List of Cities Covered by the 2020 ACI Annual Indices on Cost of Living, Wage and Purchasing Power

No.	City	Country	Region
1	Adelaide	Australia	Australasia
2	Amman	Jordan	Asia
3	Amsterdam	Netherlands	Western Europe
4	Asuncion	Paraguay	South America
5	Athens	Greece	Western Europe
6	Atlanta	United States	North America
7	Auckland	New Zealand	Australasia
8	Baku	Azerbaijan	Asia
9	Bangkok	Thailand	Asia
10	Barcelona	Spain	Western Europe
11	Beijing	China	Asia
12	Berlin	Germany	Western Europe
13	Bogota	Colombia	South America
14	Boston	United States	North America
15	Bratislava	Slovakia	Eastern Europe
16	Brisbane	Australia	Australasia
17	Brussels	Belgium	Western Europe
18	Bucharest	Romania	Eastern Europe
19	Budapest	Hungary	Eastern Europe
20	Buenos Aires	Argentina	South America
21	Cairo	Egypt	Africa
22	Calgary	Canada	North America
23	Chicago	United States	North America
24	Cleveland	United States	North America
25	Colombo	Sri Lanka	Asia
26	Copenhagen	Denmark	Western Europe
27	Dalian	China	Asia
28	Detroit	United States	North America
29	Doha	Qatar	Asia
30	Dubai	United Arab Emirates	Asia
31	Dublin	Ireland	Western Europe
32	Frankfurt	Germany	Western Europe
33	Geneva	Switzerland	Western Europe
34	Guangzhou	China	Asia
35	Hanoi	Vietnam	Asia
36	Helsinki	Finland	Western Europe
37	Ho Chi Minh City	Vietnam	Asia
38	Hong Kong	Hong Kong, China	Asia

39	Honolulu	United States	North America
40	Houston	United States	North America
41	Istanbul	Turkey	Asia
42	Jakarta	Indonesia	Asia
43	Johannesburg	South Africa	Africa
44	Kiev	Ukraine	Eastern Europe
45	Kuala Lumpur	Malaysia	Asia
46	Kuwait City	Kuwait	Asia
47	Lexington	United States	North America
48	Lima	Peru	South America
49	Lisbon	Portugal	Western Europe
50	London	Great Britain	Western Europe
51	Los Angeles	United States	North America
52	Luxembourg	Luxembourg	Western Europe
53	Lyon	France	Western Europe
54	Madrid	Spain	Western Europe
55	Manila	Philippines	Asia
56	Melbourne	Australia	Australasia
57	Mexico City	Mexico	North America
58	Miami	United States	North America
59	Milan	Italy	Western Europe
60	Minneapolis	United States	North America
61	Montevideo	Uruguay	South America
62	Montreal	Canada	North America
63	Moscow	Russia	Eastern Europe
64	Mumbai	India	Asia
65	Munich	Germany	Western Europe
66	Nairobi	Kenya	Africa
67	New Delhi	India	Asia
68	New York	United States	North America
69	Osaka-Kobe	Japan	Asia
70	Oslo	Norway	Western Europe
71	Paris	France	Western Europe
72	Perth	Australia	Australasia
73	Pittsburgh	United States	North America
74	Prague	Czech Republic	Eastern Europe
75	Pretoria	South Africa	Africa
76	Qingdao	China	Asia
77	Quito	Ecuador	South America
78	Reykjavik	Iceland	Western Europe
79	Rio de Janeiro	Brazil	South America

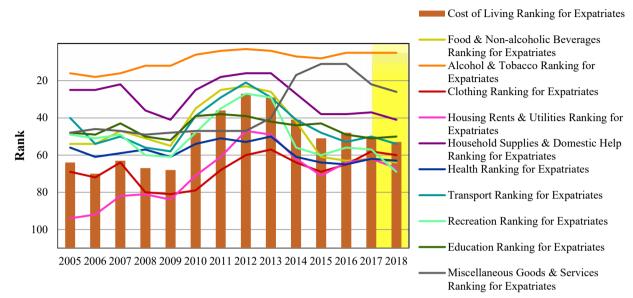
80	Rome	Italy	Western Europe
81	San Francisco	United States	North America
82	Santiago	Chile	South America
83	Sao Paulo	Brazil	South America
84	Seattle	United States	North America
85	Seoul	South Korea	Asia
86	Shanghai	China	Asia
87	Shenzhen	China	Asia
88	Singapore	Singapore	Asia
89	Sofia	Bulgaria	Eastern Europe
90	St Petersburg	Russia	Eastern Europe
91	Stockholm	Sweden	Western Europe
92	Suzhou	China	Asia
93	Sydney	Australia	Australasia
94	Taipei	Taiwan, China	Asia
95	Tel Aviv	Israel	Asia
96	Tianjin	China	Asia
97	Tokyo	Japan	Asia
98	Toronto	Canada	North America
99	Vancouver	Canada	North America
100	Vienna	Austria	Western Europe
101	Warsaw	Poland	Eastern Europe
102	Washington DC	United States	North America
103	Wellington	New Zealand	Australasia
104	Zurich	Switzerland	Western Europe

ADELAIDE

Australia

Expatriates: Cost of Living

Figure 1.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Adelaide, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Adelaide is the capital of Australia and the country's fifth-most populous city currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 64th to the 53rd position between 2005 and 2018 (see Figure 1a).

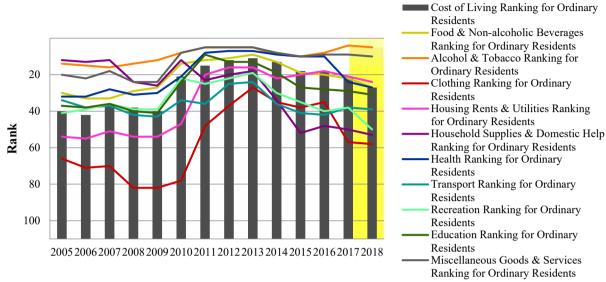
The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation declined the most, falling by 20 places from the 49th to the 69th position, while the ranking for Household Supplies & Domestic Help decreased by 16 places from the 25th to the 41st position. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 27 places from the 94th to the 67th position, while the ranking for Miscellaneous Goods & Services increased by 22 places from the 48th to the 26th position.

ADELAIDE

Australia

Ordinary Residents: Cost of Living

Figure 1.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Adelaide, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 40th position to the 21st position between 2005 and 2010. The ranking climbed from the 15th position to the 18th between 2011 to 2016 and rose from the 22nd position to the 27th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing decreased the most, falling by 12 places from the 66th to the 78th position. On the other hand, the ranking for Recreation rose the most, climbing 19 places from the 41st to the 22nd position, while the ranking for Food & Non-alcoholic Beverages rose by 16 places from the 30th to the 14th position. Household Supplies & Domestic Help and Transport did not change overall during this period.

Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help declined the most, falling by 25 places from the 23rd to the 48th spot, while the ranking for Education declined by 19 places from the 9th to the 28th spot. On the other hand, the ranking for Clothing increased the most, climbing 13 places from

the 48th to the 35th spot, while the ranking for Housing Rents & Utilities increased by two places from the 20th to the 18th spot.

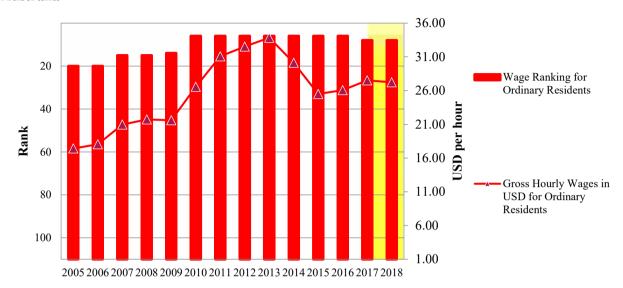
For the third sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2017 and 2018, the ranking for Recreation dropped the most, falling by 12 places from the 38th to the 50th spot, while the ranking for Food & Non-alcoholic Beverages dropped by five places from the 22nd to the 27th spot.

ADELAIDE

Australia

Ordinary Residents: Wage

Figure 1.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Adelaide, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

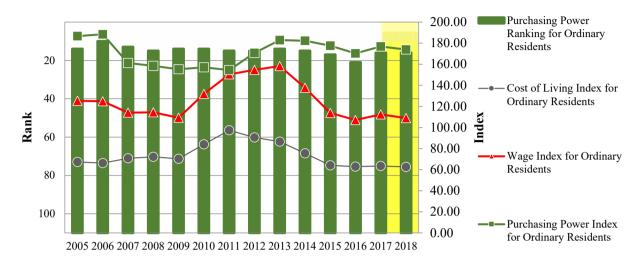
The Gross Hourly Wages in USD for Ordinary Residents in Adelaide, as represented by the red line in Figure 1.c, rose from a low of 17.42 USD in 2005 to a high of 33.84 USD in 2013 before falling to 27.24 USD in 2018. The Wage Ranking for Ordinary Residents in Adelaide, as denoted by the red bars, fell from 20th to 8th across 2005 and 2018.

ADELAIDE

Australia

Ordinary Residents: Purchasing Power

Figure 1.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Adelaide, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Adelaide. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Adelaide are represented by the grey and red line respectively in Figure 1.d. In the first sub-period, Adelaide's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Adelaide was 67.23 percent that of their counterparts in New York. This increased to 83.94 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Adelaide climbed from 125.3 to 131.91 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Adelaide, as denoted by the green line in Figure 1.d, followed a general downward trend from 186.7 to 157.15 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Adelaide dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Adelaide, as denoted by the green bars in Figure 1.d, remained the same at the 14th spot.

In the second sub-period, Adelaide's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Adelaide was 97.41 percent that of their counterparts in New York. This declined to 62.91 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Adelaide fell from 150.46 to 107.13 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Adelaide followed a general rising trend from 154.47 to 170.3 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Adelaide decreased from the 15th to the 21st position.

For the third sub-period, Adelaide's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Adelaide was 63.55 percent that of their counterparts in New York. This fell to 62.61 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Adelaide declined from 112.42 to 108.94 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Adelaide followed a general downward trend from 176.9 to 174 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Adelaide remained the same at the 16th spot.

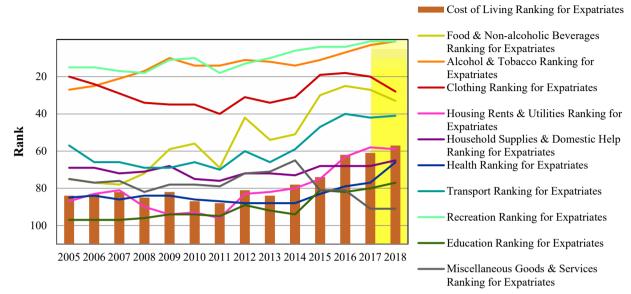
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Adelaide has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Adelaide, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

AMMAN

Jordan

Expatriates: Cost of Living

Figure 2.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Amman, Jordan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Amman is the capital of Jordan and a key economic hub in the Middle East and North Africa (MENA) region. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 84th to the 57th spot between 2005 and 2018 (see Figure 2a).

The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services declined the most, falling by 16 places from the 75th to the 91st spot, while the ranking for Clothing decreased by eight places from the 20th to the 28th spot. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 42 places from the 75th to the 33rd spot, while the ranking for Housing Rents & Utilities increased by 28 places from the 87th to the 59th spot.

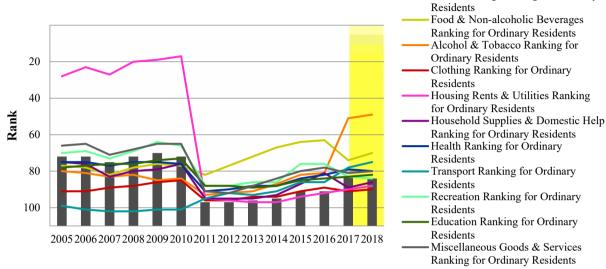
Cost of Living Ranking for Ordinary

AMMAN

Jordan

Ordinary Residents: Cost of Living

Figure 2.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Amman, Jordan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 72nd spot to the 72nd spot between 2005 and 2010. The ranking declined from the 97th spot to the 91st between 2011 to 2016 and rose from the 83rd spot to the 84th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Alcohol & Tobacco decreased the most, falling by four places from the 80th to the 84th position, while the ranking for Transport declined by two places from the 99th to the 101st position. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 11 places from the 28th to the 17th position, while the ranking for Clothing rose by six places from the 91st to the 85th position. Food & Non-alcoholic Beverages did not change overall during this period.

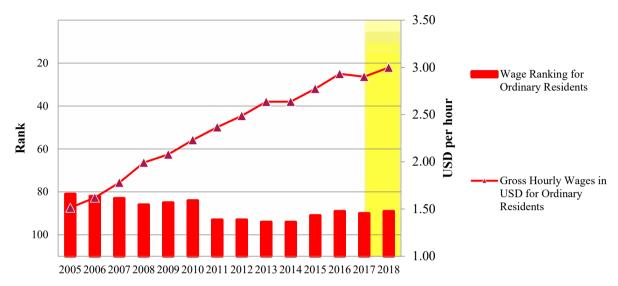
Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 19 places from the 82nd to the 63rd spot, while the ranking for Household Supplies & Domestic Help rose by 14 places from the 95th to the 81st spot.

For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the rankings for Health and Recreation fell by one place from the 79th to the 80th position, and 83rd to the 84th position respectively. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing four places from the 74th to the 70th position, while the rankings for Household Supplies & Domestic Help and Transport rose by three places from the 89th to the 86th position, and the 78th to the 75th position respectively.

AMMAN Jordan

Ordinary Residents: Wage

Figure 2.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Amman, Jordan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Amman, as represented by the red line in Figure 2.c, improved from a low of 1.51 USD in 2005 to a high of 3 USD in 2018. The Wage Ranking for Ordinary Residents in Amman, as denoted by the red bars, improved from 81st to 89th across 2005 and 2018.

AMMAN

Jordan

Ordinary Residents: Purchasing Power

Figure 2.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Amman, Jordan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Amman. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Amman are represented by the grey and red line respectively in Figure 2.d. In the first sub-period, Amman's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Amman was 35.37 percent that of their counterparts in New York. This climbed to 44.09 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Amman increased from 10.9 to 11.07 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Amman, as denoted by the green line in Figure 2.d, followed a general downward trend from 30.86 to 25.12 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Amman fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Amman, as denoted by the green bars in Figure 2.d, dropped from the 89th to the 96th position.

In the second sub-period, Amman's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Amman was 25.04 percent that of their counterparts in New York. This fell to 22.32 percent in 2016. However, the Wages Index for Ordinary Residents in Amman climbed from 11.46 to 12.04 in the same period.

The cost of living index fell whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Amman followed a general rising trend from 45.77 to 53.97 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Amman declined from the 78th to the 85th position.

For the third sub-period, Amman's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Amman was 26.45 percent that of their counterparts in New York. This increased to 27.36 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Amman climbed from 11.85 to 11.99 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Amman followed a general downward trend from 44.8 to 43.83 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Amman decreased from the 89th to the 91st spot.

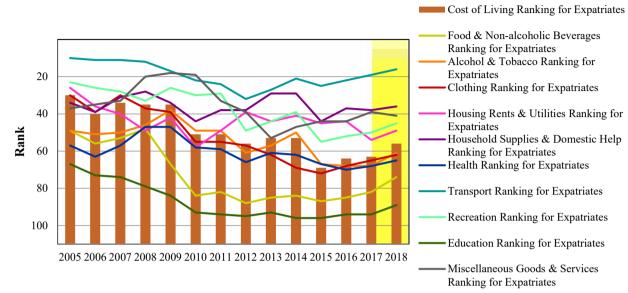
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Amman has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Amman, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

AMSTERDAM

Netherlands

Expatriates: Cost of Living

Figure 3.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Amsterdam, Netherlands



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Amsterdam is the capital of Netherlands and the country's main economic and financial hub. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 30th to the 56th position between 2005 and 2018 (see Figure 3a).

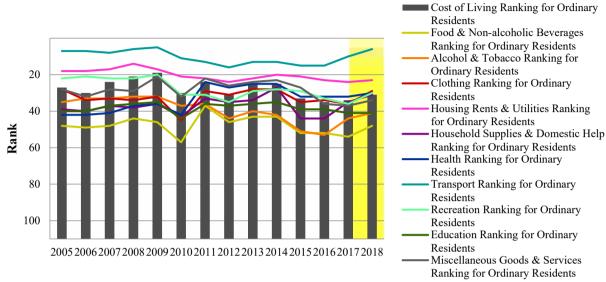
All of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2018, the ranking for Clothing decreased the most, falling by 32 places from the 30th to the 62nd spot, while the ranking for Food & Non-alcoholic Beverages dropped by 25 places from the 49th to the 74th spot.

AMSTERDAM

Netherlands

Ordinary Residents: Cost of Living

Figure 3.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Amsterdam, Netherlands



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 27th position to the 30th position between 2005 and 2010. The ranking climbed from the 24th position to the 35th between 2011 to 2016 and dropped from the 34th position to the 31st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing declined the most, falling by 17 places from the 28th to the 45th spot, while the rankings for Food & Non-alcoholic Beverages and Recreation decreased by nine places from the 48th to the 57th spot, and 22nd to the 31st spot respectively. Health did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco fell the most, falling by 17 places from the 36th to the 53rd position, while the ranking for Food & Non-alcoholic Beverages fell by 15 places from the 37th to the 52nd position.

For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing increased

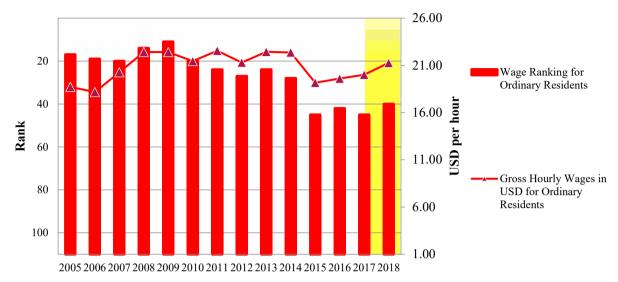
the most, climbing seven places from the 36th to the 29th spot, while the rankings for Food & Non-alcoholic Beverages and Recreation rose by six places from the 54th to the 48th spot, and the 36th to the 30th spot respectively. Education did not change overall during this period.

AMSTERDAM

Netherlands

Ordinary Residents: Wage

Figure 3.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Amsterdam, Netherlands



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

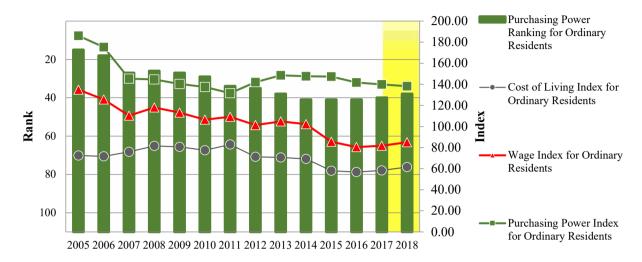
The Gross Hourly Wages in USD for Ordinary Residents in Amsterdam, as represented by the red line in Figure 3.c, fell from 18.72 USD in 2005 to a low of 18.17 USD in 2006. It then improved to a high of 22.54 USD in 2011 before, finally, decreasing to 21.27 USD in 2018. The Wage Ranking for Ordinary Residents in Amsterdam, as denoted by the red bars, improved from 17th to 40th across 2005 and 2018.

AMSTERDAM

Netherlands

Ordinary Residents: Purchasing Power

Figure 3.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Amsterdam, Netherlands



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Amsterdam. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Amsterdam are represented by the grey and red line respectively in Figure 3.d. In the first sub-period, Amsterdam's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Amsterdam was 72.51 percent that of their counterparts in New York. This rose to 77.44 percent in 2010. However, the Wages Index for Ordinary Residents in Amsterdam dropped from 134.9 to 106.46 in the same period.

The cost of living index rose whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Amsterdam, as denoted by the green line in Figure 3.d, followed a general declining trend from 186.04 to 137.48 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Amsterdam fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Amsterdam, as denoted by the green bars in Figure 3.d, fell from the 15th to the 29th spot.

In the second sub-period, Amsterdam's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Amsterdam was 82.93 percent that of their counterparts in New York. This decreased to 56.78 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Amsterdam declined from 109.16 to 80.51 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Amsterdam followed a general upward trend from 131.63 to 141.81 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Amsterdam fell from the 34th to the 41st position.

For the third sub-period, Amsterdam's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Amsterdam was 58.41 percent that of their counterparts in New York. This rose to 61.53 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Amsterdam increased from 81.7 to 85.04 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Amsterdam followed a general falling trend from 139.87 to 138.22 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Amsterdam rose from the 40th to the 38th spot.

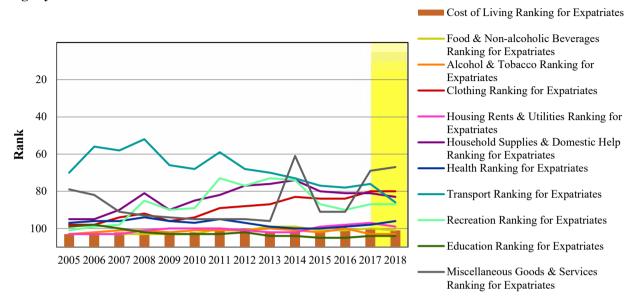
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Amsterdam has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Amsterdam, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

ASUNCION

Paraguay

Expatriates: Cost of Living

Figure 4.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Asuncion, Paraguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

One of the oldest cities in South America, Asuncion is the capital of Paraguay and the country's largest population centre. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 103rd to the 101st position between 2005 and 2018 (see Figure 4a).

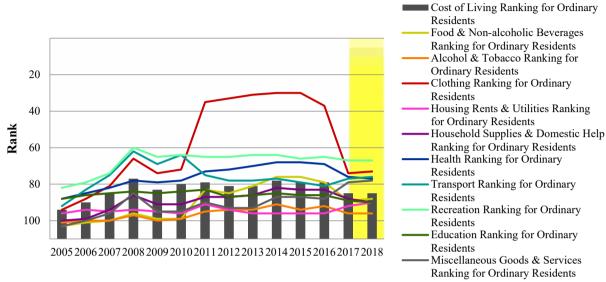
The city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Transport decreased the most, falling by 16 places from the 70th to the 86th spot, while the ranking for Education decreased by five places from the 99th to the 104th spot. On the other hand, the ranking for Clothing increased the most, climbing 18 places from the 98th to the 80th spot, while the ranking for Recreation increased by 14 places from the 101st to the 87th spot. Alcohol & Tobacco did not change overall during this period.

ASUNCION

Paraguay

Ordinary Residents: Cost of Living

Figure 4.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Asuncion, Paraguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 94th spot to the 80th spot between 2005 and 2010. The ranking remained the same from the 79th spot to the 79th between 2011 to 2016 and remained the same from the 85th spot to the 85th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Transport increased the most, climbing 28 places from the 92nd to the 64th spot, while the ranking for Clothing increased by 22 places from the 94th to the 72nd spot. Housing Rents & Utilities did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2011 and 2016, the ranking for Transport dropped the most, falling by six places from the 75th to the 81st spot, while the ranking for Housing Rents & Utilities dropped by five places from the 91st to the 96th spot. On the other hand, the rankings for Food & Non-alcoholic Beverages, Health, and Household Supplies & Domestic Help rose by four places from the 83rd to the 79th spot, 73rd to the 69th

spot, and the 87th to the 83rd spot respectively. Recreation did not change overall during this period.

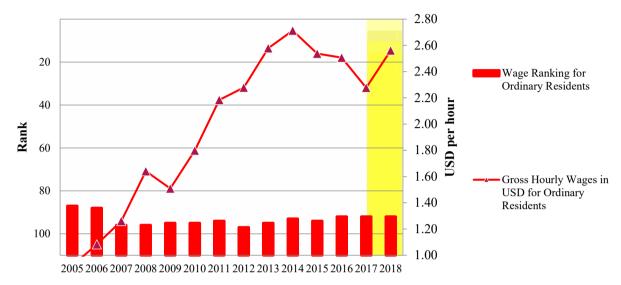
For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help dropped the most, falling by two places from the 88th to the 90th position, while the rankings for Education and Health fell by one place from the 89th to the 90th position, and 76th to the 77th position respectively. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing two places from the 92nd to the 90th position, while the rankings for Clothing, Food & Non-alcoholic Beverages, Miscellaneous Goods & Services, and Transport increased by one place from the 74th to the 73rd position, 89th to the 88th position, 79th to the 78th position, and the 77th to the 76th position respectively. Alcohol & Tobacco and Recreation did not change overall during this period.

ASUNCION

Paraguay

Ordinary Residents: Wage

Figure 4.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Asuncion, Paraguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

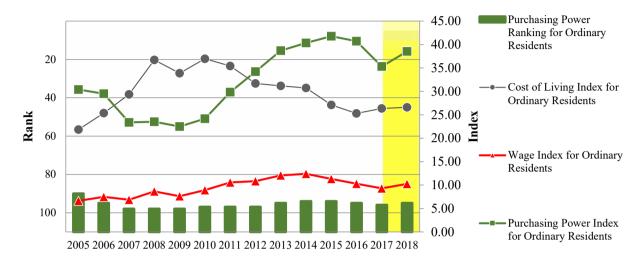
The Gross Hourly Wages in USD for Ordinary Residents in Asuncion, as represented by the red line in Figure 4.c, increased from a low of 0.92 USD in 2005 to a high of 2.71 USD in 2014 before dropping to 2.56 USD in 2018. The Wage Ranking for Ordinary Residents in Asuncion, as denoted by the red bars, rose from 87th to 92nd across 2005 and 2018.

ASUNCION

Paraguay

Ordinary Residents: Purchasing Power

Figure 4.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Asuncion, Paraguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Asuncion. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Asuncion are represented by the grey and red line respectively in Figure 4.d. In the first sub-period, Asuncion's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Asuncion was 21.85 percent that of their counterparts in New York. This rose to 36.96 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Asuncion increased from 6.63 to 8.93 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Asuncion, as denoted by the green line in Figure 4.d, followed a general declining trend from 30.4 to 24.16 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Asuncion dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Asuncion, as denoted by the green bars in Figure 4.d, fell from the 90th to the 97th spot.

In the second sub-period, Asuncion's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Asuncion was 35.42 percent that of their counterparts in New York. This declined to 25.29 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Asuncion dropped from 10.57 to 10.3 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Asuncion followed a general rising trend from 29.85 to 40.73 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Asuncion climbed from the 97th to the 95th position.

For the third sub-period, Asuncion's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Asuncion was 26.34 percent that of their counterparts in New York. This rose to 26.6 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Asuncion increased from 9.3 to 10.25 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Asuncion followed a general rising trend from 35.31 to 38.51 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Asuncion increased from the 96th to the 95th spot.

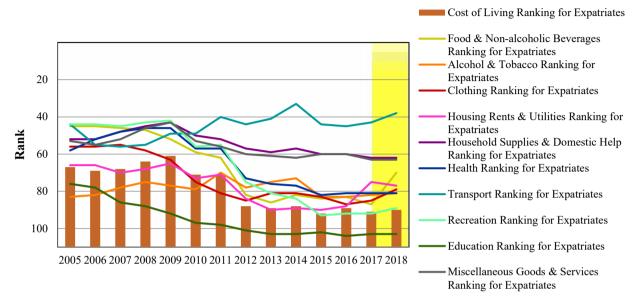
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Asuncion has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Asuncion, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

ATHENS

Greece

Expatriates: Cost of Living

Figure 5.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Athens, Greece



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Widely regarded as the birthplace of Western democracy, Athens is the capital of Greece and one of the oldest cities in Europe. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 67th to the 90th position between 2005 and 2018 (see Figure 5a).

The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation decreased the most, falling by 45 places from the 44th to the 89th position, while the ranking for Education dropped by 27 places from the 76th to the 103rd position. On the other hand, the ranking for Transport increased the most, climbing six places from the 44th to the 38th position, while the ranking for Alcohol & Tobacco rose by two places from the 83rd to the 81st position.

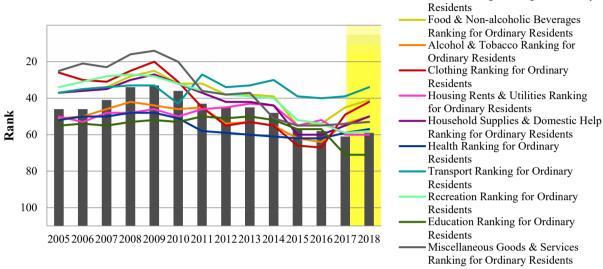
Cost of Living Ranking for Ordinary

ATHENS

Greece

Ordinary Residents: Cost of Living

Figure 5.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Athens, Greece



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, dropped from the 46th spot to the 36th spot between 2005 and 2010. The ranking climbed from the 43rd spot to the 58th between 2011 to 2016 and dropped from the 61st spot to the 59th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Transport fell the most, falling by six places from the 37th to the 43rd spot, while the ranking for Clothing decreased by five places from the 26th to the 31st spot. On the other hand, the rankings for Alcohol & Tobacco, Food & Non-alcoholic Beverages, Household Supplies & Domestic Help, and Miscellaneous Goods & Services increased by five places from the 51st to the 46th spot, 37th to the 32nd spot, 37th to the 32nd spot, and the 25th to the 20th spot respectively. Housing Rents & Utilities did not change overall during this period.

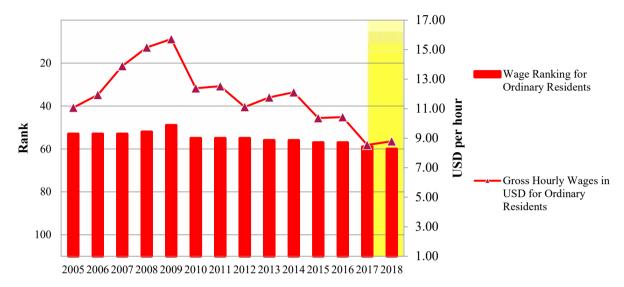
Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help declined the most, falling by 23 places from the 37th to the 60th position, while the rankings for Clothing and Food & Non-alcoholic Beverages decreased by 22 places from the 45th to the 67th position, and 32nd to the 54th position respectively.

For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing rose the most, climbing seven places from the 49th to the 42nd spot, while the rankings for Household Supplies & Domestic Help and Transport rose by five places from the 55th to the 50th spot, and the 39th to the 34th spot respectively. Education and Housing Rents & Utilities did not change overall during this period.

ATHENS Greece

Ordinary Residents: Wage

Figure 5.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Athens, Greece



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

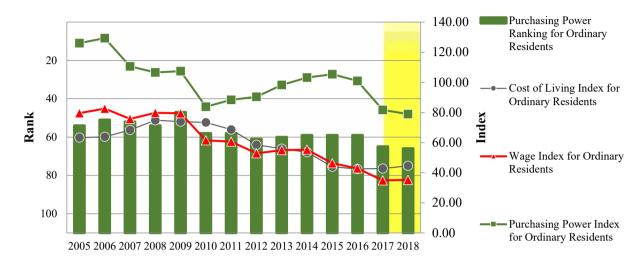
The Gross Hourly Wages in USD for Ordinary Residents in Athens, as represented by the red line in Figure 5.c, improved from 11.07 USD in 2005 to a high of 15.72 USD in 2009. It then decreased to a low of 8.54 USD in 2017 before, finally, rising to 8.79 USD in 2018. The Wage Ranking for Ordinary Residents in Athens, as denoted by the red bars, improved from 53rd to 60th across 2005 and 2018.

ATHENS

Greece

Ordinary Residents: Purchasing Power

Figure 5.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Athens, Greece



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Athens. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Athens are represented by the grey and red line respectively in Figure 5.d. In the first sub-period, Athens's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Athens was 63.3 percent that of their counterparts in New York. This climbed to 73.38 percent in 2010. However, the Wages Index for Ordinary Residents in Athens fell from 79.53 to 61.5 in the same period.

The cost of living index climbed whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Athens, as denoted by the green line in Figure 5.d, followed a general declining trend from 126.02 to 83.8 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Athens fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Athens, as denoted by the green bars in Figure 5.d, fell from the 54th to the 58th spot.

In the second sub-period, Athens's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Athens was 68.63 percent that of their counterparts in New York. This declined to 42.46 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Athens fell from 60.66 to 42.88 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Athens followed a general upward trend from 88.38 to 100.97 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Athens decreased from the 58th to the 59th spot.

For the third sub-period, Athens's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Athens was 42.74 percent that of their counterparts in New York. This climbed to 44.55 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Athens rose from 34.89 to 35.16 in the same period.

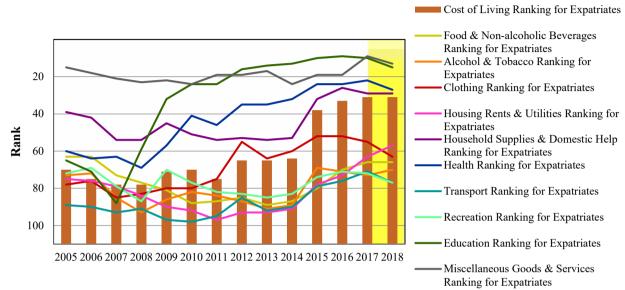
The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Athens followed a general declining trend from 81.63 to 78.92 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Athens declined from the 65th to the 66th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Athens has been higher than 100 - the base index value some of the time. This suggests that the ordinary residents in Athens, given the same number of working hours, some of the time, have been able to afford more goods and services than their counterparts in New York.

ATLANTA United States

Expatriates: Cost of Living

Figure 6.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Atlanta, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Atlanta is the capital of US state of Georgia and a host for famous landmarks such as the Martin Luther King Historic Site. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 70th to the 31st position between 2005 and 2018 (see Figure 6a).

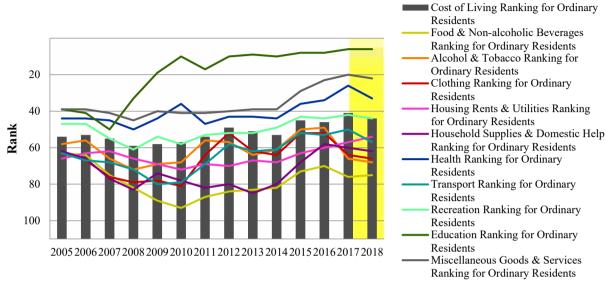
The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation decreased the most, falling by five places from the 72nd to the 77th position, while the ranking for Food & Non-alcoholic Beverages decreased by three places from the 63rd to the 66th position. On the other hand, the ranking for Education rose the most, climbing 50 places from the 65th to the 15th position, while the ranking for Health increased by 33 places from the 60th to the 27th position.

ATLANTA

United States

Ordinary Residents: Cost of Living

Figure 6.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Atlanta, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 54th spot to the 57th spot between 2005 and 2010. The ranking dropped from the 54th spot to the 46th between 2011 to 2016 and rose from the 41st spot to the 44th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages decreased the most, falling by 30 places from the 63rd to the 93rd spot, while the ranking for Clothing declined by 19 places from the 62nd to the 81st spot. On the other hand, the ranking for Education rose the most, climbing 29 places from the 39th to the 10th spot, while the ranking for Health rose by eight places from the 44th to the 36th spot.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help increased the most, climbing 24 places from the 82nd to the 58th position, while the ranking for Miscellaneous Goods & Services rose by 18 places from the 41st to the 23rd position.

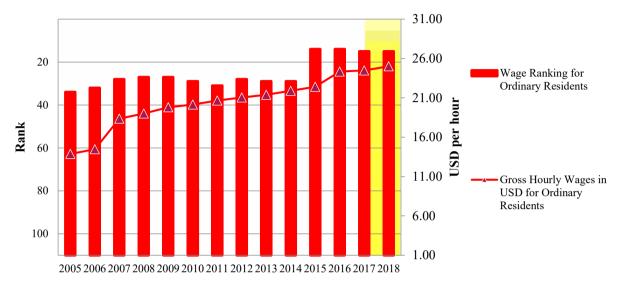
For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the rankings for Health and

Transport declined by seven places from the 26th to the 33rd spot, and 50th to the 57th spot respectively. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing three places from the 57th to the 54th spot, while the ranking for Food & Non-alcoholic Beverages increased by one place from the 76th to the 75th spot. Education did not change overall during this period.

ATLANTA United States

Ordinary Residents: Wage

Figure 6.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Atlanta, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Atlanta, as represented by the red line in Figure 6.c, increased from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Atlanta, as denoted by the red bars, fell from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Atlanta is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

ATLANTA

United States

Ordinary Residents: Purchasing Power

Figure 6.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Atlanta, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Atlanta. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Atlanta are represented by the grey and red line respectively in Figure 6.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Atlanta belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Atlanta will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Atlanta's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Atlanta was 56.79 percent that of their counterparts in New York. This climbed to 60.69 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Atlanta, as denoted by the green line in Figure 6.d, followed a general downward trend from 176.08 to 164.78 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Atlanta fell relative to that of their New York counterparts over

the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Atlanta, as denoted by the green bars in Figure 6.d, rose from the 20th to the 9th spot.

In the second sub-period, Atlanta's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Atlanta was 58.9 percent that of their counterparts in New York. This fell to 51.08 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Atlanta followed a general upward trend from 169.78 to 195.75 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Atlanta dropped from the 9th to the 10th position.

For the third sub-period, Atlanta's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Atlanta was 54.39 percent that of their counterparts in New York. This climbed to 54.93 percent in 2018.

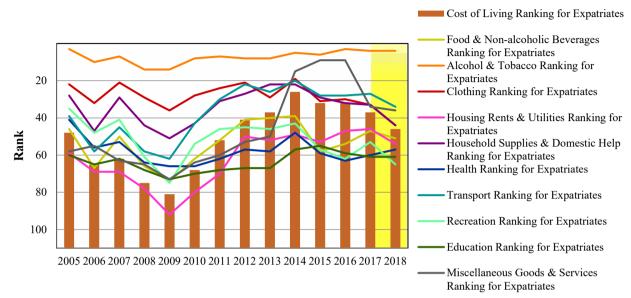
As a result, the Purchasing Power Index for Ordinary Residents in Atlanta followed a general declining trend from 183.85 to 182.07 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Atlanta remained the same at the 13th position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Atlanta has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Atlanta, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

AUCKLAND New Zealand

Expatriates: Cost of Living

Figure 7.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Auckland, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Auckland is the main economic hub of New Zealand and home to two major harbours. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 48th to the 46th spot between 2005 and 2018 (see Figure 7a).

The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation declined the most, falling by 30 places from the 35th to the 65th spot, while the ranking for Clothing dropped by 22 places from the 22nd to the 44th spot. On the other hand, the ranking for Miscellaneous Goods & Services increased the most, climbing 22 places from the 58th to the 36th spot, while the rankings for Housing Rents & Utilities and Transport rose by five places from the 59th to the 54th spot, and the 39th to the 34th spot respectively.

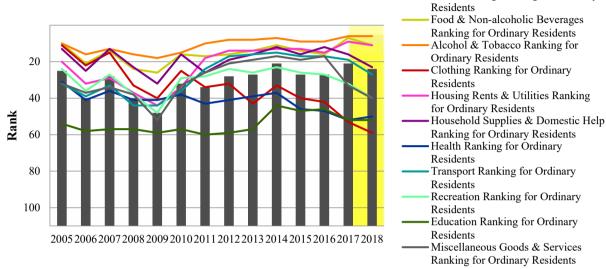
Cost of Living Ranking for Ordinary

AUCKLAND

New Zealand

Ordinary Residents: Cost of Living

Figure 7.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Auckland, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 25th spot to the 32nd spot between 2005 and 2010. The ranking dropped from the 34th spot to the 27th between 2011 to 2016 and increased from the 21st spot to the 24th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the rankings for Clothing and Housing Rents & Utilities declined by 14 places from the 11th to the 25th position, and 20th to the 34th position respectively.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Clothing decreased the most, falling by eight places from the 34th to the 42nd position, while the ranking for Health fell by four places from the 43rd to the 47th position. On the other hand, the rankings for Education and Household Supplies & Domestic Help increased by 14 places from the 60th to the 46th position, and the 26th to the 12th position respectively.

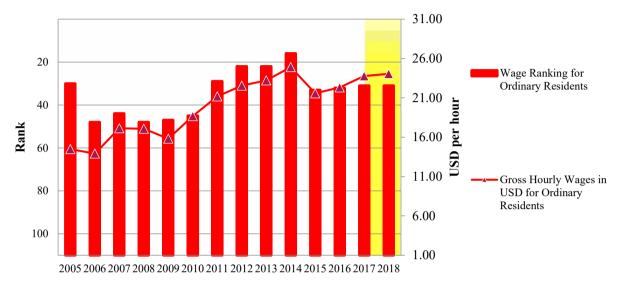
For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the rankings for Recreation and Transport declined by eight places from the 32nd to the 40th position, and 19th to the 27th

position respectively. On the other hand, the ranking for Health increased the most, climbing two places from the 52nd to the 50th position. Alcohol & Tobacco and Education did not change overall during this period.

AUCKLAND New Zealand

Ordinary Residents: Wage

Figure 7.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Auckland, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

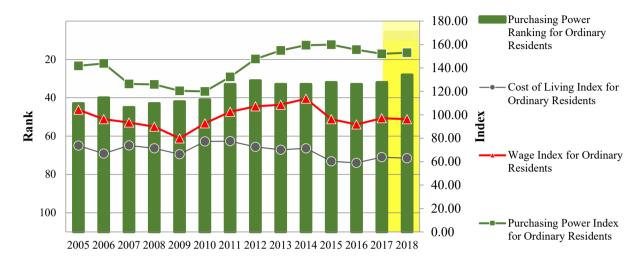
The Gross Hourly Wages in USD for Ordinary Residents in Auckland, as represented by the red line in Figure 7.c, dropped from 14.49 USD in 2005 to a low of 13.91 USD in 2006. It then increased to a high of 24.9 USD in 2014 before, finally, decreasing to 24.06 USD in 2018. The Wage Ranking for Ordinary Residents in Auckland, as denoted by the red bars, rose from 30th to 31st across 2005 and 2018.

AUCKLAND

New Zealand

Ordinary Residents: Purchasing Power

Figure 7.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Auckland, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Auckland. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Auckland are represented by the grey and red line respectively in Figure 7.d. In the first sub-period, Auckland's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Auckland was 73.64 percent that of their counterparts in New York. This increased to 77.32 percent in 2010. However, the Wages Index for Ordinary Residents in Auckland declined from 104.31 to 92.75 in the same period.

The cost of living index increased whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Auckland, as denoted by the green line in Figure 7.d, followed a general declining trend from 141.79 to 119.97 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Auckland declined relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Auckland, as denoted by the green bars in Figure 7.d, climbed from the 43rd to the 41st position.

In the second sub-period, Auckland's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Auckland was 77.46 percent that of their counterparts in New York. This fell to 58.97 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Auckland fell from 102.57 to 91.77 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Auckland followed a general rising trend from 132.42 to 155.63 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Auckland remained the same at the 33rd position.

For the third sub-period, Auckland's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Auckland was 63.86 percent that of their counterparts in New York. This fell to 62.89 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Auckland decreased from 97.07 to 96.2 in the same period.

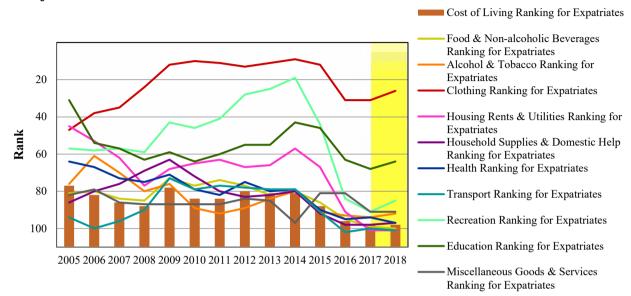
The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Auckland followed a general rising trend from 152 to 152.97 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Auckland climbed from the 32nd to the 28th position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Auckland has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Auckland, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

BAKU Azerbaijan

Expatriates: Cost of Living

Figure 8.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Baku, Azerbaijan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Baku is the capital of Azerbaijan and the country's main commercial hub. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 77th to the 98th spot between 2005 and 2018 (see Figure 8a).

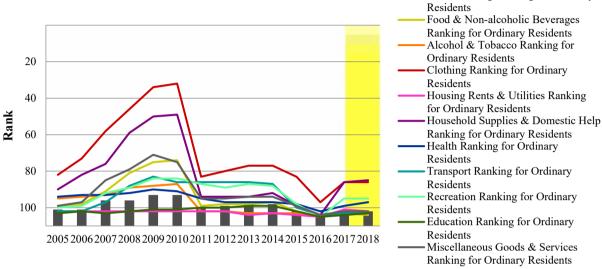
The city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities dropped the most, falling by 56 places from the 45th to the 101st spot, while the rankings for Education and Health decreased by 33 places from the 31st to the 64th spot, and 64th to the 97th spot respectively. On the other hand, the ranking for Clothing rose the most, climbing 21 places from the 47th to the 26th spot.

Cost of Living Ranking for Ordinary

BAKU Azerbaijan

Ordinary Residents: Cost of Living

Figure 8.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Baku, Azerbaijan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, dropped from the 101st position to the 93rd position between 2005 and 2010. The ranking climbed from the 100th position to the 104th between 2011 to 2016 and remained the same from the 102nd position to the 102nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing increased the most, climbing 50 places from the 82nd to the 32nd spot, while the ranking for Household Supplies & Domestic Help rose by 41 places from the 90th to the 49th spot. Housing Rents & Utilities did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the rankings for Recreation and Transport decreased by 18 places from the 87th to the 105th spot, and 86th to the 104th spot respectively.

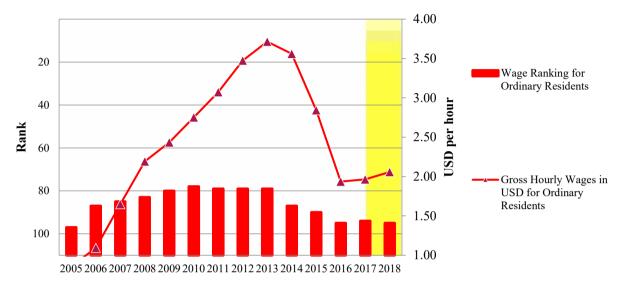
For the third sub-period, the city's cost of living ranking increased in four consumption categories across the study period. Between 2017 and 2018, the rankings for Food & Non-alcoholic Beverages and Housing Rents & Utilities fell by one place from the 103rd to the 104th

spot, and 101st to the 102nd spot respectively. On the other hand, the ranking for Health increased the most, climbing two places from the 99th to the 97th spot, while the rankings for Education, Household Supplies & Domestic Help, and Transport rose by one place from the 104th to the 103rd spot, 86th to the 85th spot, and the 103rd to the 102nd spot respectively. Alcohol & Tobacco, Clothing, Miscellaneous Goods & Services and Recreation did not change overall during this period.

BAKU Azerbaijan

Ordinary Residents: Wage

Figure 8.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Baku, Azerbaijan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

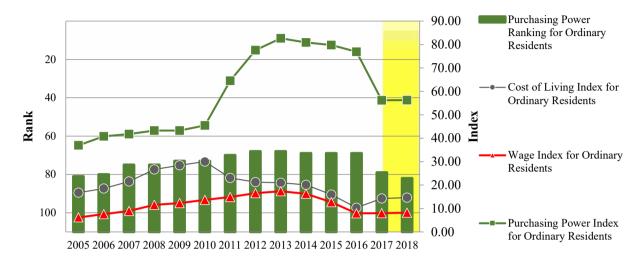
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Baku, as represented by the red line in Figure 8.c, increased from a low of 0.86 USD in 2005 to a high of 3.71 USD in 2013 before decreasing to 2.06 USD in 2018. The Wage Ranking for Ordinary Residents in Baku, as denoted by the red bars, fell from 97th to 95th across 2005 and 2018.

BAKU Azerbaijan

Ordinary Residents: Purchasing Power

Figure 8.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Baku, Azerbaijan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Baku. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Baku are represented by the grey and red line respectively in Figure 8.d. In the first sub-period, Baku's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Baku was 16.77 percent that of their counterparts in New York. This increased to 30.03 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Baku increased from 6.19 to 13.66 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Baku, as denoted by the green line in Figure 8.d, followed a general upward trend from 36.96 to 45.49 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Baku climbed relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Baku, as denoted by the green bars in Figure 8.d, increased from the 81st to the 73rd position.

In the second sub-period, Baku's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Baku was 23.05 percent that of their counterparts in New York. This declined to 10.34 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Baku decreased from 14.88 to 7.96 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Baku followed a general rising trend from 64.55 to 76.91 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Baku rose from the 70th to the 69th spot.

For the third sub-period, Baku's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Baku was 14.28 percent that of their counterparts in New York. This climbed to 14.63 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Baku climbed from 8.02 to 8.23 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Baku followed a general rising trend from 56.17 to 56.25 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Baku fell from the 79th to the 82nd spot.

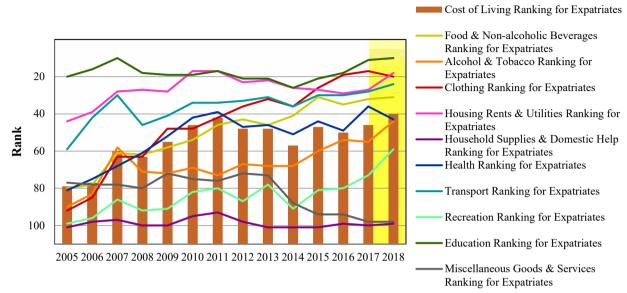
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Baku has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Baku, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

BANGKOK

Thailand

Expatriates: Cost of Living

Figure 9.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Bangkok, Thailand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Bangkok is the capital of Thailand and one of the major regional hubs in Southeast Asia. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 79th to the 40th position between 2005 and 2018 (see Figure 9a).

The city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services fell the most, falling by 21 places from the 77th to the 98th spot. On the other hand, the ranking for Clothing increased the most, climbing 72 places from the 92nd to the 20th spot, while the ranking for Food & Non-alcoholic Beverages increased by 49 places from the 80th to the 31st spot.

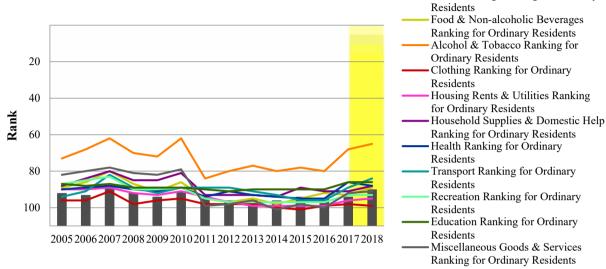
Cost of Living Ranking for Ordinary

BANGKOK

Thailand

Ordinary Residents: Cost of Living

Figure 9.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Bangkok, Thailand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 92nd spot to the 91st spot between 2005 and 2010. The ranking remained the same from the 95th spot to the 95th between 2011 to 2016 and decreased from the 94th spot to the 90th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the rankings for Education and Recreation decreased by two places from the 87th to the 89th spot, and 87th to the 89th spot respectively. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 11 places from the 73rd to the 62nd spot, while the ranking for Household Supplies & Domestic Help increased by seven places from the 88th to the 81st spot.

Over the second sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2011 and 2016, the ranking for Transport dropped the most, falling by seven places from the 89th to the 96th position, while the ranking for Housing Rents & Utilities declined by five places from the 94th to the 99th position. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing four places from the 84th to the 80th position, while the ranking for Food & Non-alcoholic

Beverages rose by three places from the 95th to the 92nd position. Education did not change overall during this period.

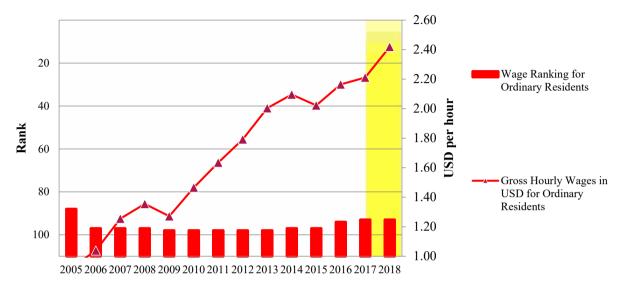
For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Health dropped the most, falling by two places from the 86th to the 88th spot, while the ranking for Clothing decreased by one place from the 98th to the 99th spot. On the other hand, the ranking for Transport rose the most, climbing five places from the 89th to the 84th spot, while the ranking for Food & Non-alcoholic Beverages increased by four places from the 93rd to the 89th spot. Education and Recreation did not change overall during this period.

BANGKOK

Thailand

Ordinary Residents: Wage

Figure 9.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Bangkok, Thailand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Bangkok, as represented by the red line in Figure 9.c, rose from a low of 0.92 USD in 2005 to a high of 2.42 USD in 2018. The Wage Ranking for Ordinary Residents in Bangkok, as denoted by the red bars, rose from 88th to 93rd across 2005 and 2018.

BANGKOK

Thailand

Ordinary Residents: Purchasing Power

Figure 9.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Bangkok, Thailand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Bangkok. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Bangkok are represented by the grey and red line respectively in Figure 9.d. In the first sub-period, Bangkok's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Bangkok was 23.08 percent that of their counterparts in New York. This increased to 31.44 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Bangkok increased from 6.63 to 7.28 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bangkok, as denoted by the green line in Figure 9.d, followed a general downward trend from 28.75 to 23.14 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Bangkok declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Bangkok, as denoted by the green bars in Figure 9.d, fell from the 93rd to the 98th position.

In the second sub-period, Bangkok's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Bangkok was 26.74 percent that of their counterparts in New York. This declined to 19.79 percent in 2016. However, the Wages Index for Ordinary Residents in Bangkok rose from 7.92 to 8.89 in the same period.

The cost of living index declined whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bangkok followed a general upward trend from 29.6 to 44.94 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Bangkok increased from the 98th to the 92nd position.

For the third sub-period, Bangkok's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Bangkok was 22.04 percent that of their counterparts in New York. This increased to 23.15 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Bangkok rose from 9.03 to 9.68 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bangkok followed a general rising trend from 40.97 to 41.79 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Bangkok declined from the 92nd to the 93rd spot.

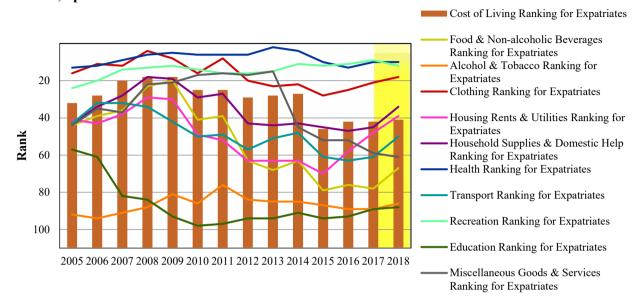
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Bangkok has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Bangkok, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

BARCELONA

Spain

Expatriates: Cost of Living

Figure 10.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Barcelona, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Barcelona is the regional capital of Catalonia and the second-largest population centre in Spain currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 32nd to the 41st spot between 2005 and 2018 (see Figure 10a).

The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Education declined the most, falling by 31 places from the 57th to the 88th position, while the ranking for Food & Non-alcoholic Beverages dropped by 23 places from the 44th to the 67th position. On the other hand, the ranking for Recreation increased the most, climbing 12 places from the 24th to the 12th position, while the ranking for Household Supplies & Domestic Help increased by nine places from the 43rd to the 34th position.

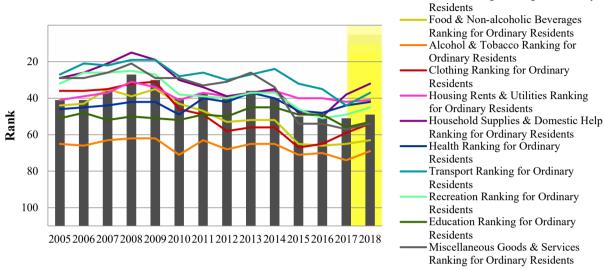
Cost of Living Ranking for Ordinary

BARCELONA

Spain

Ordinary Residents: Cost of Living

Figure 10.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Barcelona, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, dropped from the 41st position to the 40th position between 2005 and 2010. The ranking rose from the 37th position to the 51st between 2011 to 2016 and decreased from the 51st position to the 49th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing declined the most, falling by 10 places from the 36th to the 46th position, while the rankings for Alcohol & Tobacco and Recreation declined by six places from the 65th to the 71st position, and 32nd to the 38th position respectively. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing one place from the 44th to the 43rd position. Housing Rents & Utilities and Miscellaneous Goods & Services did not change overall during this period.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services fell the most, falling by 21 places from the 33rd to the 54th spot, while the ranking for Food & Non-alcoholic Beverages decreased by 19 places from the 47th to the 66th spot. Education did not change overall during this period.

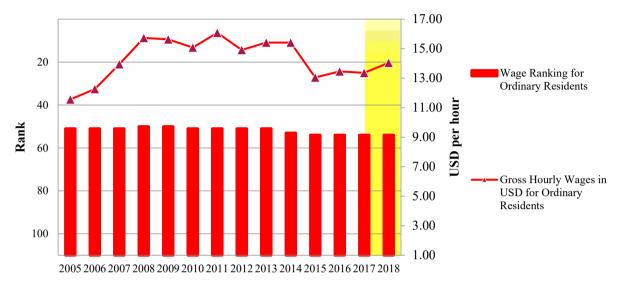
For the third sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2017 and 2018, the ranking for Transport increased the most, climbing seven places from the 44th to the 37th spot, while the ranking for Household Supplies & Domestic Help increased by six places from the 38th to the 32nd spot.

BARCELONA

Spain

Ordinary Residents: Wage

Figure 10.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Barcelona, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Barcelona, as represented by the red line in Figure 10.c, increased from a low of 11.55 USD in 2005 to a high of 16.07 USD in 2011 before falling to 14.04 USD in 2018. The Wage Ranking for Ordinary Residents in Barcelona, as denoted by the red bars, improved from 51st to 54th across 2005 and 2018.

BARCELONA

Spain

Ordinary Residents: Purchasing Power

Figure 10.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Barcelona, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Barcelona. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Barcelona are represented by the grey and red line respectively in Figure 10.d. In the first sub-period, Barcelona's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Barcelona was 65.43 percent that of their counterparts in New York. This climbed to 72.5 percent in 2010. However, the Wages Index for Ordinary Residents in Barcelona decreased from 83.21 to 74.82 in the same period.

The cost of living index climbed whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Barcelona, as denoted by the green line in Figure 10.d, followed a general declining trend from 127.27 to 103.2 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Barcelona declined relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Barcelona, as denoted by the green bars in Figure 10.d, increased from the 51st to the 49th spot.

In the second sub-period, Barcelona's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Barcelona was 73.28 percent that of their counterparts in New York. This dropped to 47.57 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Barcelona dropped from 77.82 to 55.29 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Barcelona followed a general upward trend from 106.19 to 116.23 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Barcelona dropped from the 53rd to the 55th position.

For the third sub-period, Barcelona's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Barcelona was 48.21 percent that of their counterparts in New York. This rose to 50.72 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Barcelona rose from 54.57 to 56.14 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Barcelona followed a general falling trend from 113.21 to 110.7 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Barcelona fell from the 55th to the 56th position.

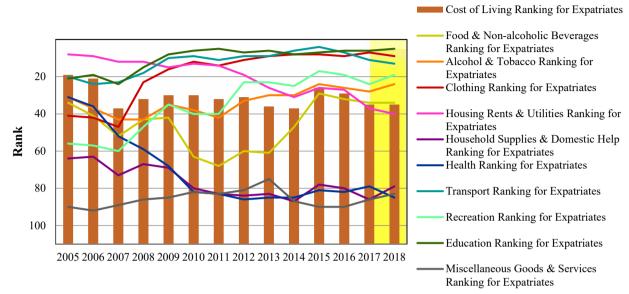
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Barcelona has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Barcelona, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

BEIJING

China

Expatriates: Cost of Living

Figure 11.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Beijing, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Recognised for its rich cultural heritage, Beijing is the capital of China. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 19th to the 35th spot between 2005 and 2018 (see Figure 11a).

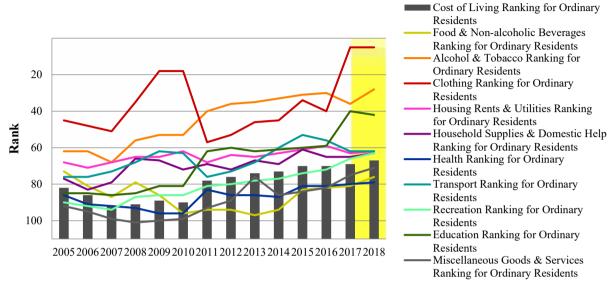
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Health dropped the most, falling by 54 places from the 31st to the 85th spot, while the ranking for Housing Rents & Utilities fell by 32 places from the 8th to the 40th spot. On the other hand, the ranking for Recreation increased the most, climbing 37 places from the 56th to the 19th spot, while the ranking for Clothing rose by 32 places from the 41st to the 9th spot. Food & Non-alcoholic Beverages did not change overall during this period.

BEIJING

China

Ordinary Residents: Cost of Living

Figure 11.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Beijing, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 82nd position to the 90th position between 2005 and 2010. The ranking dropped from the 78th position to the 70th between 2011 to 2016 and fell from the 69th position to the 67th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages declined the most, falling by 23 places from the 73rd to the 96th spot, while the ranking for Health dropped by 10 places from the 86th to the 96th spot. On the other hand, the ranking for Clothing rose the most, climbing 27 places from the 45th to the 18th spot, while the ranking for Transport increased by 13 places from the 76th to the 63rd spot.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Transport increased the most, climbing 20 places from the 76th to the 56th position, while the ranking for Clothing increased by 17 places from the 57th to the 40th position.

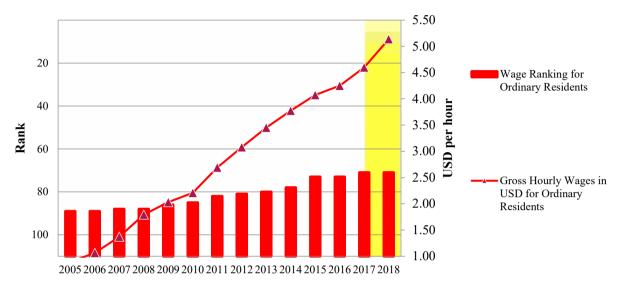
For the third sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Education fell the

most, falling by two places from the 40th to the 42nd spot. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing eight places from the 36th to the 28th spot, while the ranking for Food & Non-alcoholic Beverages rose by five places from the 81st to the 76th spot. Clothing and Transport did not change overall during this period.

BEIJING China

Ordinary Residents: Wage

Figure 11.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Beijing, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

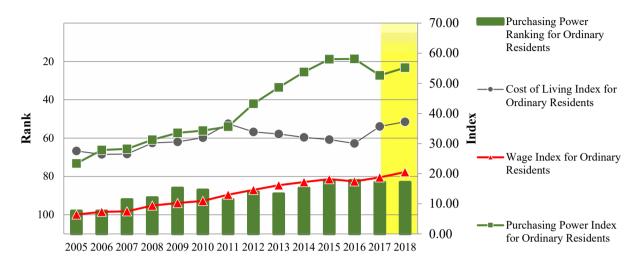
The Gross Hourly Wages in USD for Ordinary Residents in Beijing, as represented by the red line in Figure 11.c, increased from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Beijing, as denoted by the red bars, decreased from 89th to 71st across 2005 and 2018.

BEIJING

China

Ordinary Residents: Purchasing Power

Figure 11.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Beijing, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Beijing. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Beijing are represented by the grey and red line respectively in Figure 11.d. In the first sub-period, Beijing's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Beijing was 27.55 percent that of their counterparts in New York. This rose to 31.97 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Beijing increased from 6.44 to 10.96 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Beijing, as denoted by the green line in Figure 11.d, followed a general upward trend from 23.38 to 34.3 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Beijing increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Beijing, as denoted by the green bars in Figure 11.d, increased from the 98th to the 87th position.

In the second sub-period, Beijing's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Beijing was 36.59 percent that of their counterparts in New York. This fell to 30.05 percent in 2016. However, the Wages Index for Ordinary Residents in Beijing climbed from 13.03 to 17.46 in the same period.

The cost of living index fell whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Beijing followed a general rising trend from 35.63 to 58.1 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Beijing rose from the 92nd to the 82nd position.

For the third sub-period, Beijing's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Beijing was 35.67 percent that of their counterparts in New York. This climbed to 37.24 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Beijing rose from 18.78 to 20.55 in the same period.

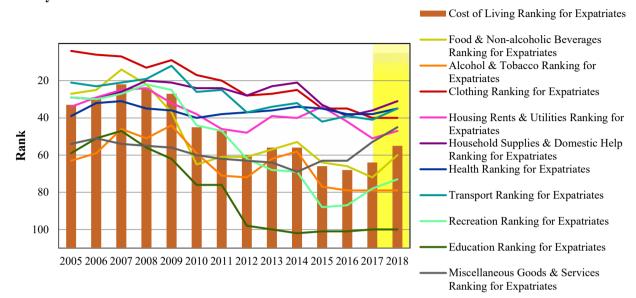
The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Beijing followed a general upward trend from 52.66 to 55.17 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Beijing remained the same at the 83rd position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Beijing has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Beijing, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

BERLIN Germany

Expatriates: Cost of Living

Figure 12.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Berlin, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

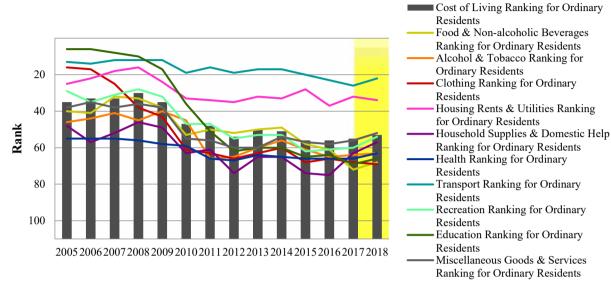
Berlin is the capital of Germany and one of the main economic and financial centres in Western Europe. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 33rd to the 55th spot between 2005 and 2018 (see Figure 12a).

The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation decreased the most, falling by 44 places from the 29th to the 73rd position, while the ranking for Education fell by 41 places from the 59th to the 100th position. On the other hand, the ranking for Miscellaneous Goods & Services increased the most, climbing nine places from the 54th to the 45th position, while the ranking for Health rose by four places from the 39th to the 35th position.

BERLIN Germany

Ordinary Residents: Cost of Living

Figure 12.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Berlin, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 35th position to the 47th position between 2005 and 2010. The ranking rose from the 48th position to the 56th between 2011 to 2016 and declined from the 55th position to the 53rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing dropped the most, falling by 45 places from the 16th to the 61st spot, while the ranking for Education fell by 30 places from the 6th to the 36th spot. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing one place from the 46th to the 45th spot.

Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the rankings for Household Supplies & Domestic Help and Recreation dropped by 14 places from the 61st to the 75th spot, and 47th to the 61st spot respectively. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing one place from the 66th to the 65th spot. Health did not change overall during this period.

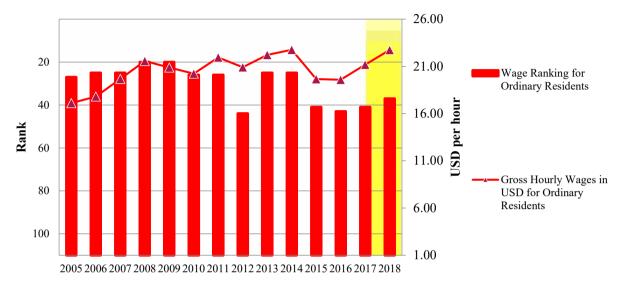
For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Housing Rents &

Utilities decreased the most, falling by two places from the 32nd to the 34th spot, while the ranking for Clothing fell by one place from the 68th to the 69th spot. On the other hand, the rankings for Household Supplies & Domestic Help and Recreation rose by six places from the 63rd to the 57th spot, and the 60th to the 54th spot respectively.

BERLIN Germany

Ordinary Residents: Wage

Figure 12.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Berlin, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

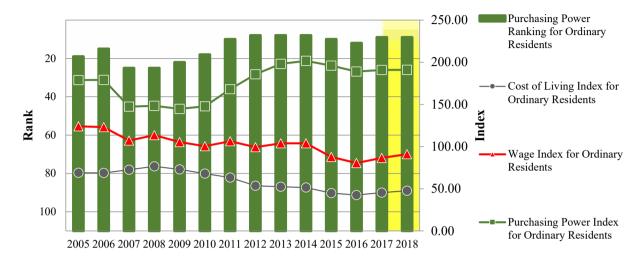
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Berlin, as represented by the red line in Figure 12.c, increased from a low of 17.11 USD in 2005 to a high of 22.75 USD in 2014 before decreasing to 22.74 USD in 2018. The Wage Ranking for Ordinary Residents in Berlin, as denoted by the red bars, increased from 27th to 37th across 2005 and 2018.

BERLIN Germany

Ordinary Residents: Purchasing Power

Figure 12.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Berlin, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Berlin. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Berlin are represented by the grey and red line respectively in Figure 12.d. In the first sub-period, Berlin's Cost of Living Index fell overall. In 2005, the cost of living for ordinary residents in Berlin was 68.91 percent that of their counterparts in New York. This fell to 67.94 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Berlin fell from 124.09 to 100.43 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Berlin, as denoted by the green line in Figure 12.d, followed a general falling trend from 178.93 to 147.82 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Berlin dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Berlin, as denoted by the green bars in Figure 12.d, climbed from the 19th to the 18th spot.

In the second sub-period, Berlin's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Berlin was 63.24 percent that of their counterparts in New York. This fell to 42.63 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Berlin fell from 106.25 to 80.5 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Berlin followed a general upward trend from 168.01 to 188.86 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Berlin decreased from the 10th to the 12th position.

For the third sub-period, Berlin's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Berlin was 45.34 percent that of their counterparts in New York. This rose to 47.6 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Berlin rose from 86.51 to 90.92 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Berlin followed a general upward trend from 190.8 to 191 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Berlin remained the same at the 9th spot.

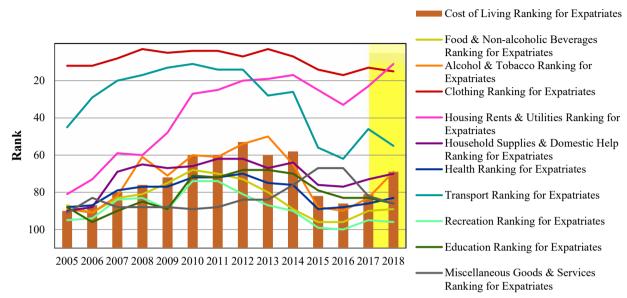
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Berlin has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Berlin, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

BOGOTA

Colombia

Expatriates: Cost of Living

Figure 13.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Bogota, Colombia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Bogota is the capital of Colombia and the country's main cultural and administrative centre. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 90th to the 69th spot between 2005 and 2018 (see Figure 13a).

The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Transport decreased the most, falling by 10 places from the 45th to the 55th spot, while the ranking for Clothing fell by three places from the 12th to the 15th spot. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 70 places from the 81st to the 11th spot, while the rankings for Alcohol & Tobacco and Household Supplies & Domestic Help rose by 20 places from the 89th to the 69th spot, and the 90th to the 70th spot respectively.

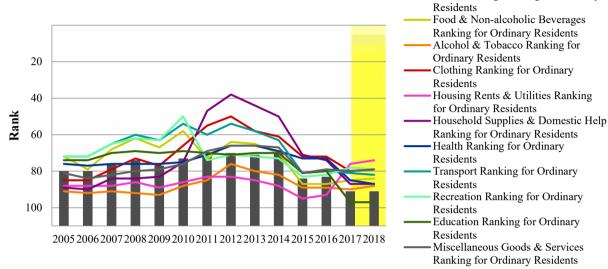
Cost of Living Ranking for Ordinary

BOGOTA

Colombia

Ordinary Residents: Cost of Living

Figure 13.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Bogota, Colombia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 80th spot to the 73rd spot between 2005 and 2010. The ranking climbed from the 72nd spot to the 83rd between 2011 to 2016 and remained the same from the 91st spot to the 91st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Recreation rose the most, climbing 22 places from the 72nd to the 50th spot, while the ranking for Clothing increased by 19 places from the 85th to the 66th spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help dropped the most, falling by 27 places from the 47th to the 74th spot, while the ranking for Transport fell by 20 places from the 60th to the 80th spot.

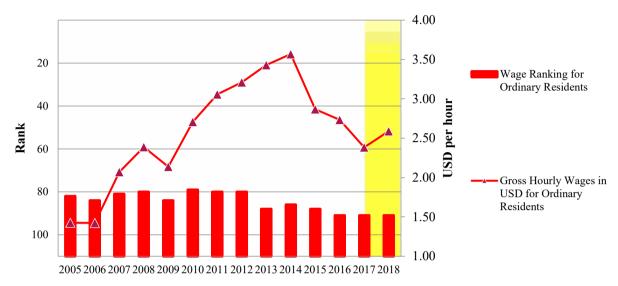
For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Health fell the most, falling by two places from the 85th to the 87th position, while the rankings for Recreation and Transport dropped by one place from the 78th to the 79th position, and 81st to the 82nd position respectively. On the other hand, the rankings for Alcohol & Tobacco and Housing Rents &

Utilities increased by two places from the 90th to the 88th position, and the 76th to the 74th position respectively. Education and Household Supplies & Domestic Help did not change overall during this period.

BOGOTA Colombia

Ordinary Residents: Wage

Figure 13.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Bogota, Colombia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

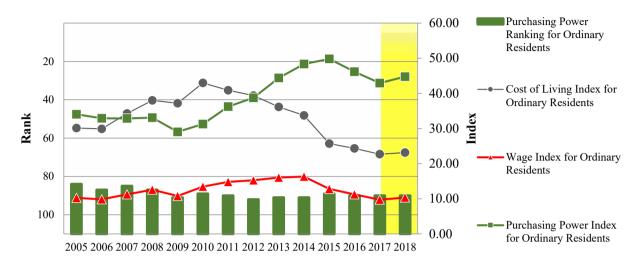
The Gross Hourly Wages in USD for Ordinary Residents in Bogota, as represented by the red line in Figure 13.c, remained unchanged at a low of 1.42 USD from 2005 to 2006. It then improved to a high of 3.57 USD in 2014 before, finally, decreasing to 2.59 USD in 2018. The Wage Ranking for Ordinary Residents in Bogota, as denoted by the red bars, improved from 82nd to 91st across 2005 and 2018.

BOGOTA

Colombia

Ordinary Residents: Purchasing Power

Figure 13.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Bogota, Colombia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Bogota. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Bogota are represented by the grey and red line respectively in Figure 13.d. In the first sub-period, Bogota's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Bogota was 30.14 percent that of their counterparts in New York. This increased to 42.97 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Bogota climbed from 10.26 to 13.43 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bogota, as denoted by the green line in Figure 13.d, followed a general downward trend from 34.06 to 31.26 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Bogota decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Bogota, as denoted by the green bars in Figure 13.d, fell from the 84th to the 89th spot.

In the second sub-period, Bogota's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Bogota was 40.87 percent that of their counterparts in New York. This dropped to 24.33 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Bogota fell from 14.8 to 11.24 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bogota followed a general rising trend from 36.22 to 46.18 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Bogota remained the same at the 90th position.

For the third sub-period, Bogota's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Bogota was 22.69 percent that of their counterparts in New York. This increased to 23.13 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Bogota climbed from 9.74 to 10.35 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bogota followed a general rising trend from 42.92 to 44.75 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Bogota remained the same at the 90th spot.

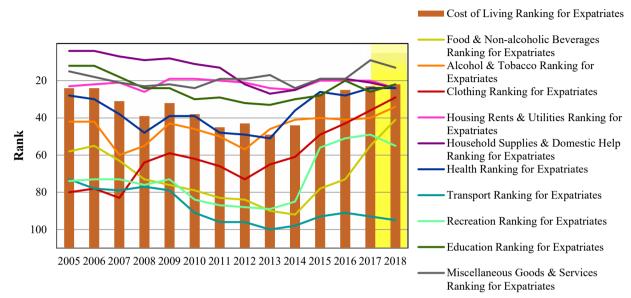
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Bogota has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Bogota, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

BOSTON

United States

Expatriates: Cost of Living

Figure 14.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Boston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Boston is the capital of Massachusetts and one of the oldest cities in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 24th to the 22nd position between 2005 and 2018 (see Figure 14a).

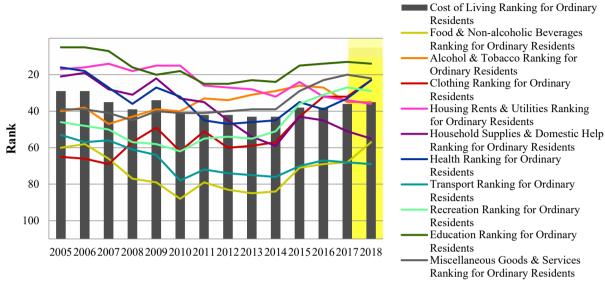
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Transport decreased the most, falling by 22 places from the 73rd to the 95th position, while the ranking for Household Supplies & Domestic Help dropped by 20 places from the 4th to the 24th position. On the other hand, the ranking for Clothing increased the most, climbing 51 places from the 80th to the 29th position, while the ranking for Recreation rose by 19 places from the 74th to the 55th position.

BOSTON

United States

Ordinary Residents: Cost of Living

Figure 14.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Boston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 29th position to the 41st position between 2005 and 2010. The ranking decreased from the 42nd position to the 38th between 2011 to 2016 and declined from the 36th position to the 35th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 28 places from the 60th to the 88th position, while the ranking for Transport fell by 25 places from the 53rd to the 78th position. On the other hand, the ranking for Clothing increased the most, climbing three places from the 65th to the 62nd position, while the ranking for Housing Rents & Utilities rose by two places from the 17th to the 15th position. Alcohol & Tobacco did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help decreased the most, falling by 10 places from the 35th to the 45th position, while the ranking for Housing Rents & Utilities fell by six places from the 26th to the 32nd position. On the other hand, the ranking for Recreation rose the most, climbing

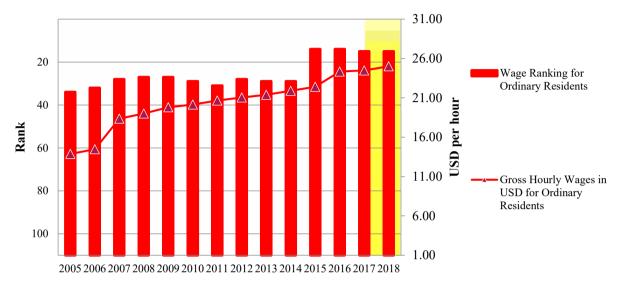
24 places from the 55th to the 31st position, while the ranking for Clothing increased by 19 places from the 51st to the 32nd position.

For the third sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help declined the most, falling by four places from the 51st to the 55th position, while the rankings for Housing Rents & Utilities, Miscellaneous Goods & Services, and Recreation dropped by two places from the 34th to the 36th position, 20th to the 22nd position, and 27th to the 29th position respectively. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 11 places from the 68th to the 57th position, while the ranking for Health increased by 10 places from the 33rd to the 23rd position. Alcohol & Tobacco did not change overall during this period.

BOSTONUnited States

Ordinary Residents: Wage

Figure 14.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Boston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

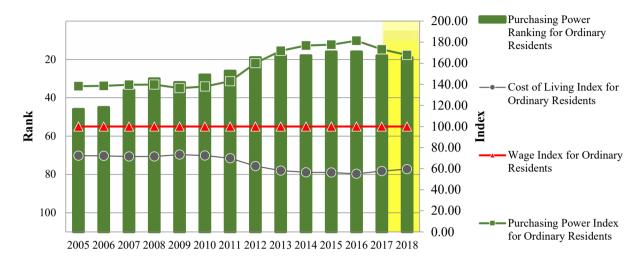
The Gross Hourly Wages in USD for Ordinary Residents in Boston, as represented by the red line in Figure 14.c, increased from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Boston, as denoted by the red bars, dropped from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Boston is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

BOSTON

United States

Ordinary Residents: Purchasing Power

Figure 14.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Boston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Boston. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Boston are represented by the grey and red line respectively in Figure 14.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Boston belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Boston will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Boston's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Boston was 72.3 percent that of their counterparts in New York. This rose to 72.49 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Boston, as denoted by the green line in Figure 14.d, followed a general downward trend from 138.31 to 137.95 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Boston fell relative to that of their New York counterparts over the first

sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Boston, as denoted by the green bars in Figure 14.d, rose from the 46th to the 28th spot.

In the second sub-period, Boston's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Boston was 69.92 percent that of their counterparts in New York. This declined to 55.14 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Boston followed a general upward trend from 143.03 to 181.36 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Boston rose from the 26th to the 16th position.

For the third sub-period, Boston's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Boston was 57.75 percent that of their counterparts in New York. This climbed to 59.56 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Boston followed a general downward trend from 173.17 to 167.9 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Boston fell from the 18th to the 19th spot.

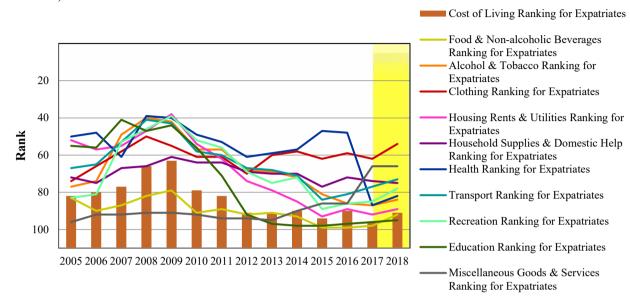
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Boston has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Boston, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

BRATISLAVA

Slovakia

Expatriates: Cost of Living

Figure 15.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Bratislava, Slovakia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Situated along the Danube River, Bratislava is the capital of Slovakia. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 82nd to the 91st spot between 2005 and 2018 (see Figure 15a).

The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Education dropped the most, falling by 40 places from the 55th to the 95th spot, while the ranking for Housing Rents & Utilities declined by 37 places from the 52nd to the 89th spot. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 30 places from the 96th to the 66th spot, while the ranking for Clothing rose by 20 places from the 74th to the 54th spot.

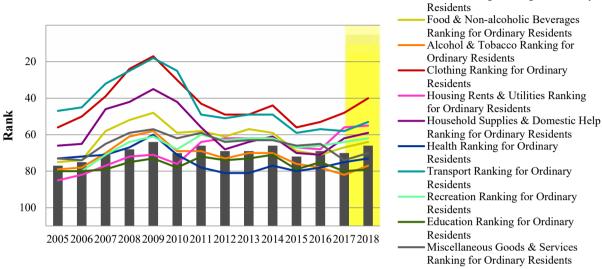
Cost of Living Ranking for Ordinary

BRATISLAVA

Slovakia

Ordinary Residents: Cost of Living

Figure 15.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Bratislava, Slovakia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 77th spot to the 70th spot between 2005 and 2010. The ranking increased from the 66th spot to the 69th between 2011 to 2016 and fell from the 70th spot to the 66th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Clothing rose the most, climbing 26 places from the 56th to the 30th position, while the ranking for Household Supplies & Domestic Help increased by 24 places from the 66th to the 42nd position.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help decreased the most, falling by 15 places from the 56th to the 71st position, while the ranking for Food & Non-alcoholic Beverages decreased by 13 places from the 58th to the 71st position. Health did not change overall during this period.

For the third sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2017 and 2018, the ranking for Clothing rose the most, climbing eight places from the 48th to the 40th position, while the rankings for

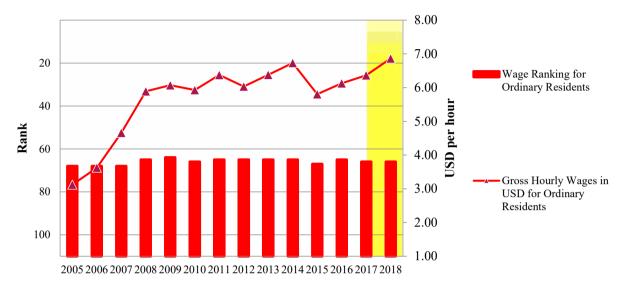
Alcohol & Tobacco and Transport rose by five places from the 82nd to the 77th position, and the 58th to the 53rd position respectively.

BRATISLAVA

Slovakia

Ordinary Residents: Wage

Figure 15.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Bratislava, Slovakia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

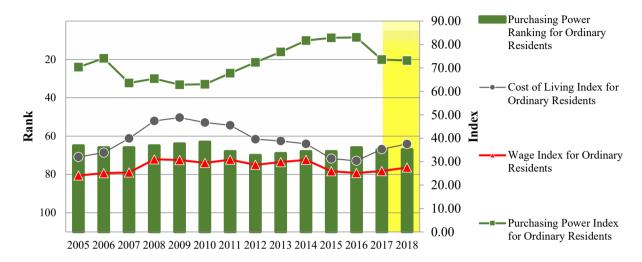
The Gross Hourly Wages in USD for Ordinary Residents in Bratislava, as represented by the red line in Figure 15.c, increased from a low of 3.12 USD in 2005 to a high of 6.87 USD in 2018. The Wage Ranking for Ordinary Residents in Bratislava, as denoted by the red bars, decreased from 68th to 66th across 2005 and 2018.

BRATISLAVA

Slovakia

Ordinary Residents: Purchasing Power

Figure 15.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Bratislava, Slovakia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Bratislava. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Bratislava are represented by the grey and red line respectively in Figure 15.d. In the first sub-period, Bratislava's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Bratislava was 31.98 percent that of their counterparts in New York. This rose to 46.69 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Bratislava climbed from 24.08 to 29.43 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bratislava, as denoted by the green line in Figure 15.d, followed a general downward trend from 70.32 to 63.05 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Bratislava dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Bratislava, as denoted by the green bars in Figure 15.d, increased from the 65th to the 63rd spot.

In the second sub-period, Bratislava's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Bratislava was 45.55 percent that of their counterparts in New York. This fell to 30.33 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Bratislava fell from 30.86 to 25.19 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bratislava followed a general rising trend from 67.76 to 83.04 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Bratislava climbed from the 68th to the 66th spot.

For the third sub-period, Bratislava's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Bratislava was 35.34 percent that of their counterparts in New York. This climbed to 37.52 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Bratislava rose from 26 to 27.46 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bratislava followed a general declining trend from 73.56 to 73.17 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Bratislava remained the same at the 67th position.

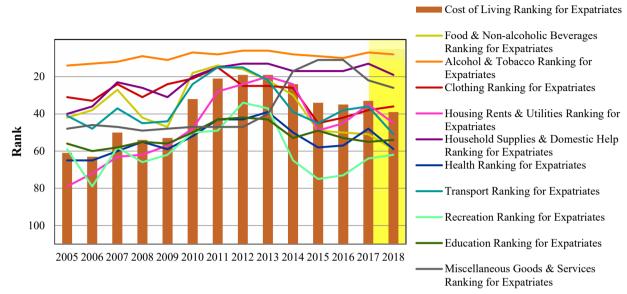
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Bratislava has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Bratislava, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

BRISBANE

Australia

Expatriates: Cost of Living

Figure 16.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Brisbane, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Brisbane is the capital of the Australian state of Queensland Brisbane's current population is estimated to be over two million people. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 61st to the 39th position between 2005 and 2018 (see Figure 16a).

The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Food & Non-alcoholic Beverages decreased the most, falling by 17 places from the 42nd to the 59th spot, while the ranking for Transport decreased by 10 places from the 41st to the 51st spot. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 34 places from the 79th to the 45th spot, while the ranking for Miscellaneous Goods & Services rose by 22 places from the 48th to the 26th spot.

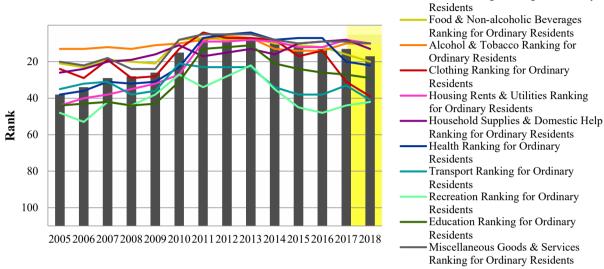
Cost of Living Ranking for Ordinary

BRISBANE

Australia

Ordinary Residents: Cost of Living

Figure 16.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Brisbane, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 38th spot to the 15th spot between 2005 and 2010. The ranking rose from the 7th spot to the 13th between 2011 to 2016 and climbed from the 13th spot to the 17th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Recreation increased the most, climbing 21 places from the 48th to the 27th spot, while the ranking for Housing Rents & Utilities rose by 17 places from the 44th to the 27th spot.

Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Transport fell the most, falling by 15 places from the 23rd to the 38th position, while the ranking for Recreation declined by 14 places from the 34th to the 48th position. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing eight places from the 17th to the 9th position. Health did not change overall during this period.

For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the rankings for Clothing and Transport decreased by eight places from the 31st to the 39th position, and 33rd to the 41st

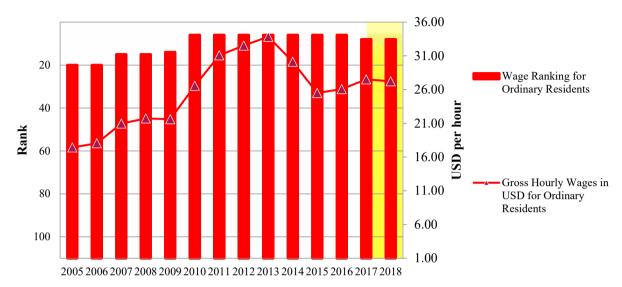
position respectively. On the other hand, the ranking for Recreation increased the most, climbing two places from the 44th to the 42nd position. Alcohol & Tobacco did not change overall during this period.

BRISBANE

Australia

Ordinary Residents: Wage

Figure 16.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Brisbane, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

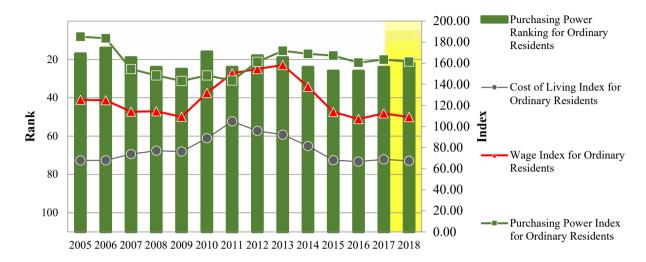
The Gross Hourly Wages in USD for Ordinary Residents in Brisbane, as represented by the red line in Figure 16.c, rose from a low of 17.42 USD in 2005 to a high of 33.84 USD in 2013 before falling to 27.24 USD in 2018. The Wage Ranking for Ordinary Residents in Brisbane, as denoted by the red bars, decreased from 20th to 8th across 2005 and 2018.

BRISBANE

Australia

Ordinary Residents: Purchasing Power

Figure 16.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Brisbane, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Brisbane. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Brisbane are represented by the grey and red line respectively in Figure 16.d. In the first sub-period, Brisbane's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Brisbane was 67.79 percent that of their counterparts in New York. This rose to 88.91 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Brisbane increased from 125.3 to 131.91 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Brisbane, as denoted by the green line in Figure 16.d, followed a general declining trend from 185.17 to 148.37 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Brisbane fell relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Brisbane, as denoted by the green bars in Figure 16.d, increased from the 17th to the 16th position.

In the second sub-period, Brisbane's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Brisbane was 104.83 percent that of their counterparts in New York. This declined to 66.73 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Brisbane declined from 150.46 to 107.13 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Brisbane followed a general upward trend from 143.53 to 160.54 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Brisbane declined from the 24th to the 26th spot.

For the third sub-period, Brisbane's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Brisbane was 68.77 percent that of their counterparts in New York. This fell to 67.47 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Brisbane fell from 112.42 to 108.94 in the same period.

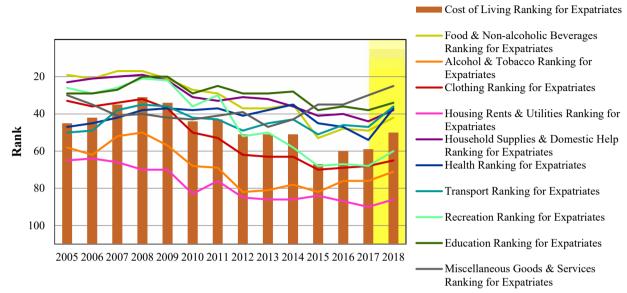
The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Brisbane followed a general downward trend from 163.47 to 161.47 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Brisbane increased from the 24th to the 22nd spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Brisbane has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Brisbane, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

BRUSSELS Belgium

Expatriates: Cost of Living

Figure 17.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Brussels, Belgium



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Brussels is widely known as the de facto capital of the European Union (EU) and the host of many EU's key institutions. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 45th to the 50th position between 2005 and 2018 (see Figure 17a).

The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation decreased the most, falling by 34 places from the 26th to the 60th spot, while the ranking for Clothing decreased by 32 places from the 33rd to the 65th spot. On the other hand, the ranking for Transport increased the most, climbing 14 places from the 50th to the 36th spot, while the ranking for Health rose by 10 places from the 47th to the 37th spot.

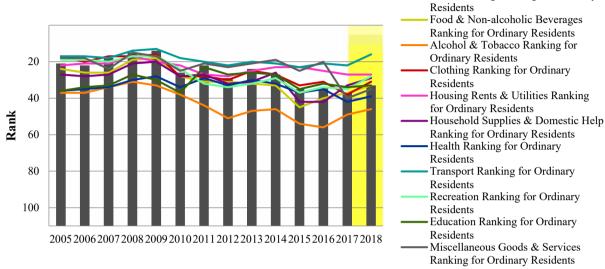
Cost of Living Ranking for Ordinary

BRUSSELS

Belgium

Ordinary Residents: Cost of Living

Figure 17.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Brussels, Belgium



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 21st position to the 26th position between 2005 and 2010. The ranking rose from the 22nd position to the 34th between 2011 to 2016 and dropped from the 37th position to the 33rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing declined the most, falling by 11 places from the 17th to the 28th spot, while the ranking for Miscellaneous Goods & Services decreased by seven places from the 18th to the 25th spot. On the other hand, the ranking for Health rose the most, climbing two places from the 36th to the 34th spot. Housing Rents & Utilities did not change overall during this period.

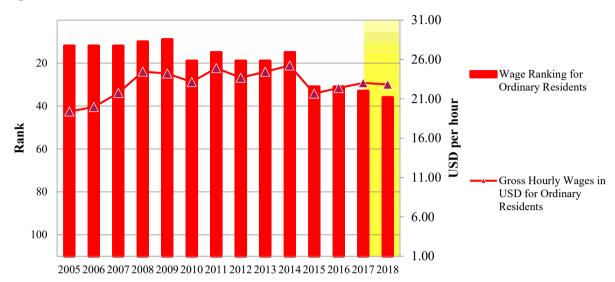
Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help decreased the most, falling by 15 places from the 27th to the 42nd spot, while the ranking for Alcohol & Tobacco declined by 12 places from the 44th to the 56th spot. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing two places from the 27th to the 25th spot, while the ranking for Miscellaneous Goods & Services increased by one place from the 21st to the 20th spot.

For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the rankings for Clothing and Recreation increased by seven places from the 38th to the 31st spot, and the 35th to the 28th spot respectively. Housing Rents & Utilities did not change overall during this period.

BRUSSELS Belgium

Ordinary Residents: Wage

Figure 17.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Brussels, Belgium



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

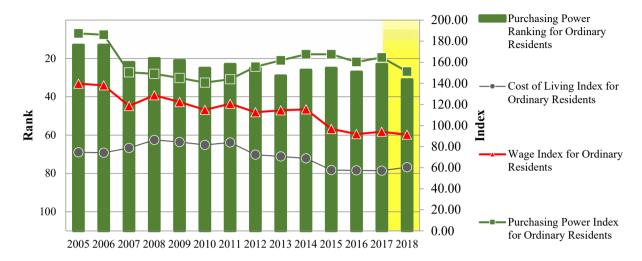
The Gross Hourly Wages in USD for Ordinary Residents in Brussels, as represented by the red line in Figure 17.c, improved from a low of 19.4 USD in 2005 to a high of 25.24 USD in 2014 before falling to 22.83 USD in 2018. The Wage Ranking for Ordinary Residents in Brussels, as denoted by the red bars, rose from 12th to 36th across 2005 and 2018.

BRUSSELS

Belgium

Ordinary Residents: Purchasing Power

Figure 17.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Brussels, Belgium



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Brussels. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Brussels are represented by the grey and red line respectively in Figure 17.d. In the first sub-period, Brussels's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Brussels was 74.61 percent that of their counterparts in New York. This increased to 81.63 percent in 2010. However, the Wages Index for Ordinary Residents in Brussels declined from 139.66 to 114.87 in the same period.

The cost of living index increased whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Brussels, as denoted by the green line in Figure 17.d, followed a general declining trend from 187.34 to 140.72 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Brussels dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Brussels, as denoted by the green bars in Figure 17.d, declined from the 13th to the 25th position.

In the second sub-period, Brussels's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Brussels was 83.79 percent that of their counterparts in New York. This declined to 57.35 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Brussels dropped from 120.57 to 91.96 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Brussels followed a general upward trend from 143.89 to 160.33 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Brussels dropped from the 23rd to the 27th position.

For the third sub-period, Brussels's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Brussels was 57.14 percent that of their counterparts in New York. This rose to 60.4 percent in 2018. However, the Wages Index for Ordinary Residents in Brussels fell from 94.04 to 91.3 in the same period.

The cost of living index rose whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Brussels followed a general declining trend from 164.57 to 151.16 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Brussels dropped from the 23rd to the 31st spot.

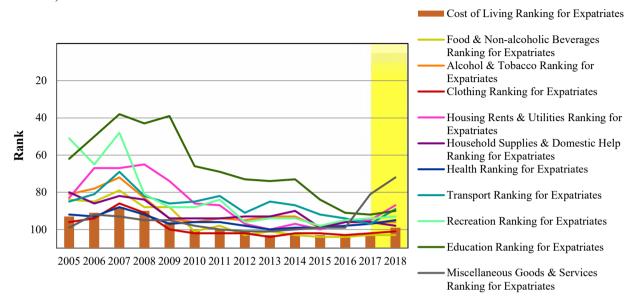
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Brussels has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Brussels, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

BUCHAREST

Romania

Expatriates: Cost of Living

Figure 18.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Bucharest, Romania



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Located in the southern part of Romania, Bucharest is the capital of Romania and the country's financial and cultural centre. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 93rd to the 99th spot between 2005 and 2018 (see Figure 18a).

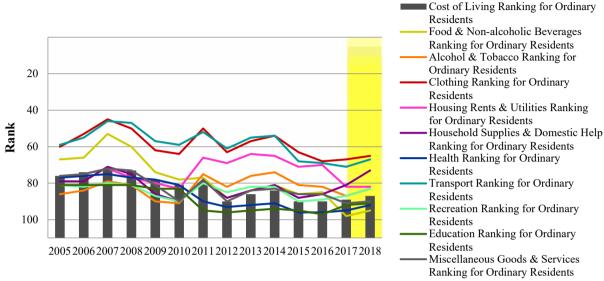
The city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation dropped the most, falling by 42 places from the 51st to the 93rd spot, while the ranking for Education dropped by 28 places from the 62nd to the 90th spot. On the other hand, the ranking for Miscellaneous Goods & Services increased the most, climbing 27 places from the 99th to the 72nd spot.

BUCHAREST

Romania

Ordinary Residents: Cost of Living

Figure 18.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Bucharest, Romania



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 76th position to the 81st position between 2005 and 2010. The ranking rose from the 80th position to the 90th between 2011 to 2016 and dropped from the 89th position to the 87th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Miscellaneous Goods & Services fell the most, falling by 14 places from the 76th to the 90th spot, while the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help declined by 11 places from the 67th to the 78th spot, and 79th to the 90th spot respectively. Transport did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Clothing dropped the most, falling by 18 places from the 50th to the 68th spot, while the ranking for Transport fell by 17 places from the 52nd to the 69th spot.

For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help rose the most, climbing eight places from the 81st to the 73rd spot, while the

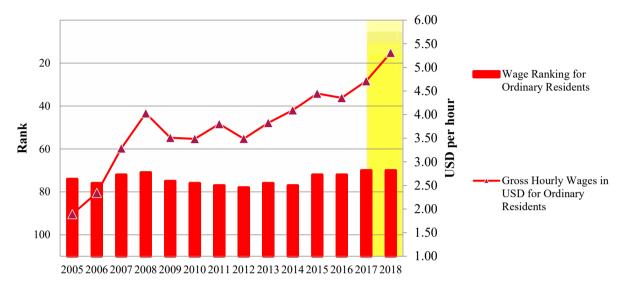
rankings for Alcohol & Tobacco, Recreation, and Transport rose by four places from the 87th to the 83rd spot, 87th to the 83rd spot, and the 71st to the 67th spot respectively. Housing Rents & Utilities did not change overall during this period.

BUCHAREST

Romania

Ordinary Residents: Wage

Figure 18.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Bucharest, Romania



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

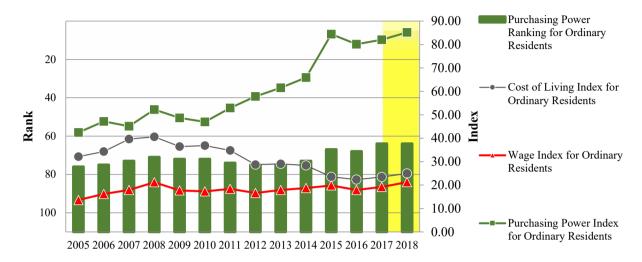
The Gross Hourly Wages in USD for Ordinary Residents in Bucharest, as represented by the red line in Figure 18.c, rose from a low of 1.89 USD in 2005 to a high of 5.31 USD in 2018. The Wage Ranking for Ordinary Residents in Bucharest, as denoted by the red bars, fell from 74th to 70th across 2005 and 2018.

BUCHAREST

Romania

Ordinary Residents: Purchasing Power

Figure 18.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Bucharest, Romania



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Bucharest. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Bucharest are represented by the grey and red line respectively in Figure 18.d. In the first sub-period, Bucharest's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Bucharest was 32.11 percent that of their counterparts in New York. This climbed to 36.83 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Bucharest rose from 13.63 to 17.3 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bucharest, as denoted by the green line in Figure 18.d, followed a general upward trend from 42.46 to 46.97 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Bucharest rose relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Bucharest, as denoted by the green bars in Figure 18.d, increased from the 76th to the 72nd spot.

In the second sub-period, Bucharest's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Bucharest was 34.79 percent that of their counterparts in New York. This declined to 22.34 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Bucharest declined from 18.4 to 17.9 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bucharest followed a general rising trend from 52.89 to 80.12 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Bucharest increased from the 74th to the 68th position.

For the third sub-period, Bucharest's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Bucharest was 23.44 percent that of their counterparts in New York. This climbed to 24.93 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Bucharest rose from 19.23 to 21.24 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Bucharest followed a general upward trend from 82.04 to 85.18 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Bucharest remained the same at the 64th position.

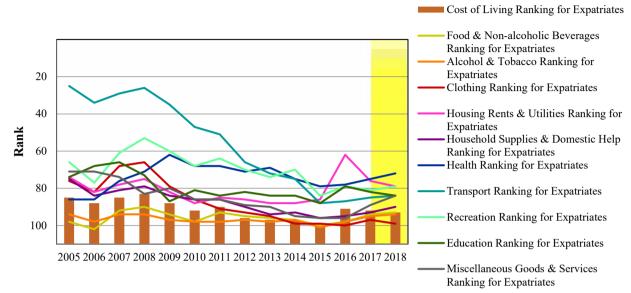
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Bucharest has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Bucharest, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

BUDAPEST

Hungary

Expatriates: Cost of Living

Figure 19.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Budapest, Hungary



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Budapest is the capital of Hungary and the country's most populous city currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 85th to the 93rd spot between 2005 and 2018 (see Figure 19a).

The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Transport decreased the most, falling by 59 places from the 25th to the 84th position, while the ranking for Clothing declined by 23 places from the 76th to the 99th position. On the other hand, the ranking for Health increased the most, climbing 14 places from the 86th to the 72nd position, while the ranking for Food & Non-alcoholic Beverages increased by five places from the 98th to the 93rd position. Alcohol & Tobacco did not change overall during this period.

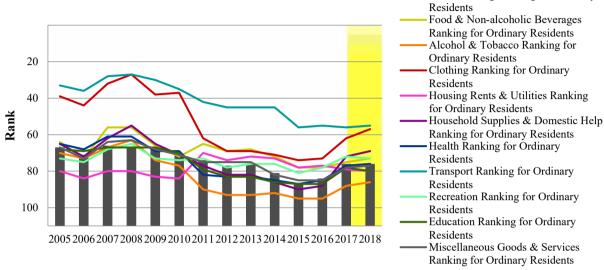
Cost of Living Ranking for Ordinary

BUDAPEST

Hungary

Ordinary Residents: Cost of Living

Figure 19.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Budapest, Hungary



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 67th spot to the 71st spot between 2005 and 2010. The ranking rose from the 74th spot to the 84th between 2011 to 2016 and remained the same from the 76th spot to the 76th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages declined the most, falling by eight places from the 64th to the 72nd spot, while the ranking for Alcohol & Tobacco fell by seven places from the 70th to the 77th spot. On the other hand, the ranking for Clothing rose the most, climbing two places from the 39th to the 37th spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the rankings for Food & Non-alcoholic Beverages and Transport decreased by 13 places from the 65th to the 78th position, and 42nd to the 55th position respectively.

For the third sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Education fell the most, falling by two places from the 78th to the 80th position, while the rankings for Housing

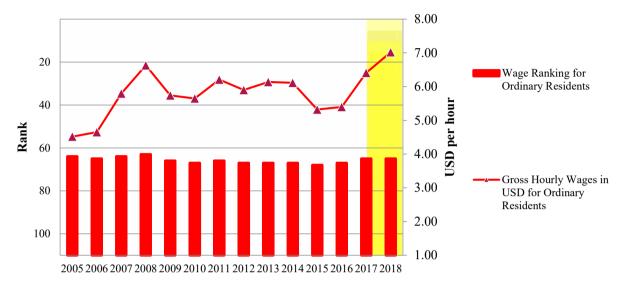
Rents & Utilities and Recreation declined by one place from the 79th to the 80th position, and 72nd to the 73rd position respectively. On the other hand, the ranking for Clothing increased the most, climbing five places from the 62nd to the 57th position, while the ranking for Household Supplies & Domestic Help increased by three places from the 72nd to the 69th position.

BUDAPEST

Hungary

Ordinary Residents: Wage

Figure 19.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Budapest, Hungary



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

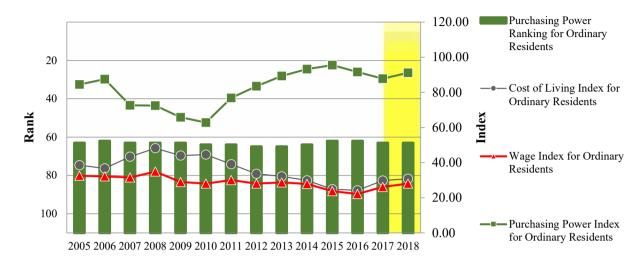
The Gross Hourly Wages in USD for Ordinary Residents in Budapest, as represented by the red line in Figure 19.c, increased from a low of 4.52 USD in 2005 to a high of 7.02 USD in 2018. The Wage Ranking for Ordinary Residents in Budapest, as denoted by the red bars, rose from 64th to 65th across 2005 and 2018.

BUDAPEST

Hungary

Ordinary Residents: Purchasing Power

Figure 19.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Budapest, Hungary



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Budapest. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Budapest are represented by the grey and red line respectively in Figure 19.d. In the first sub-period, Budapest's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Budapest was 38.53 percent that of their counterparts in New York. This climbed to 44.62 percent in 2010. However, the Wages Index for Ordinary Residents in Budapest decreased from 32.53 to 28.03 in the same period.

The cost of living index climbed whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Budapest, as denoted by the green line in Figure 19.d, followed a general declining trend from 84.47 to 62.83 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Budapest fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Budapest, as denoted by the green bars in Figure 19.d, decreased from the 63rd to the 64th position.

In the second sub-period, Budapest's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Budapest was 39.14 percent that of their counterparts in New York. This declined to 24.22 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Budapest declined from 30.07 to 22.18 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Budapest followed a general rising trend from 76.83 to 91.62 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Budapest increased from the 64th to the 62nd position.

For the third sub-period, Budapest's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Budapest was 29.83 percent that of their counterparts in New York. This increased to 30.81 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Budapest rose from 26.17 to 28.07 in the same period.

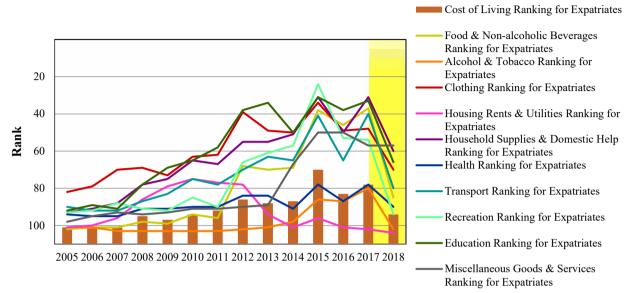
The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Budapest followed a general upward trend from 87.75 to 91.12 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Budapest remained the same at the 63rd spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Budapest has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Budapest, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

Argentina

Expatriates: Cost of Living

Figure 20.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Buenos Aires, Argentina



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

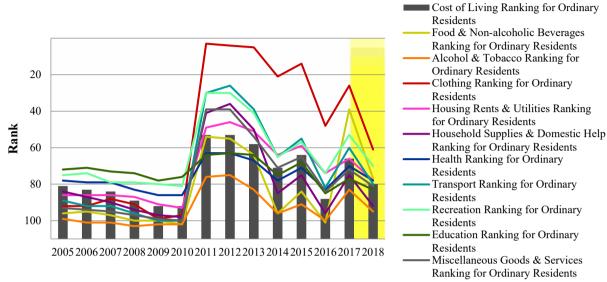
Buenos Aires is the capital of Argentina and one of the largest population centres in South America. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 101st to the 94th spot between 2005 and 2018 (see Figure 20a).

The city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities declined the most, falling by three places from the 101st to the 104th spot, while the rankings for Alcohol & Tobacco and Recreation decreased by one place from the 101st to the 102nd spot, and 93rd to the 94th spot respectively. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 41 places from the 98th to the 57th spot, while the ranking for Household Supplies & Domestic Help rose by 33 places from the 93rd to the 60th spot.

Argentina

Ordinary Residents: Cost of Living

Figure 20.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Buenos Aires, Argentina



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 81st position to the 92nd position between 2005 and 2010. The ranking climbed from the 53rd position to the 88th between 2011 to 2016 and increased from the 66th position to the 80th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help dropped the most, falling by 14 places from the 84th to the 98th position, while the ranking for Transport declined by 11 places from the 89th to the 100th position.

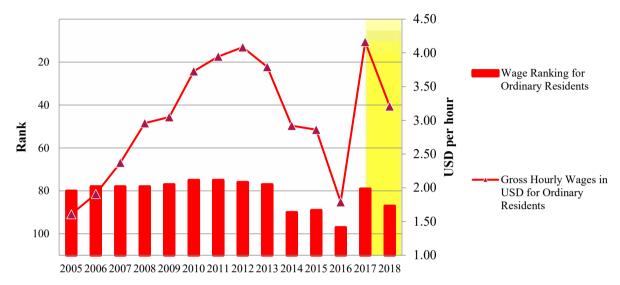
Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help fell the most, falling by 55 places from the 41st to the 96th spot, while the ranking for Transport declined by 52 places from the 30th to the 82nd spot.

For the third sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 38 places from the 39th to the 77th position, while the ranking for Clothing declined by 35 places from the 26th to the 61st position.

Argentina

Ordinary Residents: Wage

Figure 20.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Buenos Aires, Argentina



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Buenos Aires, as represented by the red line in Figure 20.c, increased from a low of 1.61 USD in 2005 to 4.08 USD in 2012. It then dropped to 1.79 USD in 2016. Subsequently, it rose again to a high of 4.16 USD in 2017 before, finally, dropping once again to 3.21 USD in 2018. The Wage Ranking for Ordinary Residents in Buenos Aires, as denoted by the red bars, increased from 80th to 87th across 2005 and 2018.

Argentina

Ordinary Residents: Purchasing Power

Figure 20.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Buenos Aires, Argentina



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Buenos Aires. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Buenos Aires are represented by the grey and red line respectively in Figure 20.d. In the first sub-period, Buenos Aires's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Buenos Aires was 28.74 percent that of their counterparts in New York. This climbed to 30.76 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Buenos Aires climbed from 11.64 to 18.5 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Buenos Aires, as denoted by the green line in Figure 20.d, followed a general upward trend from 40.34 to 60.14 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Buenos Aires increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Buenos Aires, as denoted by the green bars in Figure 20.d, climbed from the 79th to the 67th position.

In the second sub-period, Buenos Aires's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Buenos Aires was 59.23 percent that of their counterparts in New York. This dropped to 23.73 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Buenos Aires declined from 19.11 to 7.35 in the same period.

The cost of living index dropped at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Buenos Aires followed a general downward trend from 32.26 to 30.98 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Buenos Aires fell from the 94th to the 97th position.

For the third sub-period, Buenos Aires's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in Buenos Aires was 36.46 percent that of their counterparts in New York. This declined to 28.57 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Buenos Aires dropped from 16.99 to 12.83 in the same period.

The cost of living index declined at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Buenos Aires followed a general falling trend from 46.6 to 44.91 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Buenos Aires fell from the 88th to the 89th spot.

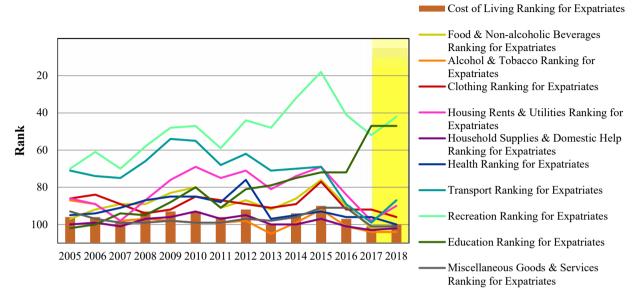
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Buenos Aires has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Buenos Aires, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

CAIRO

Egypt

Expatriates: Cost of Living

Figure 21.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Cairo, Egypt



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Cairo is the capital of Egypt and one of the oldest cities in the world. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 96th to the 100th spot between 2005 and 2018 (see Figure 21a).

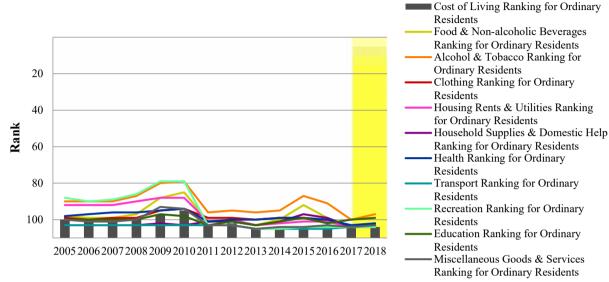
The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco fell the most, falling by 17 places from the 87th to the 104th position, while the ranking for Transport fell by 16 places from the 71st to the 87th position. On the other hand, the ranking for Education rose the most, climbing 55 places from the 102nd to the 47th position, while the ranking for Recreation rose by 28 places from the 70th to the 42nd position.

CAIRO

Egypt

Ordinary Residents: Cost of Living

Figure 21.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Cairo, Egypt



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 100th spot to the 95th spot between 2005 and 2010. The ranking remained the same from the 103rd spot to the 103rd between 2011 to 2016 and remained the same from the 104th spot to the 104th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 13 places from the 98th to the 85th spot, while the ranking for Alcohol & Tobacco rose by 11 places from the 90th to the 79th spot. Household Supplies & Domestic Help and Transport did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2011 and 2016, the rankings for Clothing and Transport dropped by two places from the 99th to the 101st position, and 103rd to the 105th position respectively. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing five places from the 96th to the 91st position, while the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help increased by two places from the 101st to the 99th position, and the 101st to the 99th position respectively. Housing

Rents & Utilities and Miscellaneous Goods & Services did not change overall during this period.

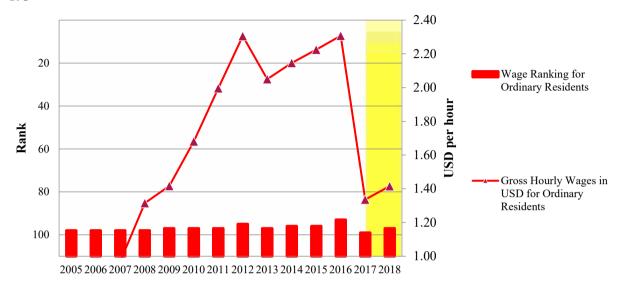
For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco rose the most, climbing three places from the 100th to the 97th spot, while the ranking for Food & Non-alcoholic Beverages rose by two places from the 104th to the 102nd spot. Clothing, Housing Rents & Utilities, Recreation and Transport did not change overall during this period.

CAIRO

Egypt

Ordinary Residents: Wage

Figure 21.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Cairo, Egypt



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

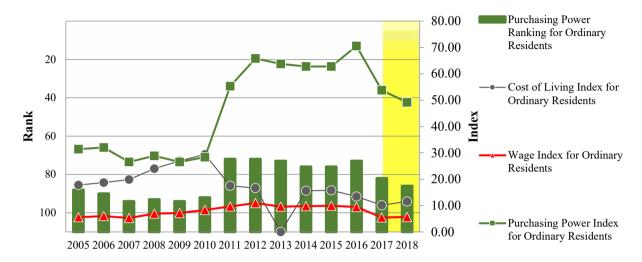
The Gross Hourly Wages in USD for Ordinary Residents in Cairo, as represented by the red line in Figure 21.c, improved from a low of 0.78 USD in 2005 to a high of 2.31 USD from 2012 to 2016 before, finally, dropping to 1.42 USD in 2018. The Wage Ranking for Ordinary Residents in Cairo, as denoted by the red bars, decreased from 98th to 97th across 2005 and 2018.

CAIRO

Egypt

Ordinary Residents: Purchasing Power

Figure 21.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Cairo, Egypt



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Cairo. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Cairo are represented by the grey and red line respectively in Figure 21.d. In the first sub-period, Cairo's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Cairo was 17.82 percent that of their counterparts in New York. This climbed to 29.41 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Cairo increased from 5.59 to 8.34 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Cairo, as denoted by the green line in Figure 21.d, followed a general downward trend from 31.41 to 28.36 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Cairo dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Cairo, as denoted by the green bars in Figure 21.d, declined from the 88th to the 92nd position.

In the second sub-period, Cairo's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Cairo was 17.47 percent that of their counterparts in New York. This fell to 13.44 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Cairo declined from 9.67 to 9.48 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Cairo followed a general rising trend from 55.32 to 70.54 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Cairo decreased from the 72nd to the 73rd position.

For the third sub-period, Cairo's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Cairo was 10.15 percent that of their counterparts in New York. This increased to 11.52 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Cairo climbed from 5.46 to 5.66 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Cairo followed a general downward trend from 53.79 to 49.16 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Cairo dropped from the 82nd to the 86th spot.

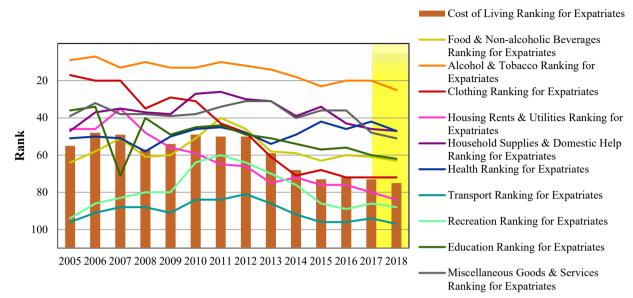
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Cairo has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Cairo, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

CALGARY

Canada

Expatriates: Cost of Living

Figure 22.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Calgary, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Located in the province of Alberta, Calgary is one of the major cities in Western Canada. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 55th to the 75th spot between 2005 and 2018 (see Figure 22a).

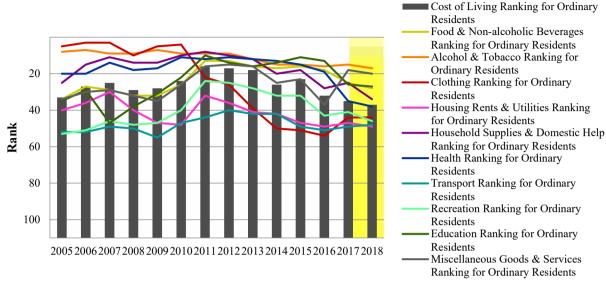
The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing dropped the most, falling by 55 places from the 17th to the 72nd spot, while the ranking for Housing Rents & Utilities declined by 38 places from the 46th to the 84th spot. On the other hand, the ranking for Recreation increased the most, climbing six places from the 94th to the 88th spot, while the ranking for Health rose by four places from the 51st to the 47th spot. Household Supplies & Domestic Help did not change overall during this period.

CALGARY

Canada

Ordinary Residents: Cost of Living

Figure 22.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Calgary, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 33rd position to the 24th position between 2005 and 2010. The ranking climbed from the 16th position to the 32nd between 2011 to 2016 and increased from the 35th position to the 37th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Housing Rents & Utilities decreased the most, falling by eight places from the 40th to the 48th position, while the ranking for Alcohol & Tobacco decreased by one place from the 8th to the 9th position. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing 15 places from the 25th to the 10th position, while the rankings for Education and Recreation rose by 13 places from the 35th to the 22nd position, and the 53rd to the 40th position respectively.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Clothing declined the most, falling by 32 places from the 22nd to the 54th position, while the ranking for Miscellaneous Goods & Services decreased by 21 places from the 16th to the 37th position.

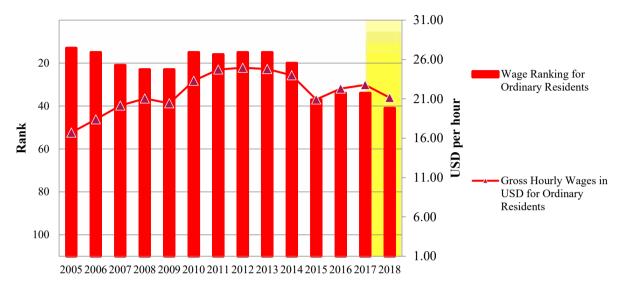
For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help decreased the most, falling by nine places from the 25th to the 34th spot, while the ranking for Recreation dropped by five places from the 41st to the 46th spot. On the other hand, the ranking for Transport rose the most, climbing one place from the 49th to the 48th spot. Clothing did not change overall during this period.

CALGARY

Canada

Ordinary Residents: Wage

Figure 22.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Calgary, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

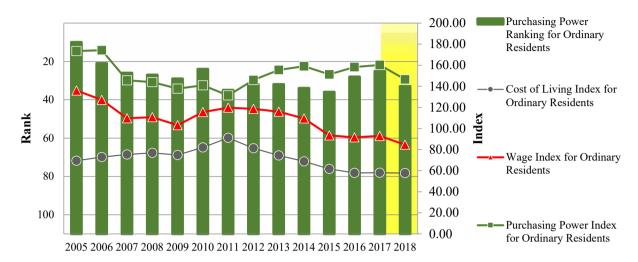
The Gross Hourly Wages in USD for Ordinary Residents in Calgary, as represented by the red line in Figure 22.c, rose from a low of 16.71 USD in 2005 to a high of 24.95 USD in 2012 before decreasing to 21.15 USD in 2018. The Wage Ranking for Ordinary Residents in Calgary, as denoted by the red bars, rose from 13th to 41st across 2005 and 2018.

CALGARY

Canada

Ordinary Residents: Purchasing Power

Figure 22.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Calgary, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Calgary. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Calgary are represented by the grey and red line respectively in Figure 22.d. In the first sub-period, Calgary's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Calgary was 69.46 percent that of their counterparts in New York. This climbed to 82.1 percent in 2010. However, the Wages Index for Ordinary Residents in Calgary declined from 136.02 to 115.69 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Calgary, as denoted by the green line in Figure 22.d, followed a general declining trend from 173.42 to 140.91 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Calgary declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Calgary, as denoted by the green bars in Figure 22.d, fell from the 10th to the 24th spot.

In the second sub-period, Calgary's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Calgary was 91.17 percent that of their counterparts in New York. This declined to 57.88 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Calgary fell from 119.76 to 91.62 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Calgary followed a general rising trend from 131.36 to 158.28 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Calgary increased from the 35th to the 28th spot.

For the third sub-period, Calgary's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Calgary was 58.05 percent that of their counterparts in New York. This fell to 57.71 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Calgary declined from 93.04 to 84.59 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Calgary followed a general declining trend from 160.26 to 146.57 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Calgary dropped from the 25th to the 33rd position.

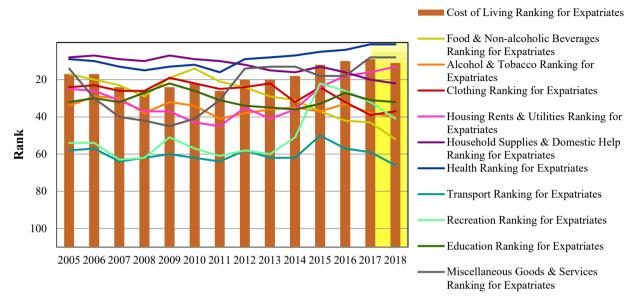
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Calgary has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Calgary, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

CHICAGO

United States

Expatriates: Cost of Living

Figure 23.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Chicago, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Chicago is currently the third-largest population centre in the United States and one of the country's main cultural centres. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 17th to the 11th spot between 2005 and 2018 (see Figure 23a).

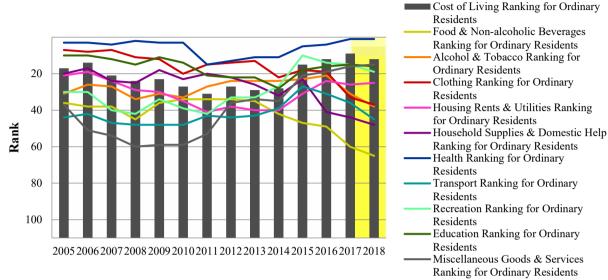
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Food & Non-alcoholic Beverages declined the most, falling by 35 places from the 17th to the 52nd position, while the ranking for Household Supplies & Domestic Help fell by 14 places from the 8th to the 22nd position. On the other hand, the ranking for Recreation rose the most, climbing 13 places from the 54th to the 41st position, while the ranking for Housing Rents & Utilities rose by 12 places from the 25th to the 13th position. Education did not change overall during this period.

CHICAGO

United States

Ordinary Residents: Cost of Living

Figure 23.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Chicago, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 17th position to the 27th position between 2005 and 2010. The ranking declined from the 31st position to the 12th between 2011 to 2016 and climbed from the 9th position to the 12th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Miscellaneous Goods & Services declined the most, falling by 22 places from the 37th to the 59th position, while the ranking for Housing Rents & Utilities dropped by 14 places from the 21st to the 35th position. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing two places from the 36th to the 34th position. Health did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help fell the most, falling by 21 places from the 20th to the 41st spot, while the ranking for Food & Non-alcoholic Beverages dropped by 15 places from the 34th to the 49th spot. On the other hand, the ranking for Miscellaneous Goods & Services

rose the most, climbing 34 places from the 53rd to the 19th spot, while the ranking for Recreation rose by 28 places from the 42nd to the 14th spot.

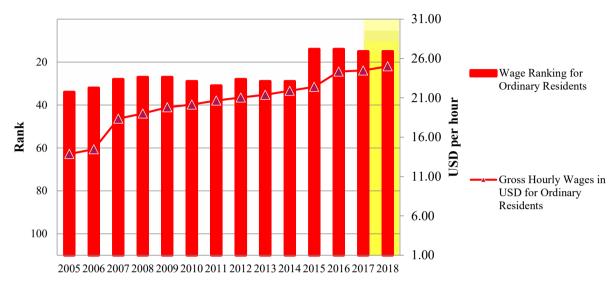
For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Transport fell the most, falling by nine places from the 36th to the 45th spot, while the ranking for Alcohol & Tobacco decreased by seven places from the 31st to the 38th spot. On the other hand, the rankings for Housing Rents & Utilities and Miscellaneous Goods & Services increased by one place from the 26th to the 25th spot, and the 16th to the 15th spot respectively. Health did not change overall during this period.

CHICAGO

United States

Ordinary Residents: Wage

Figure 23.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Chicago, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

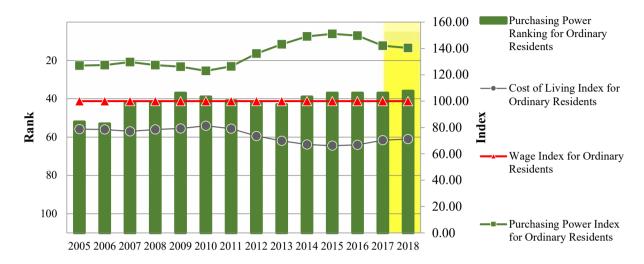
The Gross Hourly Wages in USD for Ordinary Residents in Chicago, as represented by the red line in Figure 23.c, rose from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Chicago, as denoted by the red bars, dropped from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Chicago is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

CHICAGO

United States

Ordinary Residents: Purchasing Power

Figure 23.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Chicago, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Chicago. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Chicago are represented by the grey and red line respectively in Figure 23.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Chicago belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Chicago will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Chicago's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Chicago was 78.73 percent that of their counterparts in New York. This rose to 81.31 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Chicago, as denoted by the green line in Figure 23.d, followed a general downward trend from 127.01 to 122.99 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Chicago decreased relative to that of their New York counterparts over the

first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Chicago, as denoted by the green bars in Figure 23.d, increased from the 52nd to the 39th position.

In the second sub-period, Chicago's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Chicago was 79.08 percent that of their counterparts in New York. This fell to 66.81 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Chicago followed a general upward trend from 126.45 to 149.68 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Chicago rose from the 41st to the 37th spot.

For the third sub-period, Chicago's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Chicago was 70.39 percent that of their counterparts in New York. This increased to 71.24 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Chicago followed a general falling trend from 142.06 to 140.37 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Chicago increased from the 37th to the 36th position.

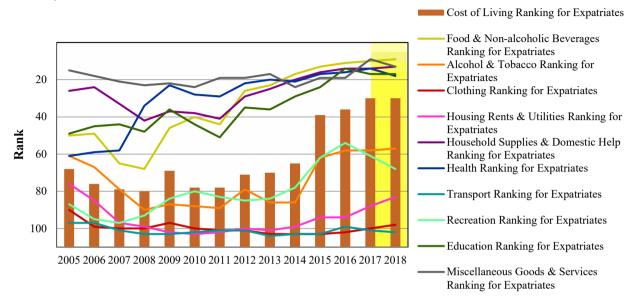
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Chicago has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Chicago, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

CLEVELAND

United States

Expatriates: Cost of Living

Figure 24.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Cleveland, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Situated in the US state of Ohio, Cleveland is home to several landmarks including the Rock and Roll Hall of Fame. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 68th to the 30th position between 2005 and 2018 (see Figure 24a).

The city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing fell the most, falling by eight places from the 90th to the 98th position, while the ranking for Housing Rents & Utilities declined by seven places from the 76th to the 83rd position. On the other hand, the ranking for Health increased the most, climbing 43 places from the 61st to the 18th position, while the ranking for Food & Non-alcoholic Beverages increased by 41 places from the 50th to the 9th position.

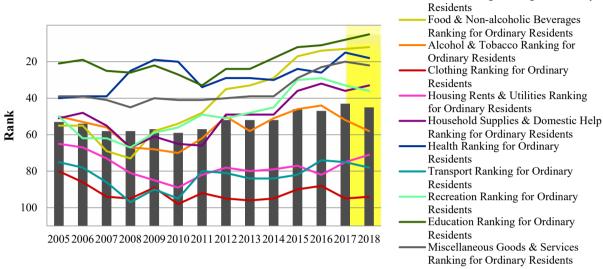
Cost of Living Ranking for Ordinary

CLEVELAND

United States

Ordinary Residents: Cost of Living

Figure 24.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Cleveland, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 53rd position to the 59th position between 2005 and 2010. The ranking fell from the 57th position to the 47th between 2011 to 2016 and rose from the 43rd position to the 45th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Housing Rents & Utilities dropped the most, falling by 24 places from the 65th to the 89th spot, while the rankings for Alcohol & Tobacco and Transport fell by 20 places from the 50th to the 70th spot, and 75th to the 95th spot respectively. On the other hand, the ranking for Health rose the most, climbing 20 places from the 40th to the 20th spot, while the ranking for Food & Non-alcoholic Beverages increased by one place from the 55th to the 54th spot.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help rose by 34 places from the 48th to the 14th position, and the 66th to the 32nd position respectively. Housing Rents & Utilities did not change overall during this period.

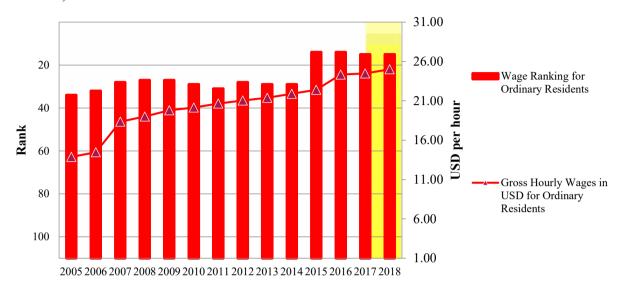
For the third sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco declined the most, falling by six places from the 52nd to the 58th spot, while the rankings for Health, Recreation, and Transport fell by three places from the 15th to the 18th spot, 33rd to the 36th spot, and 75th to the 78th spot respectively. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing four places from the 75th to the 71st spot, while the rankings for Education and Household Supplies & Domestic Help increased by three places from the 8th to the 5th spot, and the 36th to the 33rd spot respectively.

CLEVELAND

United States

Ordinary Residents: Wage

Figure 24.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Cleveland, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

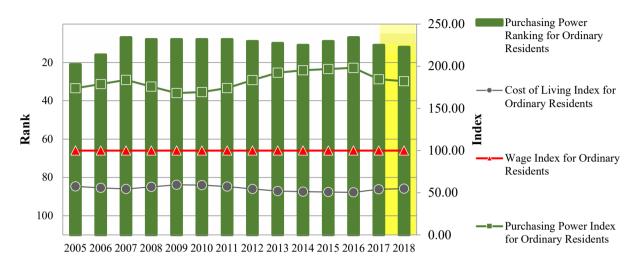
The Gross Hourly Wages in USD for Ordinary Residents in Cleveland, as represented by the red line in Figure 24.c, rose from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Cleveland, as denoted by the red bars, fell from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Cleveland is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

CLEVELAND

United States

Ordinary Residents: Purchasing Power

Figure 24.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Cleveland, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Cleveland. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Cleveland are represented by the grey and red line respectively in Figure 24.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Cleveland belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Cleveland will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Cleveland's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Cleveland was 57.46 percent that of their counterparts in New York. This climbed to 59.05 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Cleveland, as denoted by the green line in Figure 24.d, followed a general falling trend from 174.03 to 169.36 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Cleveland decreased relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary

Residents in Cleveland, as denoted by the green bars in Figure 24.d, climbed from the 21st to the 8th position.

In the second sub-period, Cleveland's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Cleveland was 57.43 percent that of their counterparts in New York. This declined to 50.48 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Cleveland followed a general upward trend from 174.12 to 198.12 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Cleveland climbed from the 8th to the 7th position.

For the third sub-period, Cleveland's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Cleveland was 54.17 percent that of their counterparts in New York. This rose to 54.88 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Cleveland followed a general downward trend from 184.59 to 182.22 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Cleveland dropped from the 11th to the 12th spot.

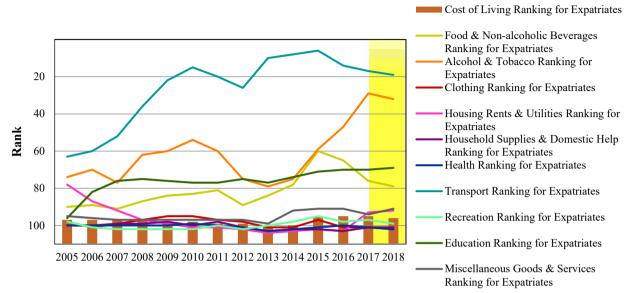
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Cleveland has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Cleveland, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

COLOMBO

Sri Lanka

Expatriates: Cost of Living

Figure 25.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Colombo, Sri Lanka



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Colombo is the capital of Sri Lanka and one of the major ports in the region historically. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 97th to the 96th spot between 2005 and 2018 (see Figure 25a).

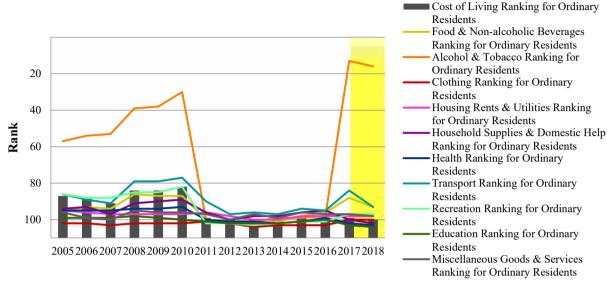
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities declined the most, falling by 14 places from the 78th to the 92nd position, while the ranking for Household Supplies & Domestic Help dropped by three places from the 98th to the 101st position. On the other hand, the ranking for Transport increased the most, climbing 44 places from the 63rd to the 19th position, while the ranking for Alcohol & Tobacco rose by 42 places from the 74th to the 32nd position.

COLOMBO

Sri Lanka

Ordinary Residents: Cost of Living

Figure 25.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Colombo, Sri Lanka



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 87th spot to the 82nd spot between 2005 and 2010. The ranking remained the same from the 99th spot to the 99th between 2011 to 2016 and climbed from the 99th spot to the 100th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Housing Rents & Utilities decreased the most, falling by two places from the 95th to the 97th position, while the ranking for Education fell by one place from the 99th to the 100th position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 27 places from the 57th to the 30th position, while the ranking for Transport rose by nine places from the 86th to the 77th position. Clothing and Miscellaneous Goods & Services did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2011 and 2016, the ranking for Transport dropped the most, falling by five places from the 90th to the 95th spot, while the rankings for Clothing and Housing Rents & Utilities fell by two places from the 101st to the 103rd spot, and 96th to the 98th spot respectively. On the other hand, the ranking for Food &

Non-alcoholic Beverages increased the most, climbing four places from the 100th to the 96th spot, while the ranking for Alcohol & Tobacco rose by two places from the 100th to the 98th spot. Miscellaneous Goods & Services did not change overall during this period.

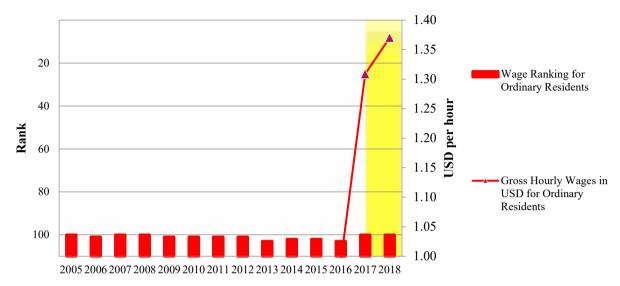
For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Transport declined the most, falling by nine places from the 84th to the 93rd spot, while the ranking for Food & Non-alcoholic Beverages decreased by five places from the 88th to the 93rd spot. Clothing, Housing Rents & Utilities and Recreation did not change overall during this period.

COLOMBO

Sri Lanka

Ordinary Residents: Wage

Figure 25.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Colombo, Sri Lanka



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

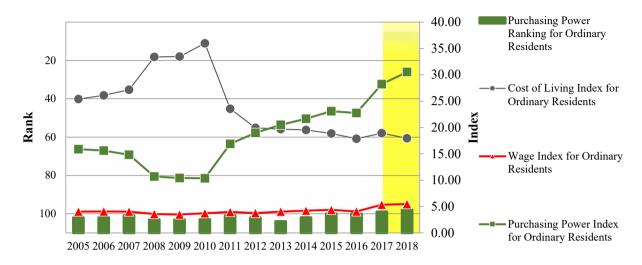
The Gross Hourly Wages in USD for Ordinary Residents in Colombo, as represented by the red line in Figure 25.c, increased from a low of 0.56 USD in 2005 to a high of 1.37 USD in 2018. The Wage Ranking for Ordinary Residents in Colombo, as denoted by the red bars, remained unchanged at 100th from 2005 to 2018.

COLOMBO

Sri Lanka

Ordinary Residents: Purchasing Power

Figure 25.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Colombo, Sri Lanka



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Colombo. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Colombo are represented by the grey and red line respectively in Figure 25.d. In the first sub-period, Colombo's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Colombo was 25.39 percent that of their counterparts in New York. This rose to 35.98 percent in 2010. However, the Wages Index for Ordinary Residents in Colombo dropped from 4.04 to 3.73 in the same period.

The cost of living index rose whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Colombo, as denoted by the green line in Figure 25.d, followed a general falling trend from 15.91 to 10.38 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Colombo dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Colombo, as denoted by the green bars in Figure 25.d, fell from the 102nd to the 103rd spot.

In the second sub-period, Colombo's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Colombo was 23.55 percent that of their counterparts in New York. This fell to 17.86 percent in 2016. However, the Wages Index for Ordinary Residents in Colombo rose from 3.98 to 4.07 in the same period.

The cost of living index fell whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Colombo followed a general rising trend from 16.89 to 22.76 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Colombo increased from the 101st to the 100th position.

For the third sub-period, Colombo's Cost of Living Index dropped overall. In 2017, the cost of living for ordinary residents in Colombo was 18.93 percent that of their counterparts in New York. This dropped to 17.95 percent in 2018. However, the Wages Index for Ordinary Residents in Colombo climbed from 5.34 to 5.48 in the same period.

The cost of living index dropped whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Colombo followed a general upward trend from 28.23 to 30.52 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Colombo climbed from the 99th to the 98th position.

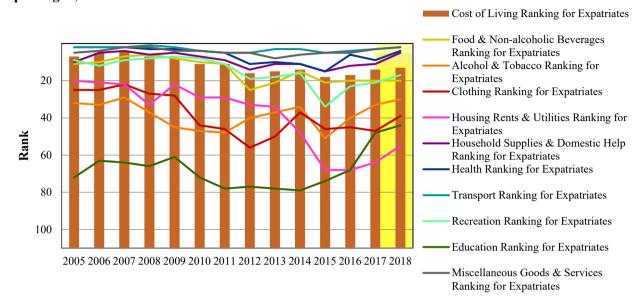
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Colombo has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Colombo, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

COPENHAGEN

Denmark

Expatriates: Cost of Living

Figure 26.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Copenhagen, Denmark



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Copenhagen is the capital of Denmark and the most populous city of Denmark currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 7th to the 13th position between 2005 and 2018 (see Figure 26a).

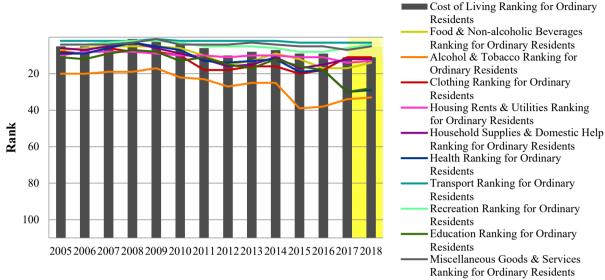
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities dropped the most, falling by 35 places from the 20th to the 55th spot, while the ranking for Clothing dropped by 14 places from the 25th to the 39th spot. On the other hand, the ranking for Education rose the most, climbing 28 places from the 72nd to the 44th spot, while the ranking for Household Supplies & Domestic Help rose by five places from the 10th to the 5th spot. Transport did not change overall during this period.

COPENHAGEN

Denmark

Ordinary Residents: Cost of Living

Figure 26.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Copenhagen, Denmark



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, dropped from the 5th position to the 4th position between 2005 and 2010. The ranking increased from the 6th position to the 9th between 2011 to 2016 and remained the same from the 11th position to the 11th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in four consumption categories across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help declined the most, falling by three places from the 6th to the 9th spot, while the rankings for Alcohol & Tobacco, Clothing, and Education fell by two places from the 20th to the 22nd spot, 8th to the 10th spot, and 11th to the 13th spot respectively. On the other hand, the ranking for Health rose the most, climbing two places from the 9th to the 7th spot, while the rankings for Food & Non-alcoholic Beverages and Recreation increased by one place from the 7th to the 6th spot, and the 4th to the 3rd spot respectively. Housing Rents & Utilities, Miscellaneous Goods & Services and Transport did not change overall during this period.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco decreased the most, falling by 15 places from the 23rd to the 38th position,

while the rankings for Education and Food & Non-alcoholic Beverages decreased by seven places from the 11th to the 18th position, and 10th to the 17th position respectively. Clothing did not change overall during this period.

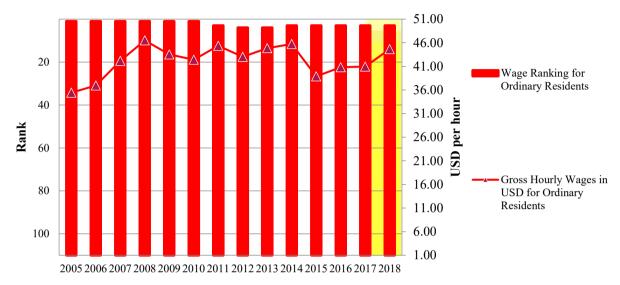
For the third sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages increased the most, climbing three places from the 17th to the 14th spot, while the rankings for Education, Miscellaneous Goods & Services, and Recreation rose by two places from the 30th to the 28th spot, 7th to the 5th spot, and the 6th to the 4th spot respectively. Clothing, Household Supplies & Domestic Help and Transport did not change overall during this period.

COPENHAGEN

Denmark

Ordinary Residents: Wage

Figure 26.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Copenhagen, Denmark



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Copenhagen, as represented by the red line in Figure 26.c, rose from a low of 35.43 USD in 2005 to a high of 46.5 USD in 2008 before decreasing to 44.64 USD in 2018. The Wage Ranking for Ordinary Residents in Copenhagen, as denoted by the red bars, improved from 1st to 3rd across 2005 and 2018.

COPENHAGEN

Denmark

Ordinary Residents: Purchasing Power

Figure 26.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Copenhagen, Denmark



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Copenhagen. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Copenhagen are represented by the grey and red line respectively in Figure 26.d. In the first sub-period, Copenhagen's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Copenhagen was 97.59 percent that of their counterparts in New York. This rose to 107.26 percent in 2010. However, the Wages Index for Ordinary Residents in Copenhagen decreased from 255.04 to 210.57 in the same period.

The cost of living index rose whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Copenhagen, as denoted by the green line in Figure 26.d, followed a general downward trend from 261.63 to 196.31 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Copenhagen decreased relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Copenhagen, as denoted by the green bars in Figure 26.d, remained the same at the 1st spot.

In the second sub-period, Copenhagen's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Copenhagen was 107.95 percent that of their counterparts in New York. This fell to 72.24 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Copenhagen declined from 219.54 to 167.78 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Copenhagen followed a general rising trend from 203.38 to 232.27 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Copenhagen dropped from the 1st to the 2nd position.

For the third sub-period, Copenhagen's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Copenhagen was 69.98 percent that of their counterparts in New York. This increased to 72.93 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Copenhagen climbed from 167.17 to 178.51 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Copenhagen followed a general upward trend from 238.89 to 244.76 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Copenhagen increased from the 3rd to the 1st position.

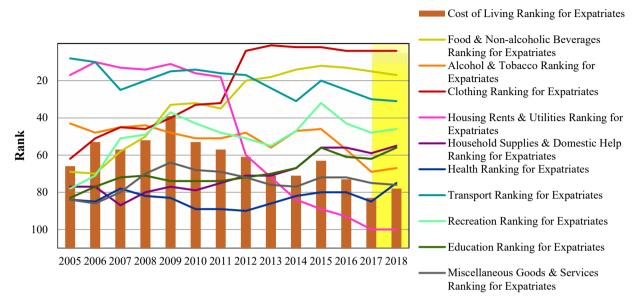
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Copenhagen has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Copenhagen, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

DALIAN

China

Expatriates: Cost of Living

Figure 27.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Dalian, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Dalian is a seaport and is currently the second-largest city of the Liaoning province. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 66th to the 78th position between 2005 and 2018 (see Figure 27a).

The city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities decreased the most, falling by 83 places from the 17th to the 100th position, while the ranking for Alcohol & Tobacco dropped by 24 places from the 43rd to the 67th position. On the other hand, the ranking for Clothing increased the most, climbing 58 places from the 62nd to the 4th position, while the ranking for Food & Non-alcoholic Beverages rose by 52 places from the 69th to the 17th position.

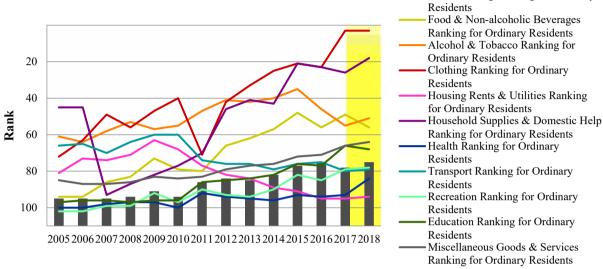
Cost of Living Ranking for Ordinary

DALIAN

China

Ordinary Residents: Cost of Living

Figure 27.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Dalian, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 95th position to the 94th position between 2005 and 2010. The ranking declined from the 86th position to the 75th between 2011 to 2016 and dropped from the 78th position to the 75th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help declined the most, falling by 32 places from the 45th to the 77th position. On the other hand, the ranking for Clothing increased the most, climbing 32 places from the 72nd to the 40th position, while the ranking for Food & Non-alcoholic Beverages increased by 15 places from the 94th to the 79th position. Health did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2011 and 2016, the ranking for Housing Rents & Utilities declined the most, falling by 18 places from the 77th to the 95th spot, while the ranking for Health decreased by two places from the 92nd to the 94th spot. On the other hand, the ranking for Clothing rose the most, climbing 48 places from the 71st to the 23rd spot, while the ranking for Household Supplies & Domestic Help rose by 47 places from the 70th to the 23rd spot.

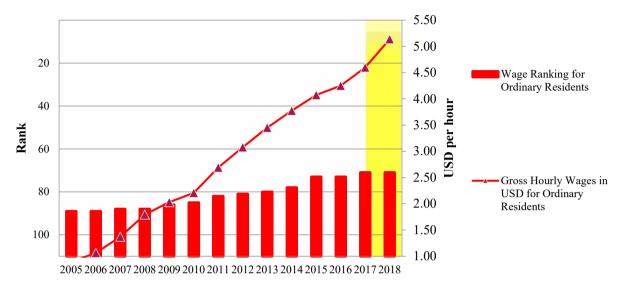
For the third sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages declined the most, falling by seven places from the 49th to the 56th position, while the ranking for Education declined by two places from the 66th to the 68th position. On the other hand, the ranking for Health rose the most, climbing nine places from the 93rd to the 84th position, while the ranking for Household Supplies & Domestic Help increased by eight places from the 26th to the 18th position. Clothing did not change overall during this period.

DALIAN

China

Ordinary Residents: Wage

Figure 27.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Dalian, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

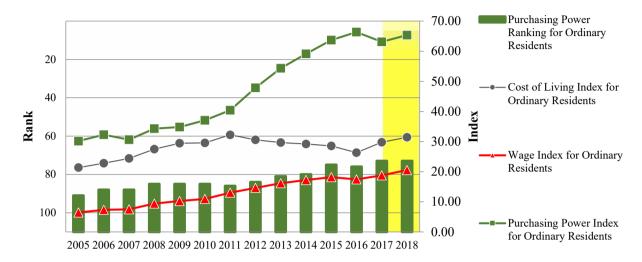
The Gross Hourly Wages in USD for Ordinary Residents in Dalian, as represented by the red line in Figure 27.c, improved from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Dalian, as denoted by the red bars, dropped from 89th to 71st across 2005 and 2018.

DALIAN

China

Ordinary Residents: Purchasing Power

Figure 27.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Dalian, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Dalian. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Dalian are represented by the grey and red line respectively in Figure 27.d. In the first sub-period, Dalian's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Dalian was 21.35 percent that of their counterparts in New York. This increased to 29.58 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Dalian climbed from 6.44 to 10.96 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dalian, as denoted by the green line in Figure 27.d, followed a general rising trend from 30.17 to 37.06 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Dalian rose relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Dalian, as denoted by the green bars in Figure 27.d, climbed from the 91st to the 85th position.

In the second sub-period, Dalian's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Dalian was 32.24 percent that of their counterparts in New York. This decreased to 26.32 percent in 2016. However, the Wages Index for Ordinary Residents in Dalian increased from 13.03 to 17.46 in the same period.

The cost of living index decreased whereas the wage index increased over this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Dalian followed a general rising trend from 40.42 to 66.35 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Dalian rose from the 86th to the 76th position.

For the third sub-period, Dalian's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Dalian was 29.76 percent that of their counterparts in New York. This climbed to 31.45 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Dalian rose from 18.78 to 20.55 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dalian followed a general rising trend from 63.12 to 65.34 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Dalian remained the same at the 73rd spot.

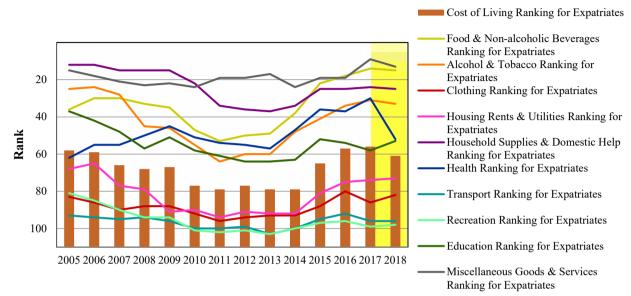
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Dalian has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Dalian, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

DETROIT

United States

Expatriates: Cost of Living

Figure 28.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Detroit, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Detroit is regarded as a major cultural centre for its contribution to music and as a repository for architecture and design. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 58th to the 61st position between 2005 and 2018 (see Figure 28a).

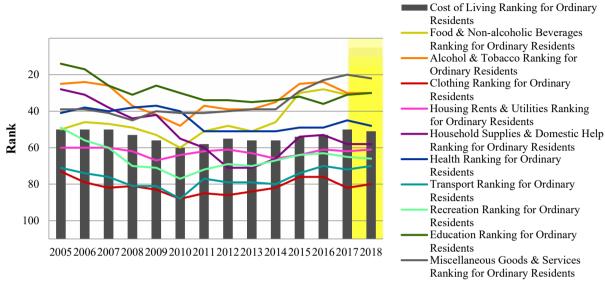
The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation decreased the most, falling by 17 places from the 81st to the 98th position, while the ranking for Education fell by 16 places from the 37th to the 53rd position. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 21 places from the 36th to the 15th position, while the ranking for Health rose by 10 places from the 62nd to the 52nd position.

DETROIT

United States

Ordinary Residents: Cost of Living

Figure 28.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Detroit, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 50th position to the 60th position between 2005 and 2010. The ranking dropped from the 58th position to the 53rd between 2011 to 2016 and rose from the 50th position to the 51st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Recreation dropped the most, falling by 28 places from the 49th to the 77th position, while the ranking for Household Supplies & Domestic Help declined by 27 places from the 28th to the 55th position. On the other hand, the ranking for Health rose the most, climbing one place from the 41st to the 40th position.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Education declined the most, falling by two places from the 34th to the 36th spot. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 23 places from the 51st to the 28th spot, while the ranking for Miscellaneous Goods & Services rose by 18 places from the 41st to the 23rd spot.

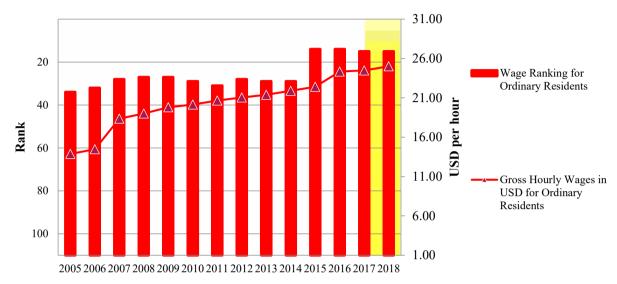
For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Health dropped the most, falling by three places from the 45th to the 48th position, while the ranking for Miscellaneous Goods & Services dropped by two places from the 20th to the 22nd position. On the other hand, the rankings for Clothing and Transport increased by two places from the 82nd to the 80th position, and the 72nd to the 70th position respectively. Alcohol & Tobacco and Household Supplies & Domestic Help did not change overall during this period.

DETROIT

United States

Ordinary Residents: Wage

Figure 28.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Detroit, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Detroit, as represented by the red line in Figure 28.c, improved from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Detroit, as denoted by the red bars, dropped from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Detroit is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

DETROIT

United States

Ordinary Residents: Purchasing Power

Figure 28.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Detroit, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Detroit. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Detroit are represented by the grey and red line respectively in Figure 28.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Detroit belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Detroit will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Detroit's Cost of Living Index fell overall. In 2005, the cost of living for ordinary residents in Detroit was 60.2 percent that of their counterparts in New York. This fell to 59.04 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Detroit, as denoted by the green line in Figure 28.d, followed a general rising trend from 166.11 to 169.38 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Detroit rose relative to that of their New York counterparts over the first

sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Detroit, as denoted by the green bars in Figure 28.d, rose from the 26th to the 7th spot.

In the second sub-period, Detroit's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Detroit was 56.83 percent that of their counterparts in New York. This fell to 46.43 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Detroit followed a general upward trend from 175.95 to 215.39 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Detroit increased from the 6th to the 5th spot.

For the third sub-period, Detroit's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Detroit was 48.57 percent that of their counterparts in New York. This decreased to 48.51 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Detroit followed a general upward trend from 205.89 to 206.13 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Detroit remained the same at the 6th spot.

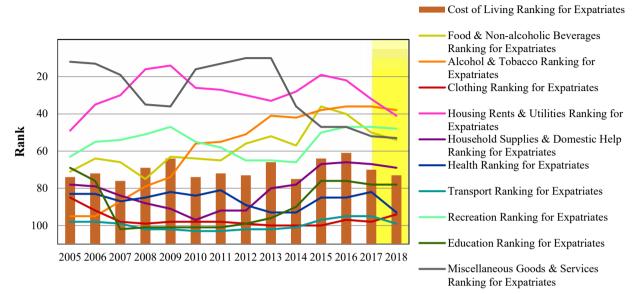
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Detroit has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Detroit, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

DOHA

Qatar

Expatriates: Cost of Living

Figure 29.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Doha, Oatar



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Doha is Qatar's fastest-growing city with more than 80% of the national population currently living in it. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 74th to the 73rd spot between 2005 and 2018 (see Figure 29a).

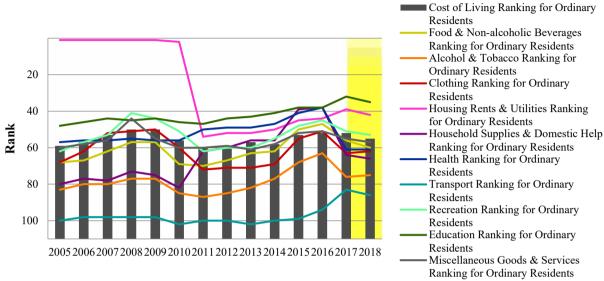
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services declined the most, falling by 41 places from the 12th to the 53rd position, while the ranking for Health decreased by 10 places from the 83rd to the 93rd position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 57 places from the 95th to the 38th position, while the ranking for Food & Non-alcoholic Beverages increased by 17 places from the 71st to the 54th position.

DOHA

Qatar

Ordinary Residents: Cost of Living

Figure 29.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Doha, Qatar



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 59th position to the 56th position between 2005 and 2010. The ranking decreased from the 60th position to the 52nd between 2011 to 2016 and rose from the 52nd position to the 55th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2010, the rankings for Alcohol & Tobacco, Household Supplies & Domestic Help, and Transport dropped by two places from the 83rd to the 85th position, 80th to the 82nd position, and 100th to the 102nd position respectively. On the other hand, the ranking for Recreation rose the most, climbing 11 places from the 62nd to the 51st position, while the ranking for Clothing rose by eight places from the 68th to the 60th position. Miscellaneous Goods & Services did not change overall during this period.

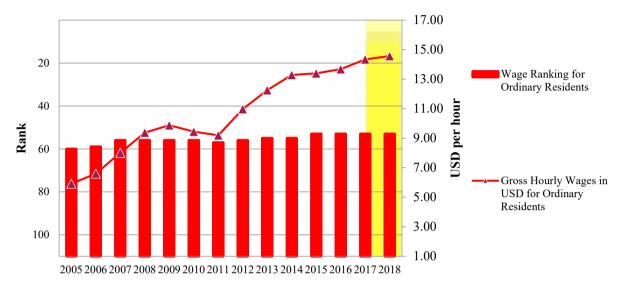
Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the rankings for Alcohol & Tobacco and Household Supplies & Domestic Help rose by 24 places from the 87th to the 63rd position, and the 62nd to the 38th position respectively.

For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages fell the most, falling by four places from the 56th to the 60th position, while the rankings for Education, Housing Rents & Utilities, and Transport dropped by three places from the 32nd to the 35th position, 39th to the 42nd position, and 83rd to the 86th position respectively. On the other hand, the rankings for Alcohol & Tobacco and Clothing rose by one place from the 76th to the 75th position, and the 63rd to the 62nd position respectively. Health did not change overall during this period.

DOHA Qatar

Ordinary Residents: Wage

Figure 29.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Doha, Qatar



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Doha, as represented by the red line in Figure 29.c, increased from a low of 5.91 USD in 2005 to a high of 14.57 USD in 2018. The Wage Ranking for Ordinary Residents in Doha, as denoted by the red bars, dropped from 60th to 53rd across 2005 and 2018.

DOHA Oatar

Ordinary Residents: Purchasing Power

Figure 29.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Doha, Qatar



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Doha. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Doha are represented by the grey and red line respectively in Figure 29.d. In the first sub-period, Doha's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Doha was 48.79 percent that of their counterparts in New York. This climbed to 61.52 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Doha increased from 41.71 to 46.85 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Doha, as denoted by the green line in Figure 29.d, followed a general declining trend from 87.33 to 76.15 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Doha dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Doha, as denoted by the green bars in Figure 29.d, rose from the 61st to the 60th position.

In the second sub-period, Doha's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Doha was 52.1 percent that of their counterparts in New York. This decreased to 47.56 percent in 2016. However, the Wages Index for Ordinary Residents in Doha increased from 44.53 to 56.22 in the same period.

The cost of living index decreased whereas the wage index increased over this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Doha followed a general upward trend from 85.47 to 118.19 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Doha climbed from the 60th to the 52nd position.

For the third sub-period, Doha's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Doha was 47.15 percent that of their counterparts in New York. This decreased to 46.87 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Doha decreased from 58.55 to 58.25 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Doha followed a general rising trend from 124.17 to 124.3 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Doha rose from the 49th to the 48th spot.

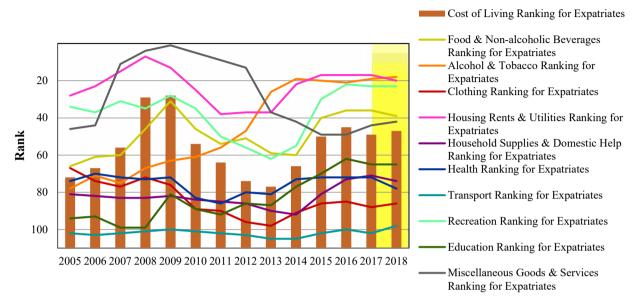
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Doha has been higher than 100 - the base index value some of the time. This suggests that the ordinary residents in Doha, given the same number of working hours, some of the time, have been able to afford more goods and services than their counterparts in New York.

DUBAI

United Arab Emirates

Expatriates: Cost of Living

Figure 30.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Dubai, United Arab Emirates



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

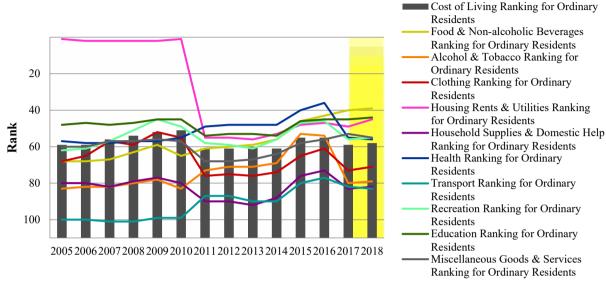
Dubai is a major business and transport hub of the Middle East. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 72nd to the 47th spot between 2005 and 2018 (see Figure 30a).

The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing dropped the most, falling by 19 places from the 67th to the 86th spot, while the ranking for Health dropped by four places from the 74th to the 78th spot. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 60 places from the 78th to the 18th spot, while the ranking for Education rose by 29 places from the 94th to the 65th spot.

DUBAI United Arab Emirates

Ordinary Residents: Cost of Living

Figure 30.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Dubai, United Arab Emirates



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 59th position to the 51st position between 2005 and 2010. The ranking fell from the 61st position to the 55th between 2011 to 2016 and dropped from the 59th position to the 58th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the rankings for Clothing and Recreation rose by 13 places from the 68th to the 55th position, and the 62nd to the 49th position respectively. Alcohol & Tobacco, Household Supplies & Domestic Help and Housing Rents & Utilities did not change overall during this period.

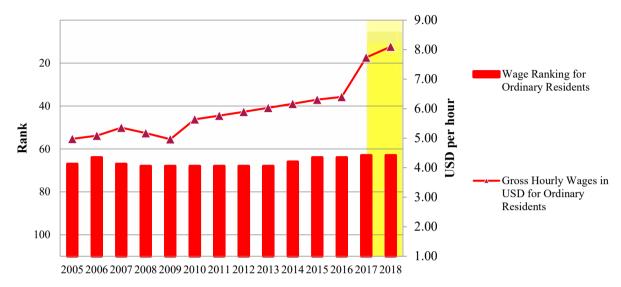
Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco rose the most, climbing 19 places from the 73rd to the 54th spot, while the ranking for Food & Non-alcoholic Beverages rose by 18 places from the 61st to the 43rd spot.

For the third sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous Goods & Services decreased the most, falling by two places from the 53rd to the 55th position, while the rankings for Health and Transport dropped by one place from the 55th to the 56th

position, and 82nd to the 83rd position respectively. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing four places from the 49th to the 45th position, while the ranking for Clothing rose by two places from the 73rd to the 71st position.

DUBAI United Arab Emirates Ordinary Residents: Wage

Figure 30.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Dubai, United Arab Emirates



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

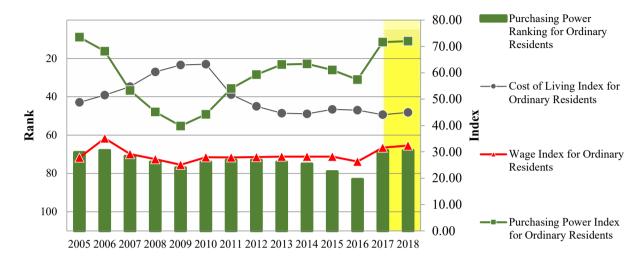
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Dubai, as represented by the red line in Figure 30.c, dropped from 4.98 USD USD in 2005 to a low of 4.96 USD in 2009 before increasing to a high of 8.1 USD in 2018. The Wage Ranking for Ordinary Residents in Dubai, as denoted by the red bars, dropped from 67th to 63rd across 2005 and 2018.

DUBAI United Arab Emirates

Ordinary Residents: Purchasing Power

Figure 30.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Dubai, United Arab Emirates



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Dubai. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Dubai are represented by the grey and red line respectively in Figure 30.d. In the first sub-period, Dubai's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Dubai was 48.79 percent that of their counterparts in New York. This increased to 63.25 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Dubai increased from 27.81 to 27.98 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dubai, as denoted by the green line in Figure 30.d, followed a general downward trend from 73.5 to 44.23 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Dubai declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Dubai, as denoted by the green bars in Figure 30.d, decreased from the 69th to the 74th spot.

In the second sub-period, Dubai's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Dubai was 51.7 percent that of their counterparts in New York. This decreased to 45.8 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Dubai fell from 27.91 to 26.31 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dubai followed a general rising trend from 54 to 57.43 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Dubai declined from the 73rd to the 83rd spot.

For the third sub-period, Dubai's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Dubai was 44.09 percent that of their counterparts in New York. This increased to 44.99 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Dubai climbed from 31.59 to 32.4 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dubai followed a general rising trend from 71.64 to 72 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Dubai remained the same at the 68th position.

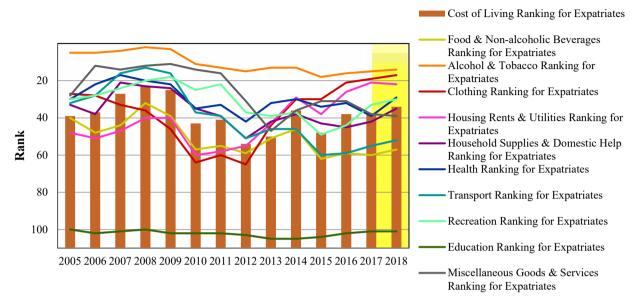
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Dubai has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Dubai, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

DUBLIN

Ireland

Expatriates: Cost of Living

Figure 31.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Dublin, Ireland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Dublin is the capital of Ireland and the most populous city of Ireland currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 39th to the 34th position between 2005 and 2018 (see Figure 31a).

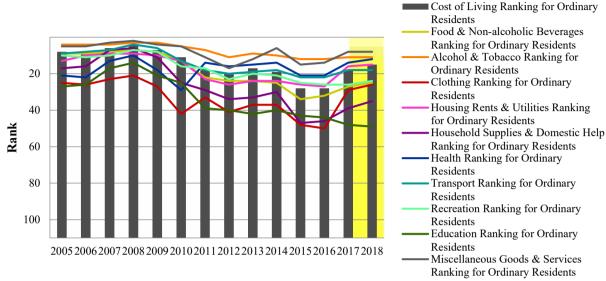
The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Transport declined the most, falling by 20 places from the 32nd to the 52nd spot, while the ranking for Food & Non-alcoholic Beverages dropped by 17 places from the 40th to the 57th spot. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 26 places from the 48th to the 22nd spot, while the ranking for Clothing rose by 10 places from the 27th to the 17th spot. Recreation did not change overall during this period.

DUBLIN

Ireland

Ordinary Residents: Cost of Living

Figure 31.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Dublin, Ireland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 8th position to the 11th position between 2005 and 2010. The ranking climbed from the 18th position to the 28th between 2011 to 2016 and fell from the 18th position to the 15th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing dropped the most, falling by 17 places from the 25th to the 42nd spot, while the rankings for Health and Household Supplies & Domestic Help decreased by eight places from the 21st to the 29th spot, and 17th to the 25th spot respectively. On the other hand, the ranking for Education increased the most, climbing two places from the 27th to the 25th spot. Housing Rents & Utilities and Miscellaneous Goods & Services did not change overall during this period.

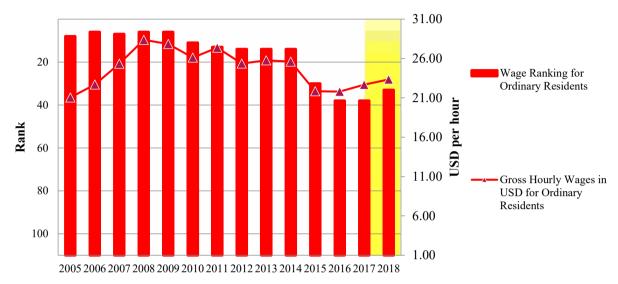
Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the rankings for Clothing and Household Supplies & Domestic Help dropped by 17 places from the 33rd to the 50th spot, and 29th to the 46th spot respectively.

For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Education declined the most, falling by one place from the 48th to the 49th position. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing four places from the 39th to the 35th position, while the ranking for Clothing increased by three places from the 29th to the 26th position. Alcohol & Tobacco, Miscellaneous Goods & Services and Transport did not change overall during this period.

DUBLIN Ireland

Ordinary Residents: Wage

Figure 31.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Dublin, Ireland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

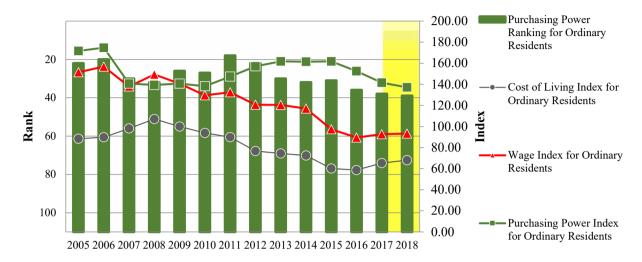
The Gross Hourly Wages in USD for Ordinary Residents in Dublin, as represented by the red line in Figure 31.c, improved from a low of 21.05 USD in 2005 to a high of 28.37 USD in 2008 before falling to 23.34 USD in 2018. The Wage Ranking for Ordinary Residents in Dublin, as denoted by the red bars, improved from 8th to 33rd across 2005 and 2018.

DUBLIN

Ireland

Ordinary Residents: Purchasing Power

Figure 31.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Dublin, Ireland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Dublin. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Dublin are represented by the grey and red line respectively in Figure 31.d. In the first sub-period, Dublin's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Dublin was 88.37 percent that of their counterparts in New York. This climbed to 93.81 percent in 2010. However, the Wages Index for Ordinary Residents in Dublin declined from 151.4 to 129.64 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dublin, as denoted by the green line in Figure 31.d, followed a general downward trend from 171.63 to 138.2 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Dublin declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Dublin, as denoted by the green bars in Figure 31.d, declined from the 22nd to the 27th spot.

In the second sub-period, Dublin's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Dublin was 89.87 percent that of their counterparts in New York. This dropped to 58.71 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Dublin fell from 132.48 to 89.52 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dublin followed a general upward trend from 147.4 to 152.5 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Dublin decreased from the 18th to the 36th spot.

For the third sub-period, Dublin's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Dublin was 65.4 percent that of their counterparts in New York. This increased to 68.07 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Dublin increased from 92.6 to 93.35 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Dublin followed a general declining trend from 141.6 to 137.14 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Dublin dropped from the 38th to the 39th position.

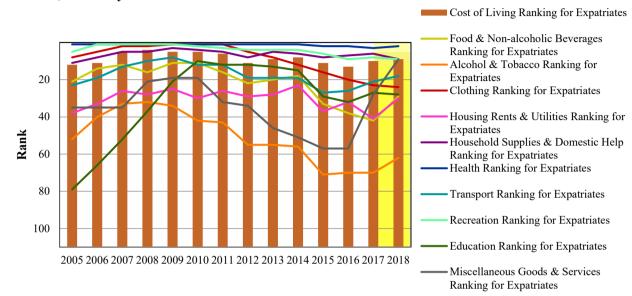
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Dublin has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Dublin, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

FRANKFURT

Germany

Expatriates: Cost of Living

Figure 32.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Frankfurt, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Frankfurt is the major financial centre of the European continent with many banking headquarters situated in the city. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 12th to the 9th spot between 2005 and 2018 (see Figure 32a).

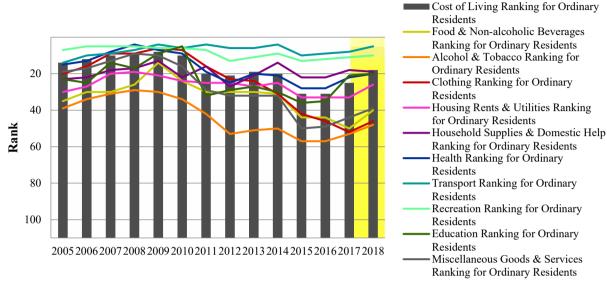
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing decreased the most, falling by 16 places from the 8th to the 24th position, while the ranking for Alcohol & Tobacco fell by 10 places from the 52nd to the 62nd position. On the other hand, the ranking for Education increased the most, climbing 51 places from the 79th to the 28th position, while the ranking for Miscellaneous Goods & Services increased by 26 places from the 35th to the 9th position.

FRANKFURT

Germany

Ordinary Residents: Cost of Living

Figure 32.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Frankfurt, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 14th spot to the 10th spot between 2005 and 2010. The ranking rose from the 20th spot to the 31st between 2011 to 2016 and declined from the 25th spot to the 18th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Education increased the most, climbing 18 places from the 23rd to the 5th spot, while the ranking for Clothing rose by 13 places from the 20th to the 7th spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Clothing dropped the most, falling by 30 places from the 16th to the 46th spot, while the ranking for Miscellaneous Goods & Services fell by 20 places from the 29th to the 49th spot.

For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help declined the most, falling by one place from the 18th to the 19th position. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing

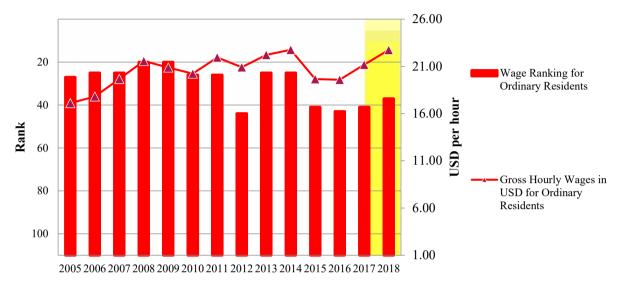
10 places from the 50th to the 40th position, while the ranking for Housing Rents & Utilities increased by seven places from the 33rd to the 26th position.

FRANKFURT

Germany

Ordinary Residents: Wage

Figure 32.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Frankfurt, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

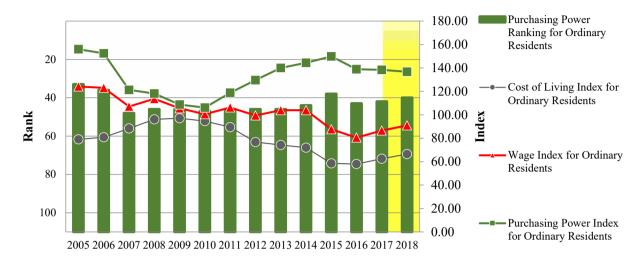
The Gross Hourly Wages in USD for Ordinary Residents in Frankfurt, as represented by the red line in Figure 32.c, improved from a low of 17.11 USD in 2005 to a high of 22.75 USD in 2014 before decreasing to 22.74 USD in 2018. The Wage Ranking for Ordinary Residents in Frankfurt, as denoted by the red bars, increased from 27th to 37th across 2005 and 2018.

FRANKFURT

Germany

Ordinary Residents: Purchasing Power

Figure 32.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Frankfurt, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Frankfurt. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Frankfurt are represented by the grey and red line respectively in Figure 32.d. In the first sub-period, Frankfurt's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Frankfurt was 79.06 percent that of their counterparts in New York. This climbed to 94.64 percent in 2010. However, the Wages Index for Ordinary Residents in Frankfurt declined from 124.09 to 100.43 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Frankfurt, as denoted by the green line in Figure 32.d, followed a general falling trend from 155.95 to 106.12 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Frankfurt fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Frankfurt, as denoted by the green bars in Figure 32.d, dropped from the 33rd to the 47th spot.

In the second sub-period, Frankfurt's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Frankfurt was 89.44 percent that of their counterparts in New York. This decreased to 57.95 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Frankfurt fell from 106.25 to 80.5 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Frankfurt followed a general rising trend from 118.8 to 138.92 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Frankfurt increased from the 46th to the 43rd spot.

For the third sub-period, Frankfurt's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Frankfurt was 62.49 percent that of their counterparts in New York. This increased to 66.49 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Frankfurt increased from 86.51 to 90.92 in the same period.

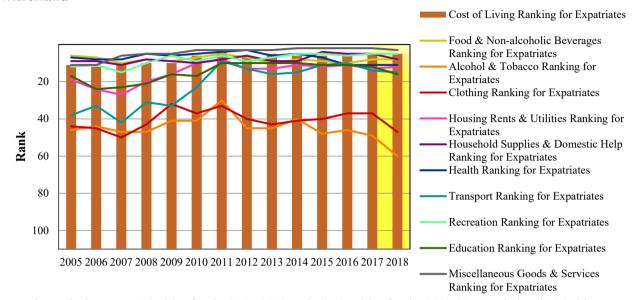
The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Frankfurt followed a general falling trend from 138.43 to 136.74 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Frankfurt climbed from the 42nd to the 40th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Frankfurt has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Frankfurt, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

GENEVA Switzerland

Expatriates: Cost of Living

Figure 33.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Geneva, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Geneva is considered a worldwide centre for diplomacy due to the presence of many international organisations such as the United Nations and the World Health Organization. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 11th to the 5th spot between 2005 and 2018 (see Figure 33a).

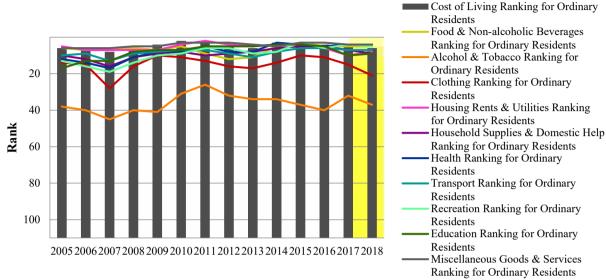
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco dropped the most, falling by 14 places from the 46th to the 60th spot, while the ranking for Health decreased by four places from the 7th to the 11th spot. On the other hand, the ranking for Transport increased the most, climbing 23 places from the 38th to the 15th spot, while the ranking for Miscellaneous Goods & Services rose by eight places from the 11th to the 3rd spot.

GENEVA

Switzerland

Ordinary Residents: Cost of Living

Figure 33.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Geneva, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 6th position to the 2nd position between 2005 and 2010. The ranking increased from the 3rd position to the 4th between 2011 to 2016 and climbed from the 5th position to the 6th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Education rose the most, climbing 10 places from the 17th to the 7th spot, while the ranking for Alcohol & Tobacco rose by seven places from the 38th to the 31st spot.

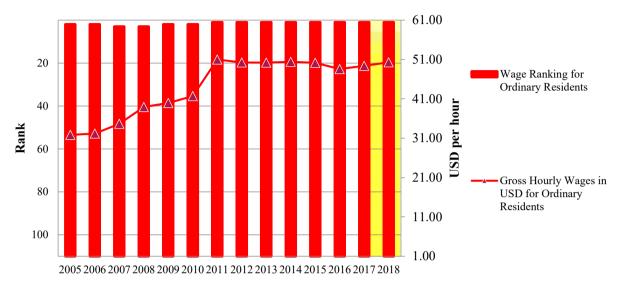
Over the second sub-period, the city's cost of living ranking increased in four consumption categories across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco declined the most, falling by 14 places from the 26th to the 40th spot, while the ranking for Housing Rents & Utilities dropped by four places from the 2nd to the 6th spot. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing five places from the 10th to the 5th spot, while the ranking for Food & Non-alcoholic Beverages increased by four places from the 9th to the 5th spot. Education, Health, Miscellaneous Goods & Services and Recreation did not change overall during this period.

For the third sub-period, the city's cost of living ranking decreased in four consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing decreased the most, falling by six places from the 15th to the 21st spot, while the ranking for Alcohol & Tobacco decreased by five places from the 32nd to the 37th spot. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing two places from the 10th to the 8th spot, while the ranking for Education rose by one place from the 10th to the 9th spot. Food & Non-alcoholic Beverages, Health, Miscellaneous Goods & Services and Transport did not change overall during this period.

GENEVA Switzerland

Ordinary Residents: Wage

Figure 33.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Geneva, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

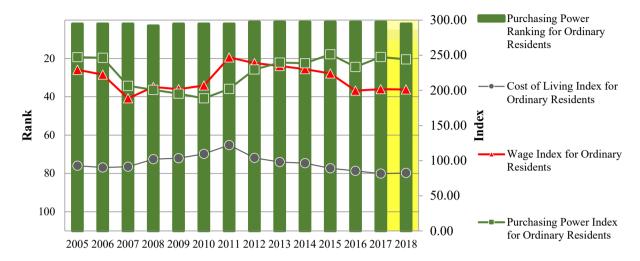
The Gross Hourly Wages in USD for Ordinary Residents in Geneva, as represented by the red line in Figure 33.c, rose from a low of 31.85 USD in 2005 to a high of 50.98 USD in 2011 before decreasing to 50.3 USD in 2018. The Wage Ranking for Ordinary Residents in Geneva, as denoted by the red bars, decreased from 2nd to 1st across 2005 and 2018.

GENEVA

Switzerland

Ordinary Residents: Purchasing Power

Figure 33.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Geneva, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Geneva. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Geneva are represented by the grey and red line respectively in Figure 33.d. In the first sub-period, Geneva's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Geneva was 92.8 percent that of their counterparts in New York. This climbed to 109.72 percent in 2010. However, the Wages Index for Ordinary Residents in Geneva decreased from 229.25 to 206.91 in the same period.

The cost of living index climbed whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Geneva, as denoted by the green line in Figure 33.d, followed a general declining trend from 247.35 to 188.58 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Geneva decreased relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Geneva, as denoted by the green bars in Figure 33.d, remained the same at the 2nd position.

In the second sub-period, Geneva's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Geneva was 122.16 percent that of their counterparts in New York. This fell to 85.55 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Geneva dropped from 246.85 to 199.61 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Geneva followed a general rising trend from 202.07 to 233.33 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Geneva increased from the 2nd to the 1st position.

For the third sub-period, Geneva's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Geneva was 81.47 percent that of their counterparts in New York. This increased to 82.4 percent in 2018. However, the Wages Index for Ordinary Residents in Geneva fell from 201.66 to 201.14 in the same period.

The cost of living index increased whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Geneva followed a general declining trend from 247.54 to 244.1 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Geneva dropped from the 1st to the 2nd position.

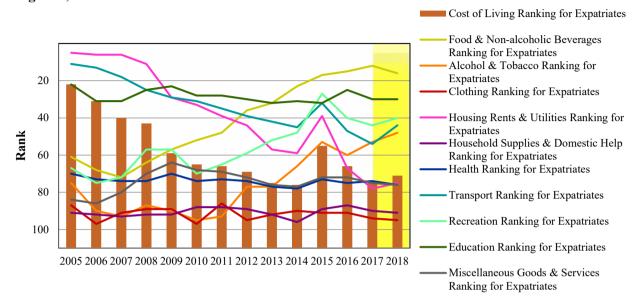
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Geneva has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Geneva, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

GUANGZHOU

China

Expatriates: Cost of Living

Figure 34.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Guangzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Guangzhou is the capital of Guangdong Province in Southern China and, is currently, one of China's three largest cities. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 22nd to the 71st position between 2005 and 2018 (see Figure 34a).

The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities declined the most, falling by 70 places from the 5th to the 75th spot, while the ranking for Transport fell by 33 places from the 11th to the 44th spot. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 45 places from the 61st to the 16th spot, while the rankings for Alcohol & Tobacco and Recreation increased by 27 places from the 75th to the 48th spot, and the 67th to the 40th spot respectively. Household Supplies & Domestic Help did not change overall during this period.

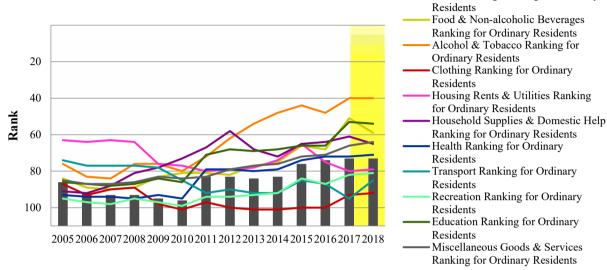
Cost of Living Ranking for Ordinary

GUANGZHOU

China

Ordinary Residents: Cost of Living

Figure 34.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Guangzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 86th position to the 96th position between 2005 and 2010. The ranking decreased from the 83rd position to the 74th between 2011 to 2016 and remained the same from the 73rd position to the 73rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2010, the rankings for Clothing and Housing Rents & Utilities fell by 14 places from the 87th to the 101st position, and 63rd to the 77th position respectively. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing 18 places from the 91st to the 73rd position, while the ranking for Food & Non-alcoholic Beverages rose by three places from the 84th to the 81st position. Education did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Clothing dropped the most, falling by three places from the 97th to the 100th position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 24 places from the

72nd to the 48th position, while the ranking for Food & Non-alcoholic Beverages increased by 13 places from the 81st to the 68th position.

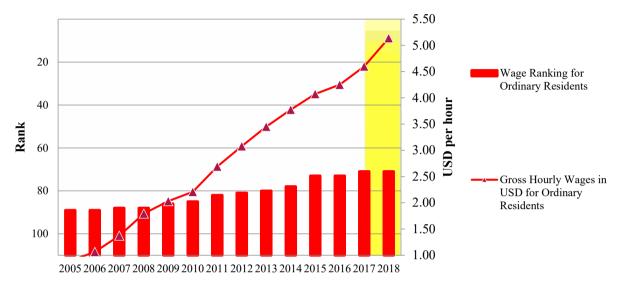
For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages fell the most, falling by eight places from the 51st to the 59th spot, while the ranking for Household Supplies & Domestic Help declined by four places from the 61st to the 65th spot. On the other hand, the ranking for Transport increased the most, climbing 10 places from the 95th to the 85th spot, while the ranking for Miscellaneous Goods & Services increased by two places from the 66th to the 64th spot. Alcohol & Tobacco did not change overall during this period.

GUANGZHOU

China

Ordinary Residents: Wage

Figure 34.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Guangzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Guangzhou, as represented by the red line in Figure 34.c, increased from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Guangzhou, as denoted by the red bars, dropped from 89th to 71st across 2005 and 2018.

GUANGZHOU

China

Ordinary Residents: Purchasing Power

Figure 34.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Guangzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Guangzhou. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Guangzhou are represented by the grey and red line respectively in Figure 34.d. In the first sub-period, Guangzhou's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Guangzhou was 25.66 percent that of their counterparts in New York. This climbed to 29.05 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Guangzhou climbed from 6.44 to 10.96 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Guangzhou, as denoted by the green line in Figure 34.d, followed a general upward trend from 25.11 to 37.75 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Guangzhou climbed relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Guangzhou, as denoted by the green bars in Figure 34.d, rose from the 96th to the 83rd position.

In the second sub-period, Guangzhou's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Guangzhou was 33.02 percent that of their counterparts in New York. This declined to 27.16 percent in 2016. However, the Wages Index for Ordinary Residents in Guangzhou increased from 13.03 to 17.46 in the same period.

The cost of living index declined whereas the wage index increased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Guangzhou followed a general rising trend from 39.47 to 64.28 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Guangzhou rose from the 87th to the 77th spot.

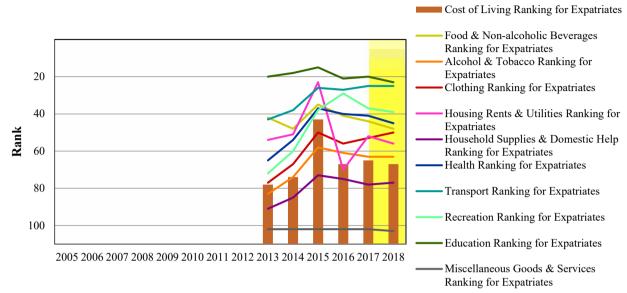
For the third sub-period, Guangzhou's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Guangzhou was 32.25 percent that of their counterparts in New York. This climbed to 32.86 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Guangzhou rose from 18.78 to 20.55 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Guangzhou followed a general upward trend from 58.24 to 62.53 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Guangzhou increased from the 76th to the 75th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Guangzhou has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Guangzhou, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

Expatriates: Cost of Living

Figure 35.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Hanoi, Vietnam



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

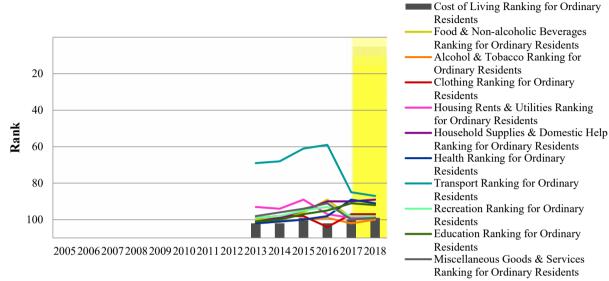
Source: Asia Competitiveness Institute

Hanoi is the capital of Vietnam and the second-largest city of Vietnam currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 78th to the 67th position between 2013 and 2018 (see Figure 35a).

The city's cost of living ranking increased in six consumption categories across the study period. Between 2013 and 2018, the ranking for Food & Non-alcoholic Beverages dropped the most, falling by six places from the 42nd to the 48th position, while the ranking for Education decreased by three places from the 20th to the 23rd position. On the other hand, the ranking for Recreation increased the most, climbing 33 places from the 72nd to the 39th position, while the ranking for Clothing rose by 27 places from the 77th to the 50th position.

Ordinary Residents: Cost of Living

Figure 35.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Hanoi, Vietnam



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

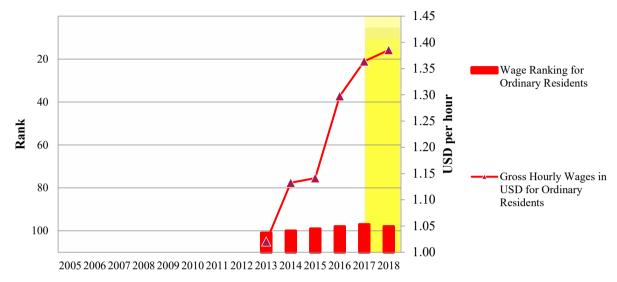
The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 102nd spot to the 102nd spot between 2013 and 2016. The ranking fell from the 100th spot to the 99th between 2017 to 2018. We discuss the results in two subperiods: from 2013 to 2016 and from 2017 to 2018.

In the earlier sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2013 and 2016, the ranking for Clothing fell the most, falling by five places from the 99th to the 104th spot, while the ranking for Housing Rents & Utilities fell by four places from the 93rd to the 97th spot. On the other hand, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help increased by 11 places from the 100th to the 89th spot, and the 101st to the 90th spot respectively.

Over the next sub-period, the city's cost of living ranking decreased in three consumption categories across the study period. Between 2017 and 2018, the rankings for Health and Transport fell by two places from the 89th to the 91st spot, and 85th to the 87th spot respectively. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing two places from the 102nd to the 100th spot, while the rankings for Household Supplies & Domestic Help and Miscellaneous Goods & Services rose by one place from the 90th to the 89th spot, and the 100th to the 99th spot respectively. Clothing, Food & Non-alcoholic Beverages, Housing Rents & Utilities and Recreation did not change overall during this period.

Ordinary Residents: Wage

Figure 35.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Hanoi, Vietnam



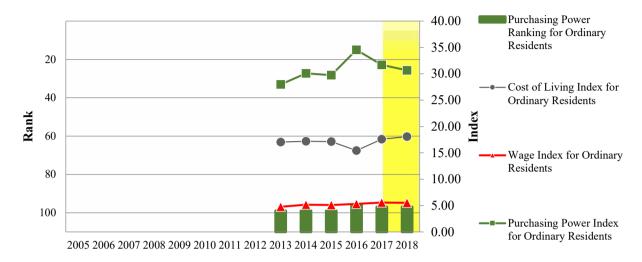
Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Hanoi, as represented by the red line in Figure 35.c, increased from a low of 1.02 USD in 2013 to a high of 1.39 USD in 2018. The Wage Ranking for Ordinary Residents in Hanoi, as denoted by the red bars, fell from 101st to 98th across 2013 and 2018.

Ordinary Residents: Purchasing Power

Figure 35.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Hanoi, Vietnam



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Hanoi. We discuss the results in two sub-periods: from 2013 to 2016 and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Hanoi are represented by the grey and red line respectively in Figure 35.d. In this sub-period, Hanoi's Cost of Living Index dropped overall. In 2013, the cost of living for ordinary residents in Hanoi was 17.05 percent that of their counterparts in New York. This dropped to 15.44 percent in 2016. However, the Wages Index for Ordinary Residents in Hanoi climbed from 4.77 to 5.33 in the same period.

The cost of living index dropped whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Hanoi, as denoted by the green line in Figure 35.d, followed a general upward trend from 27.98 to 34.54 between 2013 and 2016. In other words, the purchasing power of ordinary residents in Hanoi rose relative to that of their New York counterparts over this sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Hanoi, as denoted by the green bars in Figure 35.d, increased from the 99th to the 96th spot.

For the next sub-period, Hanoi's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Hanoi was 17.58 percent that of their counterparts in

New York. This increased to 18.08 percent in 2018. However, the Wages Index for Ordinary Residents in Hanoi dropped from 5.57 to 5.54 in the same period.

The cost of living index increased whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Hanoi followed a general declining trend from 31.68 to 30.65 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Hanoi remained the same at the 97th spot.

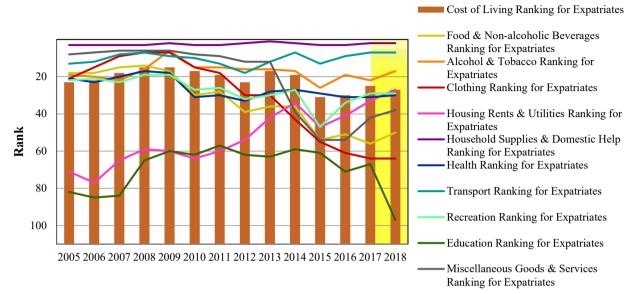
Finally, we note that over the course of the study period (2013 to 2018), the Purchasing Power Index for Ordinary Residents in Hanoi has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Hanoi, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

HELSINKI

Finland

Expatriates: Cost of Living

Figure 36.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Helsinki, Finland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Helsinki is the capital of Finland and the most populous city of Finland currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 23rd to the 27th spot between 2005 and 2018 (see Figure 36a).

The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing dropped the most, falling by 43 places from the 21st to the 64th position, while the ranking for Food & Non-alcoholic Beverages decreased by 32 places from the 18th to the 50th position. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 44 places from the 71st to the 27th position, while the ranking for Transport increased by six places from the 13th to the 7th position.

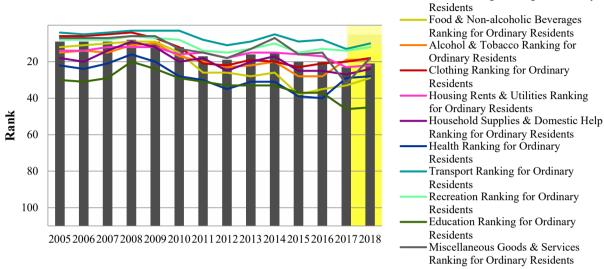
Cost of Living Ranking for Ordinary

HELSINKI

Finland

Ordinary Residents: Cost of Living

Figure 36.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Helsinki, Finland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 9th position to the 12th position between 2005 and 2010. The ranking climbed from the 17th position to the 20th between 2011 to 2016 and declined from the 23rd position to the 21st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the rankings for Clothing, Health, and Miscellaneous Goods & Services fell by six places from the 6th to the 12th position, 22nd to the 28th position, and 7th to the 13th position respectively. On the other hand, the rankings for Education and Transport rose by one place from the 30th to the 29th position, and the 4th to the 3rd position respectively. Recreation did not change overall during this period.

Over the second sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2011 and 2016, the ranking for Health dropped the most, falling by 10 places from the 30th to the 40th spot, while the ranking for Food & Non-alcoholic Beverages declined by nine places from the 26th to the 35th spot. On the other hand, the ranking for Recreation increased the most, climbing one place from the 14th to the 13th spot. Clothing, Miscellaneous Goods & Services and Transport did not change overall during this period.

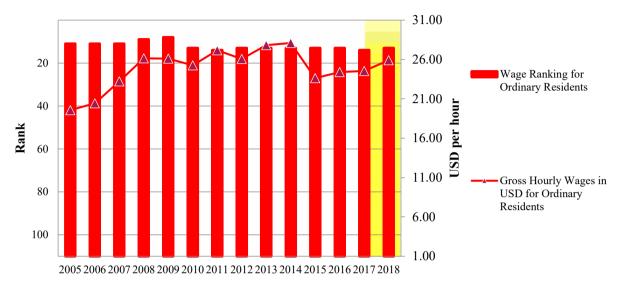
For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous Goods & Services increased the most, climbing 14 places from the 32nd to the 18th position, while the ranking for Food & Non-alcoholic Beverages rose by four places from the 33rd to the 29th position. Alcohol & Tobacco did not change overall during this period.

HELSINKI

Finland

Ordinary Residents: Wage

Figure 36.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Helsinki, Finland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

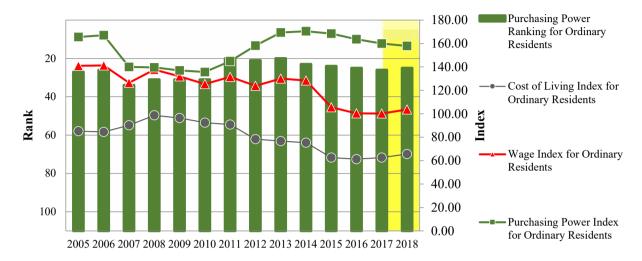
The Gross Hourly Wages in USD for Ordinary Residents in Helsinki, as represented by the red line in Figure 36.c, rose from a low of 19.57 USD in 2005 to a high of 28.09 USD in 2014 before dropping to 25.9 USD in 2018. The Wage Ranking for Ordinary Residents in Helsinki, as denoted by the red bars, improved from 11th to 13th across 2005 and 2018.

HELSINKI

Finland

Ordinary Residents: Purchasing Power

Figure 36.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Helsinki, Finland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Helsinki. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Helsinki are represented by the grey and red line respectively in Figure 36.d. In the first sub-period, Helsinki's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Helsinki was 85.2 percent that of their counterparts in New York. This climbed to 92.41 percent in 2010. However, the Wages Index for Ordinary Residents in Helsinki dropped from 141.03 to 125.4 in the same period.

The cost of living index climbed whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Helsinki, as denoted by the green line in Figure 36.d, followed a general downward trend from 165.52 to 135.69 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Helsinki declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Helsinki, as denoted by the green bars in Figure 36.d, decreased from the 27th to the 31st position.

In the second sub-period, Helsinki's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Helsinki was 90.74 percent that of their counterparts in New York. This dropped to 61.29 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Helsinki decreased from 131.5 to 100.3 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Helsinki followed a general rising trend from 144.91 to 163.66 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Helsinki fell from the 20th to the 25th spot.

For the third sub-period, Helsinki's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Helsinki was 62.65 percent that of their counterparts in New York. This climbed to 65.59 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Helsinki increased from 100.22 to 103.59 in the same period.

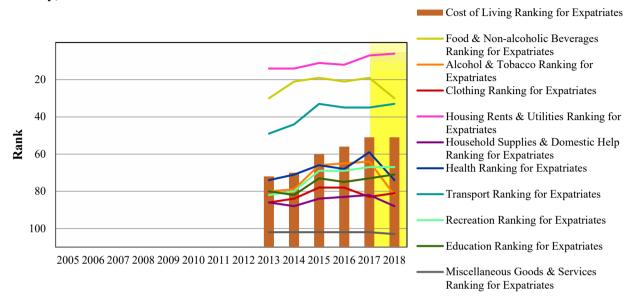
The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Helsinki followed a general declining trend from 159.98 to 157.94 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Helsinki rose from the 26th to the 25th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Helsinki has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Helsinki, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

Vietnam

Expatriates: Cost of Living

Figure 37.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Ho Chi Minh City, Vietnam



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

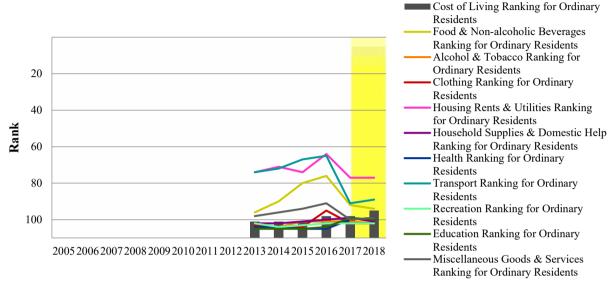
Ho Chi Minh City was formerly known as Saigon, and the current name was given after the fall of Saigon in 1975 to honour Ho Chi Minh. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 72nd to the 51st spot between 2013 and 2018 (see Figure 37a).

The city's cost of living ranking increased in five consumption categories across the study period. Between 2013 and 2018, the rankings for Alcohol & Tobacco and Household Supplies & Domestic Help decreased by two places from the 80th to the 82nd position, and 86th to the 88th position respectively. On the other hand, the ranking for Transport increased the most, climbing 16 places from the 49th to the 33rd position, while the ranking for Recreation increased by 15 places from the 82nd to the 67th position. Food & Non-alcoholic Beverages and Health did not change overall during this period.

Vietnam

Ordinary Residents: Cost of Living

Figure 37.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Ho Chi Minh City, Vietnam



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 101st position to the 98th position between 2013 and 2016. The ranking fell from the 98th position to the 95th between 2017 to 2018. We discuss the results in two subperiods: from 2013 to 2016 and from 2017 to 2018.

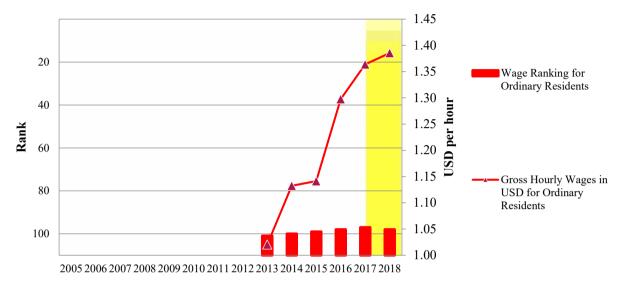
In the earlier sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2013 and 2016, the ranking for Health declined the most, falling by one place from the 104th to the 105th position. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 20 places from the 96th to the 76th position, while the ranking for Housing Rents & Utilities rose by 10 places from the 74th to the 64th position. Recreation did not change overall during this period.

Over the next sub-period, the city's cost of living ranking decreased in four consumption categories across the study period. Between 2017 and 2018, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help dropped by two places from the 92nd to the 94th position, and 99th to the 101st position respectively. On the other hand, the ranking for Transport increased the most, climbing two places from the 91st to the 89th position, while the rankings for Health and Miscellaneous Goods & Services increased by one place from the 100th to the 99th position, and the 100th to the 99th position respectively. Clothing, Housing Rents & Utilities and Recreation did not change overall during this period.

Vietnam

Ordinary Residents: Wage

Figure 37.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Ho Chi Minh City, Vietnam



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

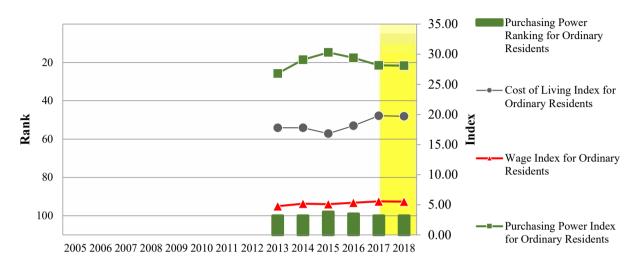
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Ho Chi Minh City, as represented by the red line in Figure 37.c, increased from a low of 1.02 USD in 2013 to a high of 1.39 USD in 2018. The Wage Ranking for Ordinary Residents in Ho Chi Minh City, as denoted by the red bars, decreased from 101st to 98th across 2013 and 2018.

Vietnam

Ordinary Residents: Purchasing Power

Figure 37.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Ho Chi Minh City, Vietnam



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Ho Chi Minh City. We discuss the results in two sub-periods: from 2013 to 2016 and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Ho Chi Minh City are represented by the grey and red line respectively in Figure 37.d. In this sub-period, Ho Chi Minh City's Cost of Living Index rose overall. In 2013, the cost of living for ordinary residents in Ho Chi Minh City was 17.8 percent that of their counterparts in New York. This rose to 18.13 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Ho Chi Minh City rose from 4.77 to 5.33 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Ho Chi Minh City, as denoted by the green line in Figure 37.d, followed a general upward trend from 26.81 to 29.4 between 2013 and 2016. In other words, the purchasing power of ordinary residents in Ho Chi Minh City climbed relative to that of their New York counterparts over this sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Ho Chi Minh City, as denoted by the green bars in Figure 37.d, increased from the 100th to the 99th position.

For the next sub-period, Ho Chi Minh City's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Ho Chi Minh City was 19.78 percent that of their

counterparts in New York. This fell to 19.71 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Ho Chi Minh City decreased from 5.57 to 5.54 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Ho Chi Minh City followed a general declining trend from 28.15 to 28.11 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Ho Chi Minh City remained the same at the 100th position.

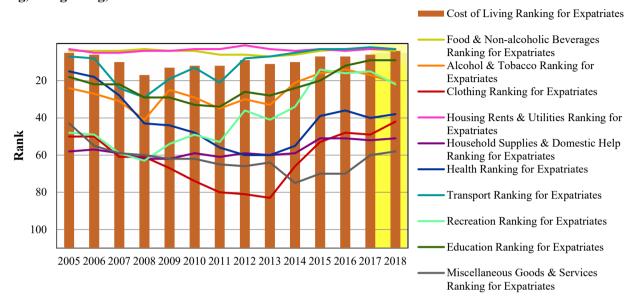
Finally, we note that over the course of the study period (2013 to 2018), the Purchasing Power Index for Ordinary Residents in Ho Chi Minh City has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Ho Chi Minh City, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

HONG KONG

Hong Kong, China

Expatriates: Cost of Living

Figure 38.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Hong Kong, Hong Kong, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Hong Kong is a Special Administrative Region of the People's Republic of China (HKSAR). The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 5th to the 4th position between 2005 and 2018 (see Figure 38a).

The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Health decreased the most, falling by 23 places from the 15th to the 38th position, while the ranking for Miscellaneous Goods & Services declined by 15 places from the 43rd to the 58th position. On the other hand, the ranking for Recreation increased the most, climbing 26 places from the 48th to the 22nd position, while the ranking for Education increased by nine places from the 18th to the 9th position. Food & Non-alcoholic Beverages and Housing Rents & Utilities did not change overall during this period.

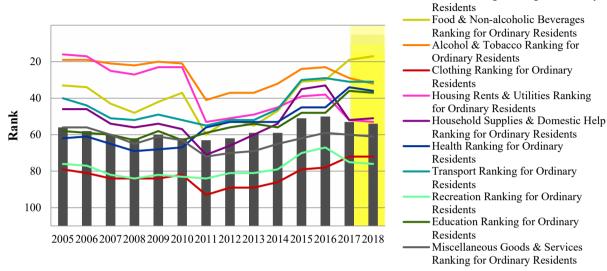
Cost of Living Ranking for Ordinary

HONG KONG

Hong Kong, China

Ordinary Residents: Cost of Living

Figure 38.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Hong Kong, Hong Kong, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 56th spot to the 62nd spot between 2005 and 2010. The ranking fell from the 63rd spot to the 50th between 2011 to 2016 and increased from the 53rd spot to the 54th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three subperiods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Transport decreased the most, falling by 12 places from the 40th to the 52nd position, while the ranking for Household Supplies & Domestic Help declined by 11 places from the 46th to the 57th position.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help increased the most, climbing 38 places from the 71st to the 33rd spot, while the ranking for Food & Non-alcoholic Beverages increased by 30 places from the 60th to the 30th spot.

For the third sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco decreased the most, falling by three places from the 29th to the 32nd spot, while the ranking for Health dropped by two places from the 34th to the 36th spot. On the other hand, the ranking for

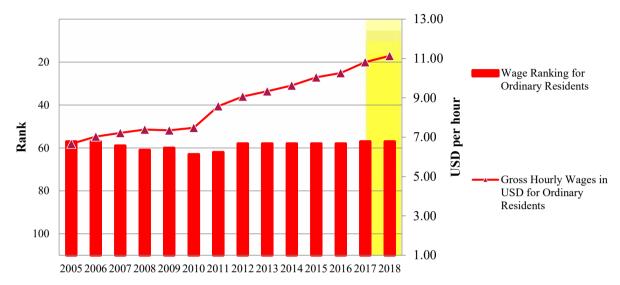
Food & Non-alcoholic Beverages rose the most, climbing two places from the 19th to the 17th spot, while the ranking for Household Supplies & Domestic Help increased by one place from the 52nd to the 51st spot. Clothing and Transport did not change overall during this period.

HONG KONG

Hong Kong, China

Ordinary Residents: Wage

Figure 38.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Hong Kong, Hong Kong, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Hong Kong, as represented by the red line in Figure 38.c, rose from a low of 6.66 USD in 2005 to a high of 11.14 USD in 2018. The Wage Ranking for Ordinary Residents in Hong Kong, as denoted by the red bars, remained unchanged at 57th from 2005 to 2018.

HONG KONG

Hong Kong, China

Ordinary Residents: Purchasing Power

Figure 38.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Hong Kong, Hong Kong, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Hong Kong. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Hong Kong are represented by the grey and red line respectively in Figure 38.d. In the first sub-period, Hong Kong's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Hong Kong was 52.75 percent that of their counterparts in New York. This increased to 54.78 percent in 2010. However, the Wages Index for Ordinary Residents in Hong Kong dropped from 47.98 to 37.11 in the same period.

The cost of living index increased whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Hong Kong, as denoted by the green line in Figure 38.d, followed a general falling trend from 91.04 to 67.74 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Hong Kong dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Hong Kong, as denoted by the green bars in Figure 38.d, declined from the 60th to the 62nd spot.

In the second sub-period, Hong Kong's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Hong Kong was 49.44 percent that of their counterparts in New York. This dropped to 47.69 percent in 2016. However, the Wages Index for Ordinary Residents in Hong Kong increased from 41.53 to 42.16 in the same period.

The cost of living index dropped whereas the wage index increased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Hong Kong followed a general upward trend from 84 to 88.4 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Hong Kong dropped from the 61st to the 64th spot.

For the third sub-period, Hong Kong's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Hong Kong was 46.99 percent that of their counterparts in New York. This climbed to 47.37 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Hong Kong climbed from 44.17 to 44.53 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Hong Kong followed a general upward trend from 93.99 to 94.01 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Hong Kong remained the same at the 62nd spot.

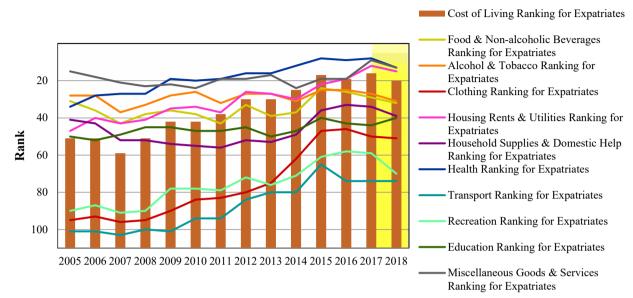
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Hong Kong has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Hong Kong, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

HONOLULU

United States

Expatriates: Cost of Living

Figure 39.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Honolulu, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Honolulu is the capital of United States and the largest city of Hawaii currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 51st to the 20th spot between 2005 and 2018 (see Figure 39a).

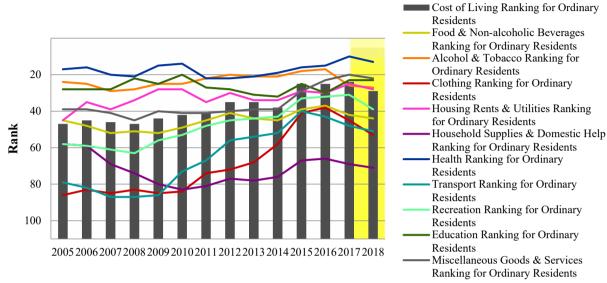
The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco dropped the most, falling by three places from the 28th to the 31st spot, while the ranking for Food & Non-alcoholic Beverages fell by one place from the 31st to the 32nd spot. On the other hand, the ranking for Clothing rose the most, climbing 44 places from the 95th to the 51st spot, while the ranking for Housing Rents & Utilities rose by 32 places from the 47th to the 15th spot.

HONOLULU

United States

Ordinary Residents: Cost of Living

Figure 39.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Honolulu, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 47th position to the 42nd position between 2005 and 2010. The ranking fell from the 41st position to the 25th between 2011 to 2016 and rose from the 24th position to the 29th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help decreased the most, falling by 25 places from the 58th to the 83rd position, while the ranking for Food & Non-alcoholic Beverages decreased by four places from the 45th to the 49th position. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 17 places from the 45th to the 28th position, while the ranking for Education rose by eight places from the 28th to the 20th position.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Education declined the most, falling by three places from the 27th to the 30th spot. On the other hand, the ranking for Clothing increased the most, climbing 36 places from the 74th to the 38th spot, while the ranking for Transport increased by 24 places from the 67th to the 43rd spot.

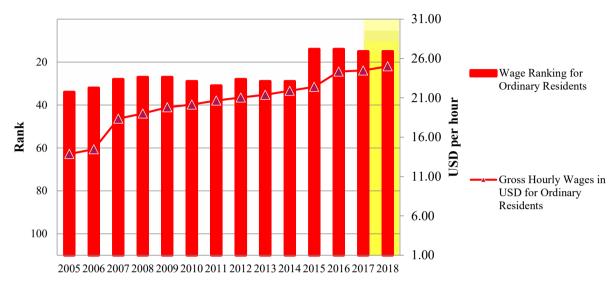
For the third sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2017 and 2018, the rankings for Clothing and Recreation fell by eight places from the 45th to the 53rd spot, and 31st to the 39th spot respectively. Education did not change overall during this period.

HONOLULU

United States

Ordinary Residents: Wage

Figure 39.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Honolulu, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Honolulu, as represented by the red line in Figure 39.c, rose from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Honolulu, as denoted by the red bars, fell from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Honolulu is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

HONOLULU

United States

Ordinary Residents: Purchasing Power

Figure 39.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Honolulu, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Honolulu. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Honolulu are represented by the grey and red line respectively in Figure 39.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Honolulu belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Honolulu will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Honolulu's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Honolulu was 62.71 percent that of their counterparts in New York. This rose to 71.98 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Honolulu, as denoted by the green line in Figure 39.d, followed a general falling trend from 159.46 to 138.94 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Honolulu dropped relative to that of their New York counterparts over the

first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Honolulu, as denoted by the green bars in Figure 39.d, increased from the 31st to the 26th position.

In the second sub-period, Honolulu's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Honolulu was 71.5 percent that of their counterparts in New York. This dropped to 59.29 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Honolulu followed a general upward trend from 139.87 to 168.67 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Honolulu climbed from the 28th to the 22nd spot.

For the third sub-period, Honolulu's Cost of Living Index dropped overall. In 2017, the cost of living for ordinary residents in Honolulu was 62.62 percent that of their counterparts in New York. This dropped to 61.88 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Honolulu followed a general upward trend from 159.68 to 161.6 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Honolulu increased from the 27th to the 21st spot.

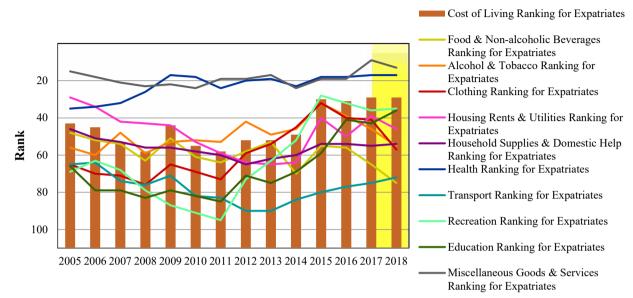
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Honolulu has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Honolulu, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

HOUSTON

United States

Expatriates: Cost of Living

Figure 40.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Houston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Houston is located in the state of Texas, and it is, currently, the third-largest city in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 43rd to the 29th spot between 2005 and 2018 (see Figure 40a).

The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 27 places from the 48th to the 75th spot, while the ranking for Housing Rents & Utilities dropped by 17 places from the 29th to the 46th spot. On the other hand, the ranking for Recreation increased the most, climbing 34 places from the 69th to the 35th spot, while the ranking for Education increased by 30 places from the 66th to the 36th spot.

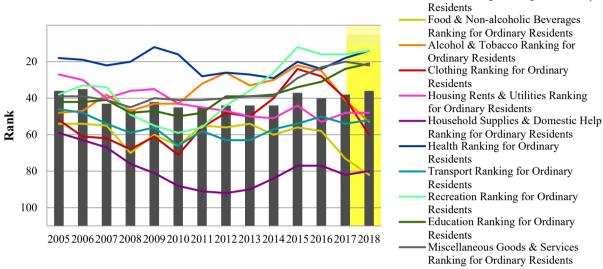
Cost of Living Ranking for Ordinary

HOUSTON

United States

Ordinary Residents: Cost of Living

Figure 40.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Houston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 36th position to the 45th position between 2005 and 2010. The ranking fell from the 45th position to the 40th between 2011 to 2016 and dropped from the 38th position to the 36th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help decreased the most, falling by 29 places from the 59th to the 88th position, while the ranking for Recreation dropped by 21 places from the 38th to the 59th position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing five places from the 48th to the 43rd position, while the ranking for Health rose by two places from the 18th to the 16th position.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Housing Rents & Utilities decreased the most, falling by eight places from the 45th to the 53rd position, while the ranking for Food & Non-alcoholic Beverages fell by three places from the 55th to the 58th position. On the other hand, the ranking for Recreation increased the most,

climbing 40 places from the 56th to the 16th position, while the ranking for Clothing increased by 28 places from the 56th to the 28th position.

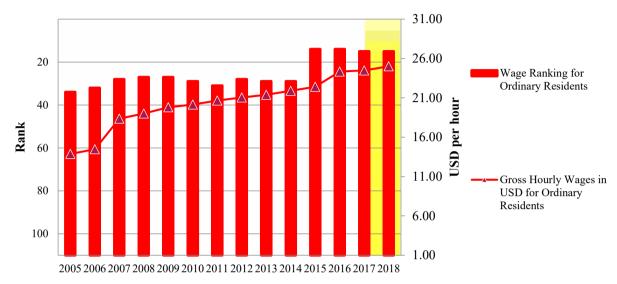
For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing declined the most, falling by 20 places from the 40th to the 60th position, while the ranking for Alcohol & Tobacco fell by 12 places from the 41st to the 53rd position. On the other hand, the ranking for Health increased the most, climbing four places from the 18th to the 14th position, while the ranking for Education increased by three places from the 24th to the 21st position. Housing Rents & Utilities did not change overall during this period.

HOUSTON

United States

Ordinary Residents: Wage

Figure 40.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Houston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

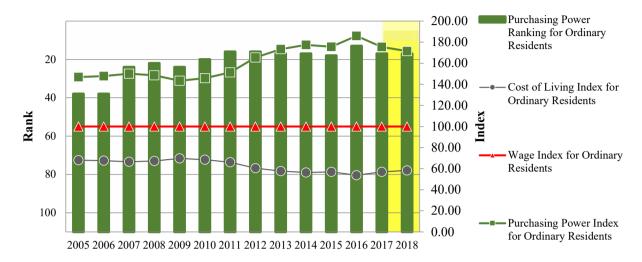
The Gross Hourly Wages in USD for Ordinary Residents in Houston, as represented by the red line in Figure 40.c, increased from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Houston, as denoted by the red bars, dropped from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Houston is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

HOUSTON

United States

Ordinary Residents: Purchasing Power

Figure 40.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Houston, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Houston. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Houston are represented by the grey and red line respectively in Figure 40.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Houston belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Houston will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Houston's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Houston was 68.08 percent that of their counterparts in New York. This rose to 68.56 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Houston, as denoted by the green line in Figure 40.d, followed a general declining trend from 146.89 to 145.86 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Houston declined relative to that of their New York counterparts over the

first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Houston, as denoted by the green bars in Figure 40.d, rose from the 38th to the 20th position.

In the second sub-period, Houston's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Houston was 66.12 percent that of their counterparts in New York. This dropped to 53.78 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Houston followed a general upward trend from 151.24 to 185.93 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Houston increased from the 16th to the 13th spot.

For the third sub-period, Houston's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Houston was 56.97 percent that of their counterparts in New York. This rose to 58.28 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Houston followed a general declining trend from 175.54 to 171.59 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Houston remained the same at the 17th spot.

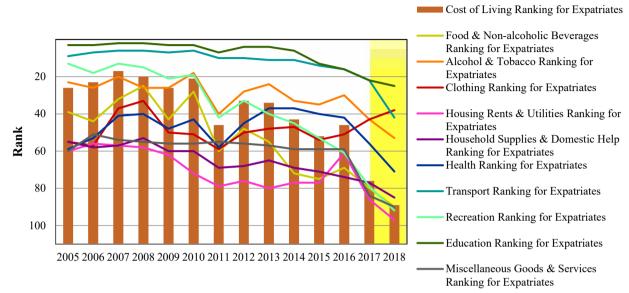
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Houston has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Houston, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

ISTANBUL

Turkey

Expatriates: Cost of Living

Figure 41.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Istanbul, Turkey



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Istanbul, formerly known as Byzantium and Constantinople, is currently the largest city and principal seaport of Turkey. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 26th to the 89th position between 2005 and 2018 (see Figure 41a).

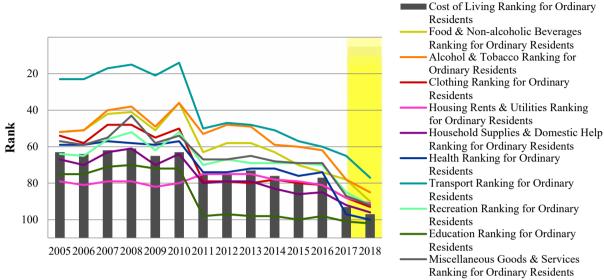
The city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation declined the most, falling by 79 places from the 13th to the 92nd spot, while the ranking for Food & Non-alcoholic Beverages fell by 51 places from the 39th to the 90th spot. On the other hand, the ranking for Clothing increased the most, climbing 17 places from the 55th to the 38th spot.

ISTANBUL

Turkey

Ordinary Residents: Cost of Living

Figure 41.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Istanbul, Turkey



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 63rd spot to the 63rd spot between 2005 and 2010. The ranking increased from the 75th spot to the 77th between 2011 to 2016 and increased from the 93rd spot to the 97th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Housing Rents & Utilities decreased the most, falling by one place from the 79th to the 80th position. On the other hand, the rankings for Alcohol & Tobacco and Food & Non-alcoholic Beverages rose by 16 places from the 52nd to the 36th position, and the 52nd to the 36th position respectively.

Over the second sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 11 places from the 63rd to the 74th spot, while the ranking for Transport declined by 10 places from the 50th to the 60th spot. Education, Health and Recreation did not change overall during this period.

For the third sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2017 and 2018, the rankings for Food & Non-

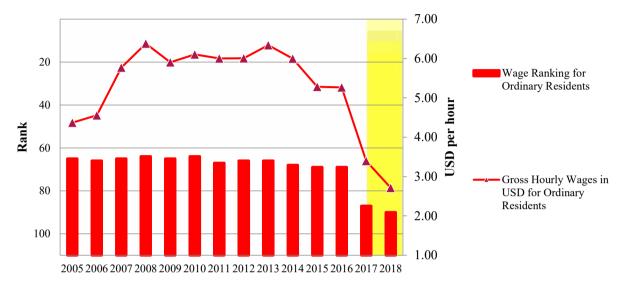
alcoholic Beverages and Transport dropped by 12 places from the 78th to the 90th spot, and 65th to the 77th spot respectively.

ISTANBUL

Turkey

Ordinary Residents: Wage

Figure 41.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Istanbul, Turkey



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

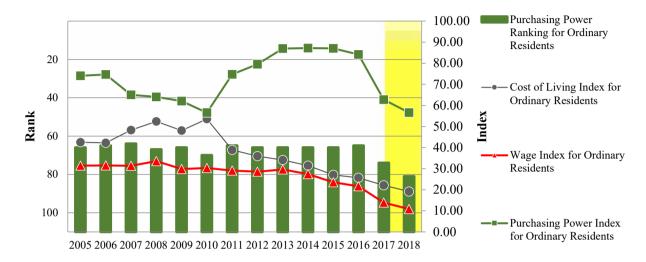
The Gross Hourly Wages in USD for Ordinary Residents in Istanbul, as represented by the red line in Figure 41.c, rose from 4.37 USD in 2005 to a high of 6.38 USD in 2008 before decreasing to a low of 2.71 USD in 2018. The Wage Ranking for Ordinary Residents in Istanbul, as denoted by the red bars, rose from 65th to 90th across 2005 and 2018.

ISTANBUL

Turkey

Ordinary Residents: Purchasing Power

Figure 41.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Istanbul, Turkey



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Istanbul. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Istanbul are represented by the grey and red line respectively in Figure 41.d. In the first sub-period, Istanbul's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Istanbul was 42.51 percent that of their counterparts in New York. This increased to 53.56 percent in 2010. However, the Wages Index for Ordinary Residents in Istanbul decreased from 31.45 to 30.29 in the same period.

The cost of living index increased whereas the wage index decreased over this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Istanbul, as denoted by the green line in Figure 41.d, followed a general falling trend from 74.06 to 56.56 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Istanbul declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Istanbul, as denoted by the green bars in Figure 41.d, declined from the 66th to the 70th spot.

In the second sub-period, Istanbul's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Istanbul was 38.88 percent that of their counterparts in New York. This dropped to 25.7 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Istanbul fell from 29.06 to 21.63 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Istanbul followed a general upward trend from 74.74 to 84.16 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Istanbul remained the same at the 65th spot.

For the third sub-period, Istanbul's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Istanbul was 22.1 percent that of their counterparts in New York. This decreased to 19.18 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Istanbul dropped from 13.87 to 10.85 in the same period.

The cost of living index decreased at a slower rate than the wage index in this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Istanbul followed a general falling trend from 62.75 to 56.6 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Istanbul dropped from the 74th to the 81st spot.

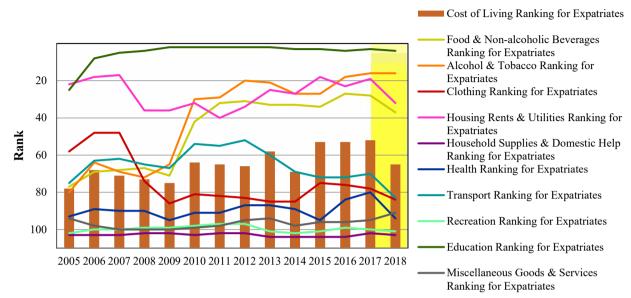
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Istanbul has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Istanbul, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

JAKARTA

Indonesia

Expatriates: Cost of Living

Figure 42.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Jakarta, Indonesia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Situated on the northwest coast of Java, Jakarta is the capital of Indonesia. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 78th to the 65th position between 2005 and 2018 (see Figure 42a).

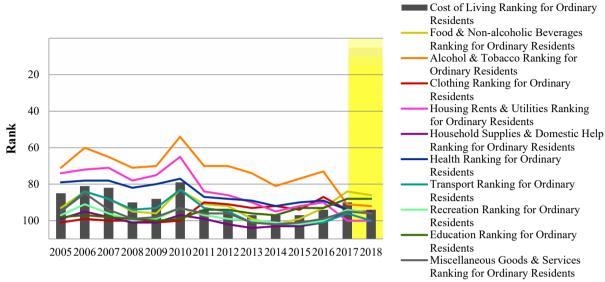
The city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing dropped the most, falling by 26 places from the 58th to the 84th spot, while the ranking for Housing Rents & Utilities dropped by 10 places from the 22nd to the 32nd spot. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 64 places from the 80th to the 16th spot, while the ranking for Food & Non-alcoholic Beverages increased by 40 places from the 77th to the 37th spot. Household Supplies & Domestic Help did not change overall during this period.

JAKARTA

Indonesia

Ordinary Residents: Cost of Living

Figure 42.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Jakarta, Indonesia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 85th position to the 79th position between 2005 and 2010. The ranking remained the same from the 94th position to the 94th between 2011 to 2016 and rose from the 90th position to the 94th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Education decreased the most, falling by one place from the 98th to the 99th spot. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 17 places from the 71st to the 54th spot, while the ranking for Transport increased by 12 places from the 95th to the 83rd spot.

Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Transport fell the most, falling by eight places from the 93rd to the 101st position, while the ranking for Housing Rents & Utilities fell by six places from the 84th to the 90th position. On the other hand, the ranking for Clothing rose the most, climbing three places from the 90th to the 87th position, while the ranking for Education increased by one place from the 94th to the 93rd position.

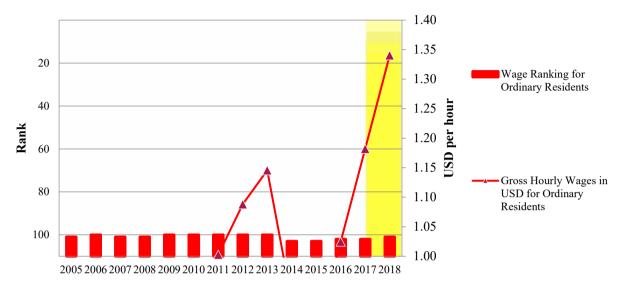
For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Transport declined the most, falling by four places from the 96th to the 100th position, while the rankings for Clothing, Food & Non-alcoholic Beverages, Health, and Recreation declined by two places from the 94th to the 96th position, 84th to the 86th position, 94th to the 96th position, and 94th to the 96th position respectively. Education, Household Supplies & Domestic Help and Housing Rents & Utilities did not change overall during this period.

JAKARTA

Indonesia

Ordinary Residents: Wage

Figure 42.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Jakarta, Indonesia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

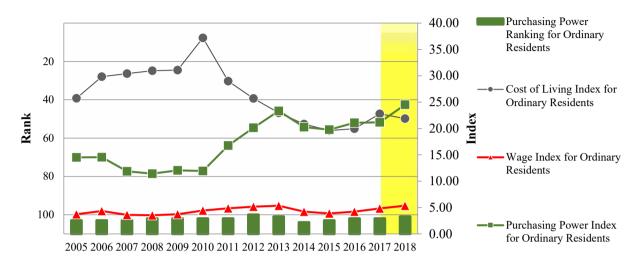
The Gross Hourly Wages in USD for Ordinary Residents in Jakarta, as represented by the red line in Figure 42.c, increased from a low of 0.52 USD in 2005 to a high of 1.34 USD in 2018. The Wage Ranking for Ordinary Residents in Jakarta, as denoted by the red bars, remained unchanged at 101st from 2005 to 2018.

JAKARTA

Indonesia

Ordinary Residents: Purchasing Power

Figure 42.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Jakarta, Indonesia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Jakarta. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Jakarta are represented by the grey and red line respectively in Figure 42.d. In the first sub-period, Jakarta's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Jakarta was 25.74 percent that of their counterparts in New York. This climbed to 37.2 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Jakarta climbed from 3.73 to 4.44 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Jakarta, as denoted by the green line in Figure 42.d, followed a general falling trend from 14.52 to 11.93 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Jakarta fell relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Jakarta, as denoted by the green bars in Figure 42.d, increased from the 103rd to the 102nd position.

In the second sub-period, Jakarta's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Jakarta was 28.97 percent that of their counterparts in New York. This decreased to 19.98 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Jakarta declined from 4.86 to 4.21 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Jakarta followed a general rising trend from 16.76 to 21.08 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Jakarta remained the same at the 102nd spot.

For the third sub-period, Jakarta's Cost of Living Index dropped overall. In 2017, the cost of living for ordinary residents in Jakarta was 22.79 percent that of their counterparts in New York. This dropped to 21.87 percent in 2018. However, the Wages Index for Ordinary Residents in Jakarta increased from 4.83 to 5.36 in the same period.

The cost of living index dropped whereas the wage index increased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Jakarta followed a general rising trend from 21.19 to 24.51 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Jakarta increased from the 102nd to the 101st position.

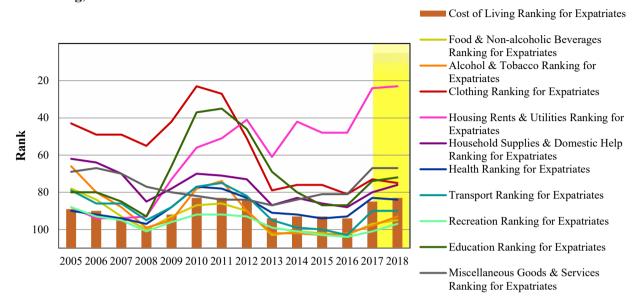
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Jakarta has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Jakarta, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

JOHANNESBURG

South Africa

Expatriates: Cost of Living

Figure 43.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Johannesburg, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Johannesburg is located in the mineral-rich region of Witwatersrand and is a hub for large scale diamond and gold mining. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 89th to the 83rd position between 2005 and 2018 (see Figure 43a).

The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing declined the most, falling by 32 places from the 43rd to the 75th position, while the ranking for Alcohol & Tobacco decreased by 27 places from the 66th to the 93rd position. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 65 places from the 88th to the 23rd position, while the ranking for Education rose by eight places from the 80th to the 72nd position.

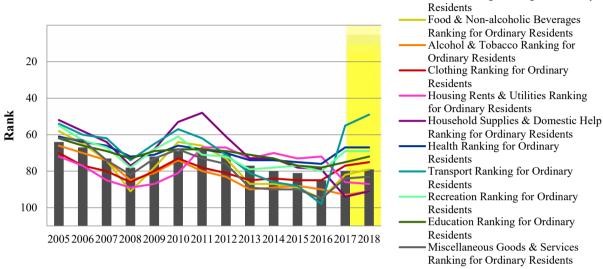
Cost of Living Ranking for Ordinary

JOHANNESBURG

South Africa

Ordinary Residents: Cost of Living

Figure 43.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Johannesburg, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 64th spot to the 69th spot between 2005 and 2010. The ranking rose from the 68th spot to the 85th between 2011 to 2016 and declined from the 80th spot to the 79th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Housing Rents & Utilities dropped the most, falling by nine places from the 72nd to the 81st spot, while the ranking for Alcohol & Tobacco declined by eight places from the 66th to the 74th spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Transport decreased the most, falling by 36 places from the 62nd to the 98th position, while the ranking for Household Supplies & Domestic Help fell by 31 places from the 48th to the 79th position.

For the third sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Housing Rents & Utilities dropped the most, falling by one place from the 86th to the 87th position. On the other hand, the ranking for Transport increased the most, climbing six places from the 55th to the 49th position, while the rankings for Education, Food & Non-alcoholic Beverages, and

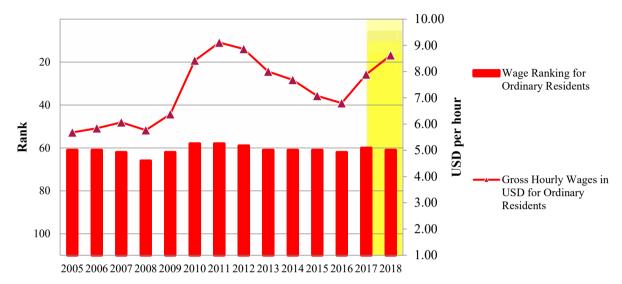
Household Supplies & Domestic Help increased by three places from the 75th to the 72nd position, 82nd to the 79th position, and the 94th to the 91st position respectively. Health and Recreation did not change overall during this period.

JOHANNESBURG

South Africa

Ordinary Residents: Wage

Figure 43.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Johannesburg, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Johannesburg, as represented by the red line in Figure 43.c, improved from a low of 5.68 USD in 2005 to a high of 9.11 USD in 2011 before dropping to 8.63 USD in 2018. The Wage Ranking for Ordinary Residents in Johannesburg, as denoted by the red bars, remained unchanged at 61st from 2005 to 2018.

JOHANNESBURG

South Africa

Ordinary Residents: Purchasing Power

Figure 43.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Johannesburg, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Johannesburg. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Johannesburg are represented by the grey and red line respectively in Figure 43.d. In the first sub-period, Johannesburg's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Johannesburg was 42.49 percent that of their counterparts in New York. This increased to 47.76 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Johannesburg climbed from 41.42 to 41.8 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Johannesburg, as denoted by the green line in Figure 43.d, followed a general falling trend from 96.38 to 87.51 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Johannesburg fell relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Johannesburg, as denoted by the green bars in Figure 43.d, rose from the 58th to the 56th position.

In the second sub-period, Johannesburg's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Johannesburg was 44.45 percent that of their counterparts in New York. This dropped to 24.13 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Johannesburg declined from 44.1 to 27.94 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Johannesburg followed a general rising trend from 99.22 to 115.79 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Johannesburg increased from the 57th to the 56th spot.

For the third sub-period, Johannesburg's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Johannesburg was 28.62 percent that of their counterparts in New York. This climbed to 29.72 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Johannesburg rose from 32.23 to 34.49 in the same period.

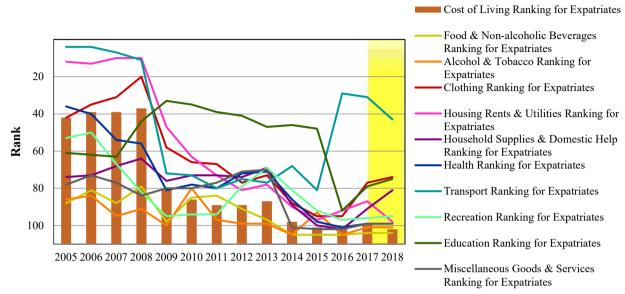
The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Johannesburg followed a general rising trend from 112.6 to 116.06 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Johannesburg climbed from the 56th to the 55th position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Johannesburg has been higher than 100 - the base index value some of the time. This suggests that the ordinary residents in Johannesburg, given the same number of working hours, some of the time, have been able to afford more goods and services than their counterparts in New York.

KIEV Ukraine

Expatriates: Cost of Living

Figure 44.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Kiev, Ukraine



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

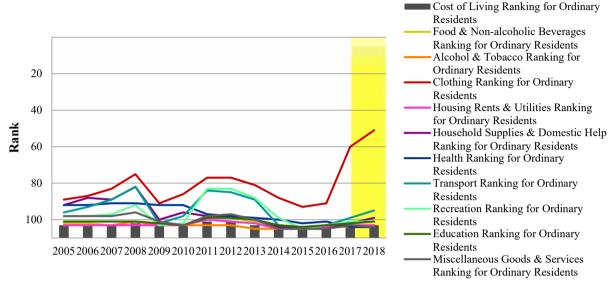
Kiev is the capital of Ukraine and the most populous city of Ukraine currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 42nd to the 102nd spot between 2005 and 2018 (see Figure 44a).

All of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities dropped the most, falling by 86 places from the 12th to the 98th spot, while the ranking for Health declined by 63 places from the 36th to the 99th spot.

KIEV Ukraine

Ordinary Residents: Cost of Living

Figure 44.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Kiev, Ukraine



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 103rd spot to the 103rd spot between 2005 and 2010. The ranking increased from the 101st spot to the 105th between 2011 to 2016 and remained the same from the 103rd spot to the 103rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Miscellaneous Goods & Services declined the most, falling by five places from the 98th to the 103rd position, while the rankings for Household Supplies & Domestic Help and Recreation fell by four places from the 92nd to the 96th position, and 98th to the 102nd position respectively. On the other hand, the ranking for Clothing increased the most, climbing three places from the 89th to the 86th position. Alcohol & Tobacco, Health and Housing Rents & Utilities did not change overall during this period.

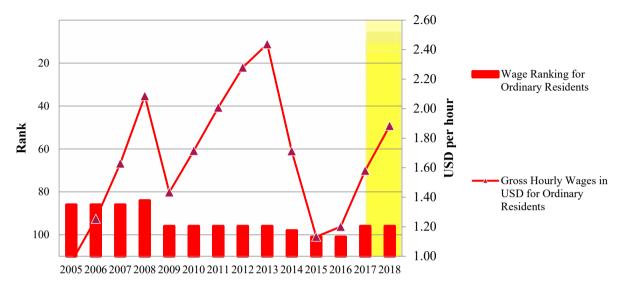
Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Recreation decreased the most, falling by 20 places from the 83rd to the 103rd position, while the ranking for Transport dropped by 19 places from the 84th to the 103rd position.

For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous Goods & Services fell the most, falling by one place from the 103rd to the 104th spot. On the other hand, the ranking for Clothing increased the most, climbing nine places from the 60th to the 51st spot, while the ranking for Transport rose by four places from the 99th to the 95th spot. Alcohol & Tobacco, Health, Housing Rents & Utilities and Recreation did not change overall during this period.

KIEV Ukraine

Ordinary Residents: Wage

Figure 44.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Kiev, Ukraine



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

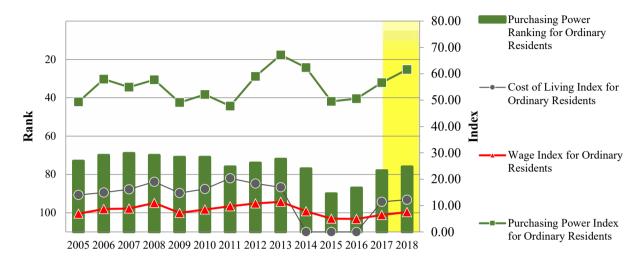
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Kiev, as represented by the red line in Figure 44.c, increased from a low of 0.96 USD in 2005 to a high of 2.44 USD in 2013. It then dropped to 1.13 USD in 2015 before, finally, increasing to 1.88 USD in 2018. The Wage Ranking for Ordinary Residents in Kiev, as denoted by the red bars, improved from 86th to 96th across 2005 and 2018.

KIEV Ukraine

Ordinary Residents: Purchasing Power

Figure 44.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Kiev, Ukraine



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Kiev. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Kiev are represented by the grey and red line respectively in Figure 44.d. In the first sub-period, Kiev's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Kiev was 14.02 percent that of their counterparts in New York. This increased to 16.32 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Kiev rose from 6.91 to 8.51 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kiev, as denoted by the green line in Figure 44.d, followed a general upward trend from 49.32 to 52.17 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Kiev increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Kiev, as denoted by the green bars in Figure 44.d, rose from the 73rd to the 71st spot.

In the second sub-period, Kiev's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Kiev was 20.36 percent that of their counterparts in New York. This decreased to 9.75 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Kiev dropped from 9.72 to 4.93 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kiev followed a general rising trend from 47.76 to 50.59 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Kiev declined from the 76th to the 87th position.

For the third sub-period, Kiev's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Kiev was 11.4 percent that of their counterparts in New York. This increased to 12.23 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Kiev climbed from 6.46 to 7.54 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kiev followed a general upward trend from 56.65 to 61.63 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Kiev rose from the 78th to the 76th spot.

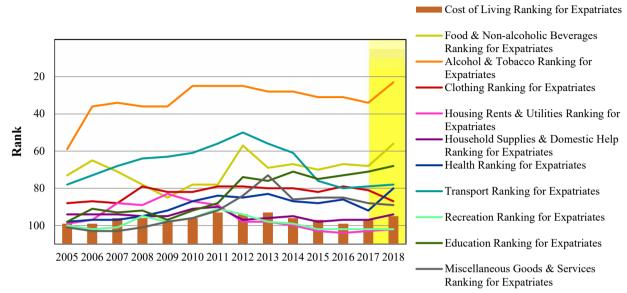
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Kiev has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Kiev, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

KUALA LUMPUR

Malaysia

Expatriates: Cost of Living

Figure 45.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Kuala Lumpur, Malaysia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Kuala Lumpur is the capital of Malaysia and one of the fastest-growing metropolitan regions in Southeast Asia. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 99th to the 95th spot between 2005 and 2018 (see Figure 45a).

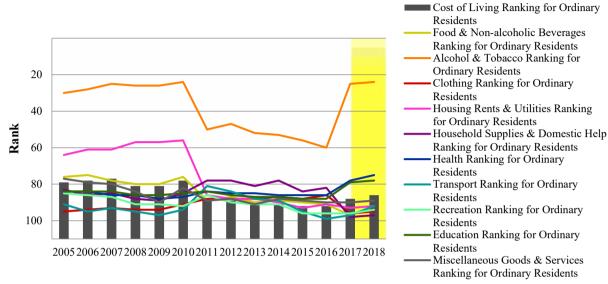
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities fell the most, falling by three places from the 99th to the 102nd spot, while the ranking for Recreation fell by two places from the 100th to the 102nd spot. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 36 places from the 59th to the 23rd spot, while the ranking for Education increased by 30 places from the 98th to the 68th spot. Household Supplies & Domestic Help and Transport did not change overall during this period.

KUALA LUMPUR

Malaysia

Ordinary Residents: Cost of Living

Figure 45.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Kuala Lumpur, Malaysia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 79th position to the 78th position between 2005 and 2010. The ranking rose from the 88th position to the 92nd between 2011 to 2016 and fell from the 88th position to the 86th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Recreation decreased the most, falling by seven places from the 85th to the 92nd spot, while the ranking for Miscellaneous Goods & Services dropped by five places from the 77th to the 82nd spot. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing eight places from the 64th to the 56th spot, while the ranking for Alcohol & Tobacco rose by six places from the 30th to the 24th spot. Food & Non-alcoholic Beverages did not change overall during this period.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Transport fell the most, falling by 18 places from the 81st to the 99th position, while the rankings for Alcohol & Tobacco and Recreation declined by 10 places from the 50th to the 60th

position, and 86th to the 96th position respectively. On the other hand, the ranking for Clothing rose the most, climbing two places from the 88th to the 86th position.

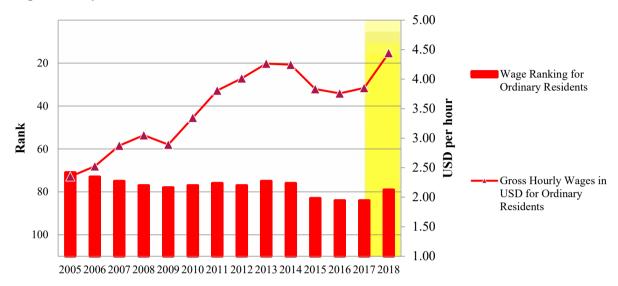
For the third sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2017 and 2018, the rankings for Food & Non-alcoholic Beverages and Transport increased by five places from the 97th to the 92nd position, and the 97th to the 92nd position respectively.

KUALA LUMPUR

Malaysia

Ordinary Residents: Wage

Figure 45.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Kuala Lumpur, Malaysia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

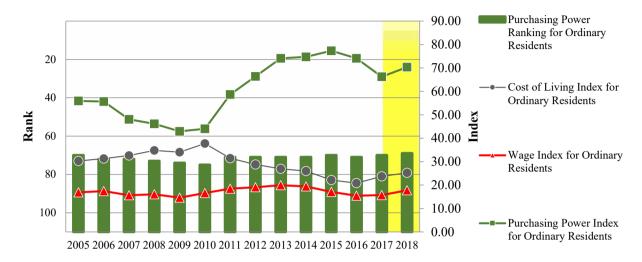
The Gross Hourly Wages in USD for Ordinary Residents in Kuala Lumpur, as represented by the red line in Figure 45.c, increased from a low of 2.35 USD in 2005 to a high of 4.44 USD in 2018. The Wage Ranking for Ordinary Residents in Kuala Lumpur, as denoted by the red bars, increased from 71st to 79th across 2005 and 2018.

KUALA LUMPUR

Malaysia

Ordinary Residents: Purchasing Power

Figure 45.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Kuala Lumpur, Malaysia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Kuala Lumpur. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Kuala Lumpur are represented by the grey and red line respectively in Figure 45.d. In the first sub-period, Kuala Lumpur's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Kuala Lumpur was 30.3 percent that of their counterparts in New York. This increased to 37.73 percent in 2010. However, the Wages Index for Ordinary Residents in Kuala Lumpur dropped from 16.92 to 16.61 in the same period.

The cost of living index increased whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kuala Lumpur, as denoted by the green line in Figure 45.d, followed a general falling trend from 55.89 to 44.04 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Kuala Lumpur decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Kuala Lumpur, as denoted by the green bars in Figure 45.d, dropped from the 70th to the 75th spot.

In the second sub-period, Kuala Lumpur's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Kuala Lumpur was 31.42 percent that of their counterparts in New York. This dropped to 20.83 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Kuala Lumpur dropped from 18.44 to 15.45 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kuala Lumpur followed a general rising trend from 58.69 to 74.14 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Kuala Lumpur remained the same at the 71st position.

For the third sub-period, Kuala Lumpur's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Kuala Lumpur was 23.72 percent that of their counterparts in New York. This climbed to 25.25 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Kuala Lumpur rose from 15.72 to 17.76 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kuala Lumpur followed a general rising trend from 66.28 to 70.34 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Kuala Lumpur climbed from the 70th to the 69th position.

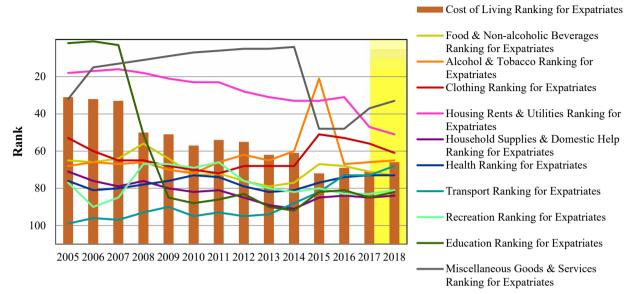
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Kuala Lumpur has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Kuala Lumpur, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

KUWAIT

Kuwait

Expatriates: Cost of Living

Figure 46.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Kuwait, Kuwait



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Kuwait is officially known as the State of Kuwait and, currently, expatriates account for 70% of the city's population. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 31st to the 66th spot between 2005 and 2018 (see Figure 46a).

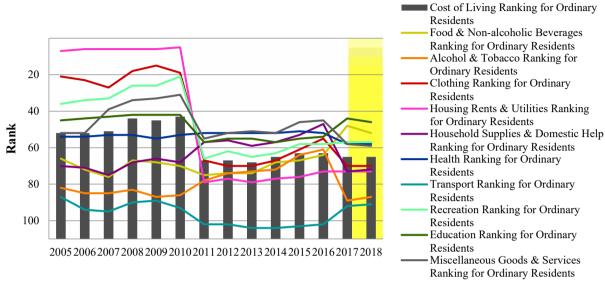
The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Education declined the most, falling by 80 places from the 2nd to the 82nd spot, while the ranking for Housing Rents & Utilities declined by 33 places from the 18th to the 51st spot. On the other hand, the ranking for Transport rose the most, climbing 31 places from the 99th to the 68th spot, while the rankings for Alcohol & Tobacco and Health rose by three places from the 68th to the 65th spot, and the 76th to the 73rd spot respectively.

KUWAIT

Kuwait

Ordinary Residents: Cost of Living

Figure 46.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Kuwait, Kuwait



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 52nd spot to the 43rd spot between 2005 and 2010. The ranking decreased from the 67th spot to the 63rd between 2011 to 2016 and remained the same from the 65th spot to the 65th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Transport decreased the most, falling by six places from the 87th to the 93rd spot, while the rankings for Alcohol & Tobacco and Food & Non-alcoholic Beverages decreased by four places from the 82nd to the 86th spot, and 66th to the 70th spot respectively. On the other hand, the ranking for Miscellaneous Goods & Services increased the most, climbing 21 places from the 52nd to the 31st spot, while the ranking for Recreation rose by 15 places from the 36th to the 21st spot.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco increased the most, climbing 17 places from the 78th to the 61st position, while the ranking for Clothing increased by 12 places from the 67th to the 55th position. Health and Transport did not change overall during this period.

For the third sub-period, the city's cost of living ranking decreased in three consumption categories across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages decreased the most, falling by four places from the 48th to the 52nd position, while the ranking for Education decreased by two places from the 44th to the 46th position. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing two places from the 89th to the 87th position, while the rankings for Household Supplies & Domestic Help and Transport rose by one place from the 73rd to the 72nd position, and the 92nd to the 91st position respectively. Clothing, Health, Housing Rents & Utilities and Recreation did not change overall during this period.

KUWAIT Kuwait

Ordinary Residents: Wage

Figure 46.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Kuwait, Kuwait



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

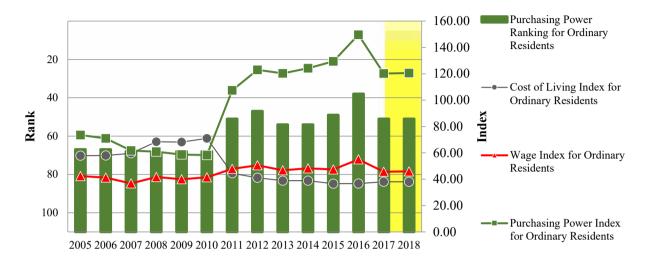
The Gross Hourly Wages in USD for Ordinary Residents in Kuwait, as represented by the red line in Figure 46.c, increased from a low of 5.9 USD in 2005 to a high of 13.39 USD in 2016 before dropping to 11.48 USD in 2018. The Wage Ranking for Ordinary Residents in Kuwait, as denoted by the red bars, decreased from 59th to 56th across 2005 and 2018.

KUWAIT

Kuwait

Ordinary Residents: Purchasing Power

Figure 46.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Kuwait, Kuwait



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Kuwait. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Kuwait are represented by the grey and red line respectively in Figure 46.d. In the first sub-period, Kuwait's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Kuwait was 57.8 percent that of their counterparts in New York. This climbed to 71 percent in 2010. However, the Wages Index for Ordinary Residents in Kuwait dropped from 42.41 to 41.4 in the same period.

The cost of living index climbed whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kuwait, as denoted by the green line in Figure 46.d, followed a general downward trend from 73.52 to 58.31 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Kuwait declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Kuwait, as denoted by the green bars in Figure 46.d, decreased from the 67th to the 68th position.

In the second sub-period, Kuwait's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Kuwait was 44.54 percent that of their counterparts in New York. This declined to 36.76 percent in 2016. However, the Wages Index for Ordinary Residents in Kuwait rose from 47.86 to 55.02 in the same period.

The cost of living index declined whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kuwait followed a general upward trend from 107.46 to 149.65 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Kuwait rose from the 51st to the 38th spot.

For the third sub-period, Kuwait's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Kuwait was 38.03 percent that of their counterparts in New York. This increased to 38.05 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Kuwait climbed from 45.69 to 45.9 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Kuwait followed a general rising trend from 120.14 to 120.61 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Kuwait remained the same at the 51st spot.

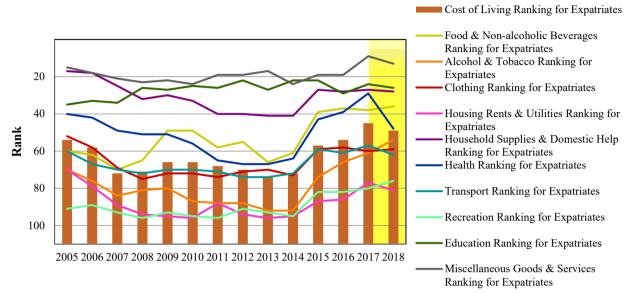
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Kuwait has been higher than 100 - the base index value some of the time. This suggests that the ordinary residents in Kuwait, given the same number of working hours, some of the time, have been able to afford more goods and services than their counterparts in New York.

LEXINGTON

United States

Expatriates: Cost of Living

Figure 47.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Lexington, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Lexington is known as the "Horse Capital of the World" with close to 450 horse farms in the city. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 54th to the 49th position between 2005 and 2018 (see Figure 47a).

The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the rankings for Household Supplies & Domestic Help and Housing Rents & Utilities decreased by 11 places from the 17th to the 28th spot, and 70th to the 81st spot respectively. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 24 places from the 60th to the 36th spot, while the ranking for Alcohol & Tobacco rose by 16 places from the 70th to the 54th spot.

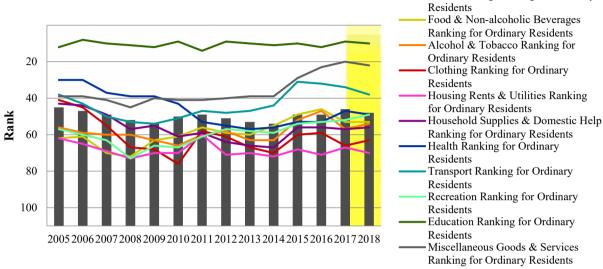
Cost of Living Ranking for Ordinary

LEXINGTON

United States

Ordinary Residents: Cost of Living

Figure 47.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Lexington, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 45th spot to the 50th spot between 2005 and 2010. The ranking remained the same from the 49th spot to the 49th between 2011 to 2016 and increased from the 46th spot to the 48th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing fell the most, falling by 35 places from the 41st to the 76th spot, while the ranking for Household Supplies & Domestic Help decreased by 18 places from the 43rd to the 61st spot. On the other hand, the ranking for Education increased the most, climbing three places from the 12th to the 9th spot, while the ranking for Food & Non-alcoholic Beverages increased by one place from the 62nd to the 61st spot.

Over the second sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2011 and 2016, the ranking for Housing Rents & Utilities declined the most, falling by 11 places from the 60th to the 71st position, while the ranking for Clothing declined by one place from the 58th to the 59th position. On the other hand, the ranking for Miscellaneous Goods & Services increased the most,

climbing 18 places from the 41st to the 23rd position, while the ranking for Transport increased by 15 places from the 47th to the 32nd position. Health did not change overall during this period.

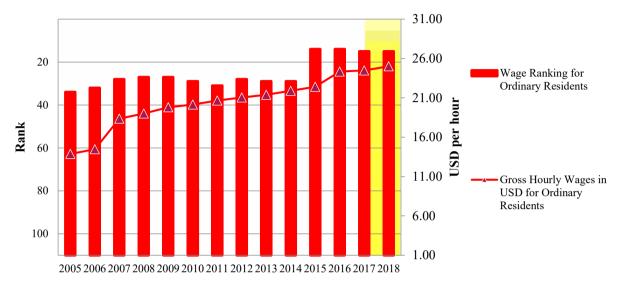
For the third sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Transport declined the most, falling by four places from the 34th to the 38th spot, while the ranking for Housing Rents & Utilities fell by three places from the 67th to the 70th spot. On the other hand, the rankings for Alcohol & Tobacco, Clothing, and Recreation increased by three places from the 57th to the 54th spot, 66th to the 63rd spot, and the 52nd to the 49th spot respectively. Food & Non-alcoholic Beverages did not change overall during this period.

LEXINGTON

United States

Ordinary Residents: Wage

Figure 47.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Lexington, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Lexington, as represented by the red line in Figure 47.c, increased from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Lexington, as denoted by the red bars, fell from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Lexington is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

LEXINGTON

United States

Ordinary Residents: Purchasing Power

Figure 47.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Lexington, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Lexington. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Lexington are represented by the grey and red line respectively in Figure 47.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Lexington belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Lexington will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Lexington's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Lexington was 63.3 percent that of their counterparts in New York. This increased to 63.56 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Lexington, as denoted by the green line in Figure 47.d, followed a general falling trend from 157.97 to 157.32 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Lexington fell relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary

Residents in Lexington, as denoted by the green bars in Figure 47.d, climbed from the 32nd to the 13th position.

In the second sub-period, Lexington's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Lexington was 61.86 percent that of their counterparts in New York. This fell to 48.32 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Lexington followed a general rising trend from 161.67 to 206.97 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Lexington rose from the 12th to the 6th spot.

For the third sub-period, Lexington's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Lexington was 51.85 percent that of their counterparts in New York. This fell to 51.29 percent in 2018.

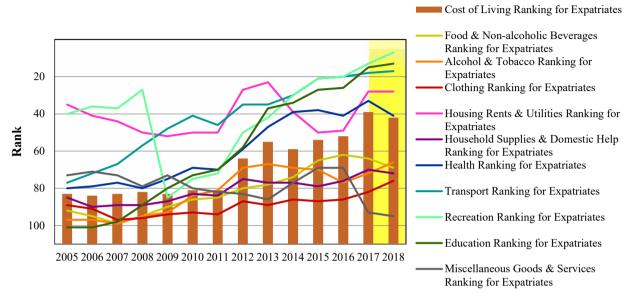
As a result, the Purchasing Power Index for Ordinary Residents in Lexington followed a general rising trend from 192.86 to 194.96 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Lexington remained the same at the 8th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Lexington has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Lexington, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

LIMA Peru

Expatriates: Cost of Living

Figure 48.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Lima, Peru



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

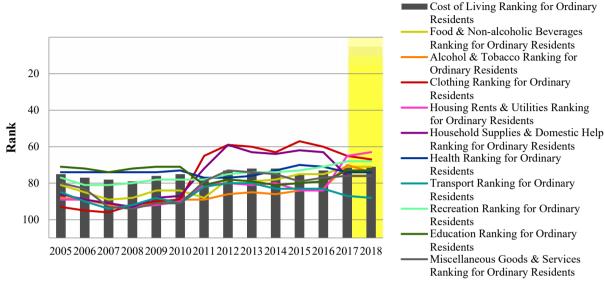
Lima is the capital of Peru and the largest city of Peru currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 83rd to the 42nd spot between 2005 and 2018 (see Figure 48a).

The city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services fell the most, falling by 22 places from the 73rd to the 95th spot. On the other hand, the ranking for Education rose the most, climbing 88 places from the 101st to the 13th spot, while the ranking for Transport increased by 60 places from the 77th to the 17th spot.

LIMA Peru

Ordinary Residents: Cost of Living

Figure 48.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Lima, Peru



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 75th spot to the 75th spot between 2005 and 2010. The ranking declined from the 77th spot to the 73rd between 2011 to 2016 and remained the same from the 71st spot to the 71st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Miscellaneous Goods & Services dropped the most, falling by 11 places from the 80th to the 91st position, while the ranking for Transport decreased by six places from the 85th to the 91st position. On the other hand, the ranking for Clothing increased the most, climbing four places from the 93rd to the 89th position, while the ranking for Health rose by one place from the 74th to the 73rd position. Education did not change overall during this period.

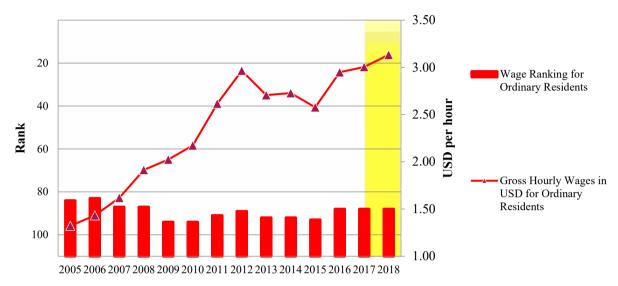
Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Housing Rents & Utilities declined the most, falling by three places from the 81st to the 84th spot, while the ranking for Transport dropped by one place from the 82nd to the 83rd spot. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 13

places from the 88th to the 75th spot, while the ranking for Household Supplies & Domestic Help rose by nine places from the 72nd to the 63rd spot.

For the third sub-period, the city's cost of living ranking decreased in three consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco dropped the most, falling by four places from the 70th to the 74th spot, while the ranking for Clothing dropped by two places from the 65th to the 67th spot. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing two places from the 65th to the 63rd spot. Education, Food & Non-alcoholic Beverages, Health, Household Supplies & Domestic Help, Miscellaneous Goods & Services and Recreation did not change overall during this period.

LIMA Peru Ordinary Residents: Wage

Figure 48.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Lima, Peru



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

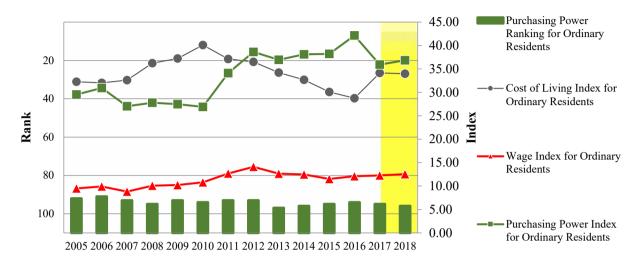
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Lima, as represented by the red line in Figure 48.c, rose from a low of 1.32 USD in 2005 to a high of 3.13 USD in 2018. The Wage Ranking for Ordinary Residents in Lima, as denoted by the red bars, rose from 84th to 88th across 2005 and 2018.

LIMA Peru

Ordinary Residents: Purchasing Power

Figure 48.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Lima, Peru



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Lima. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Lima are represented by the grey and red line respectively in Figure 48.d. In the first sub-period, Lima's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Lima was 32.25 percent that of their counterparts in New York. This climbed to 40.11 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Lima increased from 9.52 to 10.79 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lima, as denoted by the green line in Figure 48.d, followed a general downward trend from 29.54 to 26.9 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Lima declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Lima, as denoted by the green bars in Figure 48.d, decreased from the 92nd to the 94th spot.

In the second sub-period, Lima's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Lima was 37.13 percent that of their counterparts in New York. This declined to 28.76 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Lima declined from 12.67 to 12.12 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lima followed a general rising trend from 34.12 to 42.13 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Lima decreased from the 93rd to the 94th spot.

For the third sub-period, Lima's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Lima was 34.16 percent that of their counterparts in New York. This decreased to 33.99 percent in 2018. However, the Wages Index for Ordinary Residents in Lima rose from 12.27 to 12.53 in the same period.

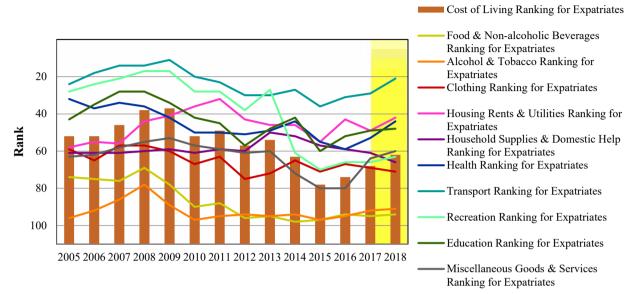
The cost of living index decreased whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lima followed a general upward trend from 35.91 to 36.86 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Lima fell from the 95th to the 96th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Lima has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Lima, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

LISBON Portugal

Expatriates: Cost of Living

Figure 49.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Lisbon, Portugal



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Lisbon is the capital of Portugal and one of the two Portuguese cities to be recognised as a global city. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 52nd to the 62nd position between 2005 and 2018 (see Figure 49a).

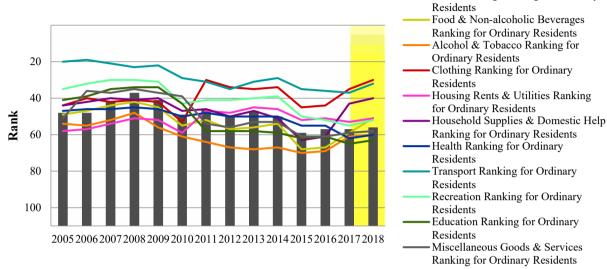
The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation fell the most, falling by 35 places from the 28th to the 63rd spot, while the ranking for Food & Non-alcoholic Beverages dropped by 20 places from the 74th to the 94th spot. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 16 places from the 58th to the 42nd spot, while the ranking for Alcohol & Tobacco increased by five places from the 96th to the 91st spot.

Cost of Living Ranking for Ordinary

LISBON Portugal

Ordinary Residents: Cost of Living

Figure 49.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Lisbon, Portugal



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 48th position to the 49th position between 2005 and 2010. The ranking climbed from the 46th position to the 57th between 2011 to 2016 and declined from the 57th position to the 56th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the rankings for Clothing and Transport decreased by nine places from the 44th to the 53rd spot, and 20th to the 29th spot respectively. On the other hand, the ranking for Miscellaneous Goods & Services increased the most, climbing 12 places from the 51st to the 39th spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help decreased by 15 places from the 52nd to the 67th position, and 46th to the 61st position respectively.

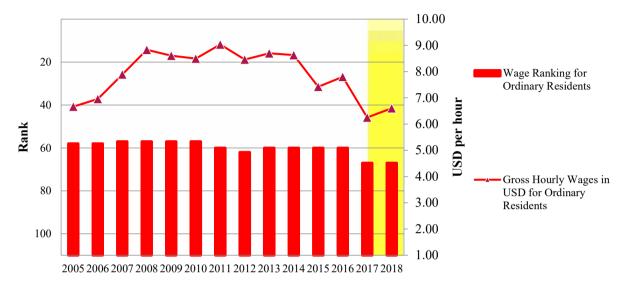
For the third sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages rose the most, climbing eight places from the 59th to the 51st spot, while

the rankings for Clothing and Transport rose by five places from the 35th to the 30th spot, and the 37th to the 32nd spot respectively.

LISBON Portugal

Ordinary Residents: Wage

Figure 49.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Lisbon, Portugal



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

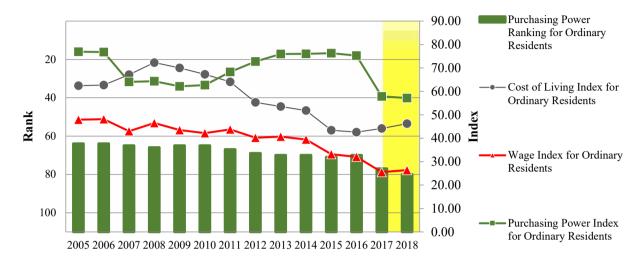
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Lisbon, as represented by the red line in Figure 49.c, increased from 6.66 USD in 2005 to a high of 9.03 USD in 2011. It then decreased to a low of 6.25 USD in 2017 before, finally, increasing to 6.6 USD in 2018. The Wage Ranking for Ordinary Residents in Lisbon, as denoted by the red bars, rose from 58th to 67th across 2005 and 2018.

LISBON Portugal

Ordinary Residents: Purchasing Power

Figure 49.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Lisbon, Portugal



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Lisbon. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Lisbon are represented by the grey and red line respectively in Figure 49.d. In the first sub-period, Lisbon's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Lisbon was 62.42 percent that of their counterparts in New York. This increased to 67.28 percent in 2010. However, the Wages Index for Ordinary Residents in Lisbon fell from 47.9 to 42.18 in the same period.

The cost of living index increased whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lisbon, as denoted by the green line in Figure 49.d, followed a general declining trend from 76.93 to 62.7 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Lisbon fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Lisbon, as denoted by the green bars in Figure 49.d, dropped from the 64th to the 65th position.

In the second sub-period, Lisbon's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Lisbon was 64.08 percent that of their counterparts in New York. This declined to 42.59 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Lisbon declined from 43.74 to 32.05 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lisbon followed a general upward trend from 68.26 to 75.24 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Lisbon fell from the 67th to the 70th position.

For the third sub-period, Lisbon's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Lisbon was 44.16 percent that of their counterparts in New York. This increased to 46.2 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Lisbon climbed from 25.53 to 26.41 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lisbon followed a general declining trend from 57.82 to 57.17 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Lisbon dropped from the 77th to the 80th spot.

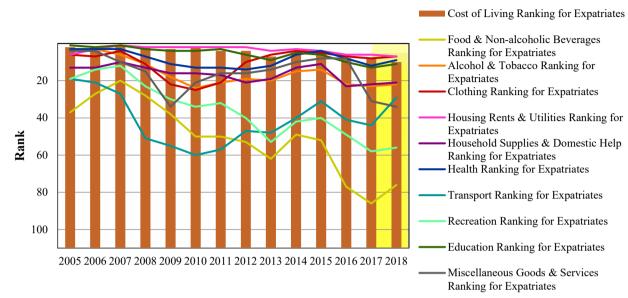
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Lisbon has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Lisbon, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

LONDON

Great Britain

Expatriates: Cost of Living

Figure 50.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in London, Great Britain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

London is the capital of Great Britain and the largest city of the United Kingdom currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 2nd to the 10th spot between 2005 and 2018 (see Figure 50a).

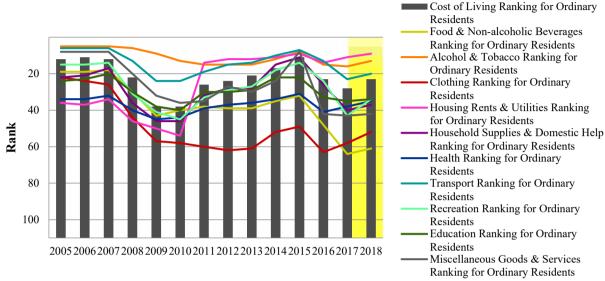
All of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2018, the ranking for Food & Non-alcoholic Beverages decreased the most, falling by 39 places from the 37th to the 76th position, while the ranking for Recreation dropped by 37 places from the 19th to the 56th position.

LONDON

Great Britain

Ordinary Residents: Cost of Living

Figure 50.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in London, Great Britain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 12th position to the 38th position between 2005 and 2010. The ranking decreased from the 26th position to the 23rd between 2011 to 2016 and declined from the 28th position to the 23rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Clothing dropped the most, falling by 36 places from the 22nd to the 58th spot, while the ranking for Recreation decreased by 30 places from the 15th to the 45th spot.

Over the second sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages declined the most, falling by 10 places from the 38th to the 48th position, while the ranking for Miscellaneous Goods & Services decreased by seven places from the 35th to the 42nd position. On the other hand, the ranking for Recreation increased the most, climbing nine places from the 33rd to the 24th position, while the rankings for Household Supplies & Domestic Help and Transport increased by six places from the 32nd to the 26th

position, and the 19th to the 13th position respectively. Alcohol & Tobacco and Housing Rents & Utilities did not change overall during this period.

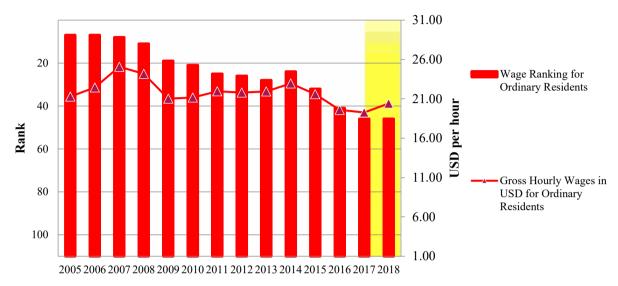
For the third sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2017 and 2018, the ranking for Recreation rose the most, climbing nine places from the 43rd to the 34th spot, while the ranking for Clothing rose by six places from the 58th to the 52nd spot.

LONDON

Great Britain

Ordinary Residents: Wage

Figure 50.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in London, Great Britain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in London, as represented by the red line in Figure 50.c, improved from 21.28 USD in 2005 to a high of 25.08 USD in 2007. It then fell to a low of 19.27 USD in 2017 before, finally, increasing to 20.41 USD in 2018. The Wage Ranking for Ordinary Residents in London, as denoted by the red bars, rose from 7th to 46th across 2005 and 2018.

LONDON

Great Britain

Ordinary Residents: Purchasing Power

Figure 50.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in London, Great Britain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in London. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in London are represented by the grey and red line respectively in Figure 50.d. In the first sub-period, London's Cost of Living Index decreased overall. In 2005, the cost of living for ordinary residents in London was 80.74 percent that of their counterparts in New York. This decreased to 72.9 percent in 2010. Similarly, the Wages Index for Ordinary Residents in London decreased from 153.26 to 105.05 in the same period.

The cost of living index decreased at a slower rate than the wage index in this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in London, as denoted by the green line in Figure 50.d, followed a general downward trend from 189.94 to 144.1 between 2005 and 2010. In other words, the purchasing power of ordinary residents in London dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in London, as denoted by the green bars in Figure 50.d, declined from the 12th to the 23rd spot.

In the second sub-period, London's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in London was 82.26 percent that of their counterparts in New York. This dropped to 60.01 percent in 2016. Similarly, the Wages Index for Ordinary Residents in London decreased from 106.34 to 80.53 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in London followed a general upward trend from 129.28 to 134.2 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in London declined from the 37th to the 45th position.

For the third sub-period, London's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in London was 61.22 percent that of their counterparts in New York. This rose to 64.19 percent in 2018. Similarly, the Wages Index for Ordinary Residents in London climbed from 78.69 to 81.62 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in London followed a general downward trend from 128.53 to 127.16 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in London remained the same at the 45th spot.

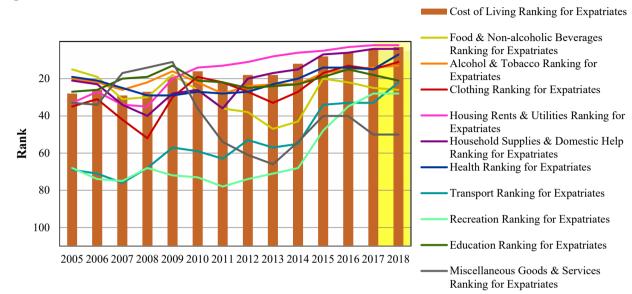
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in London has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in London, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

LOS ANGELES

United States

Expatriates: Cost of Living

Figure 51.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Los Angeles, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Los Angeles is the capital of United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 28th to the 3rd position between 2005 and 2018 (see Figure 51a).

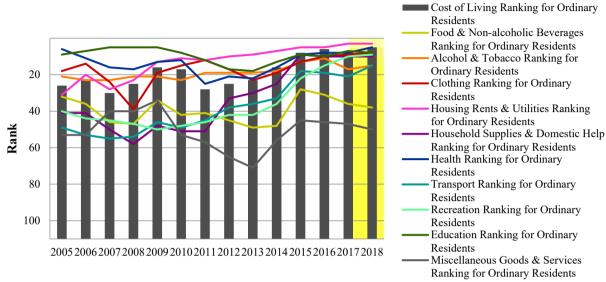
The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services dropped the most, falling by 17 places from the 33rd to the 50th position, while the ranking for Food & Non-alcoholic Beverages fell by 11 places from the 15th to the 26th position. On the other hand, the ranking for Transport rose the most, climbing 47 places from the 69th to the 22nd position, while the ranking for Recreation rose by 40 places from the 68th to the 28th position.

LOS ANGELES

United States

Ordinary Residents: Cost of Living

Figure 51.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Los Angeles, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 26th spot to the 17th spot between 2005 and 2010. The ranking decreased from the 28th spot to the 6th between 2011 to 2016 and declined from the 7th spot to the 5th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2010, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help declined by 10 places from the 32nd to the 42nd spot, and 41st to the 51st spot respectively. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 20 places from the 31st to the 11th spot, while the ranking for Clothing increased by three places from the 18th to the 15th spot. Miscellaneous Goods & Services and Transport did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help rose the most, climbing 41 places from the 51st to the 10th position, while the ranking for Recreation rose by 31 places from the 46th to the 15th position.

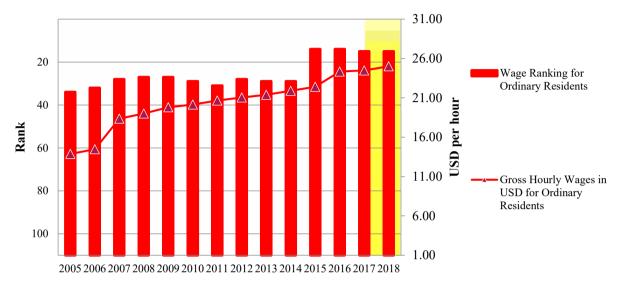
For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous Goods & Services decreased the most, falling by three places from the 47th to the 50th position, while the ranking for Food & Non-alcoholic Beverages fell by two places from the 36th to the 38th position. On the other hand, the ranking for Transport increased the most, climbing six places from the 21st to the 15th position, while the ranking for Health increased by three places from the 8th to the 5th position. Household Supplies & Domestic Help and Housing Rents & Utilities did not change overall during this period.

LOS ANGELES

United States

Ordinary Residents: Wage

Figure 51.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Los Angeles, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

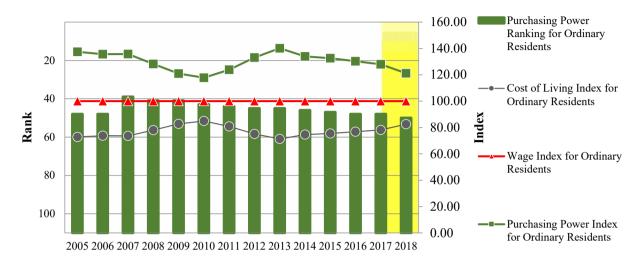
The Gross Hourly Wages in USD for Ordinary Residents in Los Angeles, as represented by the red line in Figure 51.c, increased from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Los Angeles, as denoted by the red bars, fell from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Los Angeles is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

LOS ANGELES

United States

Ordinary Residents: Purchasing Power

Figure 51.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Los Angeles, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Los Angeles. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Los Angeles are represented by the grey and red line respectively in Figure 51.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Los Angeles belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Los Angeles will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Los Angeles's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Los Angeles was 72.75 percent that of their counterparts in New York. This rose to 84.91 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Los Angeles, as denoted by the green line in Figure 51.d, followed a general declining trend from 137.46 to 117.78 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Los Angeles decreased relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for

Ordinary Residents in Los Angeles, as denoted by the green bars in Figure 51.d, rose from the 48th to the 43rd position.

In the second sub-period, Los Angeles's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Los Angeles was 80.78 percent that of their counterparts in New York. This fell to 76.75 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Los Angeles followed a general upward trend from 123.8 to 130.29 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Los Angeles fell from the 44th to the 48th position.

For the third sub-period, Los Angeles's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Los Angeles was 78.17 percent that of their counterparts in New York. This rose to 82.55 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Los Angeles followed a general downward trend from 127.92 to 121.15 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Los Angeles declined from the 48th to the 50th position.

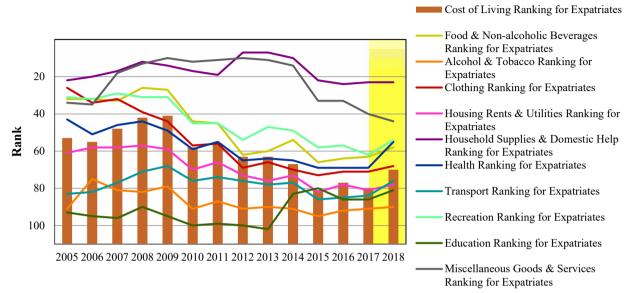
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Los Angeles has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Los Angeles, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

LUXEMBOURG

Luxembourg

Expatriates: Cost of Living

Figure 52.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Luxembourg, Luxembourg



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Luxembourg is one of the four official capitals of the European Union alongside Brussels, Frankfurt and Strasbourg. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 53rd to the 70th position between 2005 and 2018 (see Figure 52a).

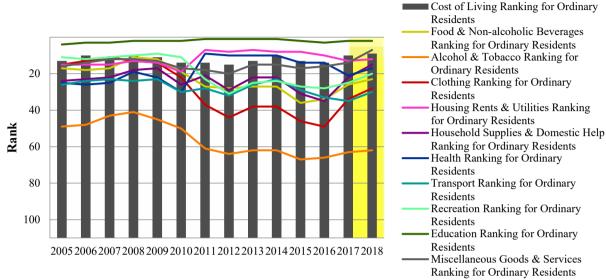
The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing declined the most, falling by 42 places from the 26th to the 68th spot, while the ranking for Food & Non-alcoholic Beverages decreased by 26 places from the 32nd to the 58th spot. On the other hand, the ranking for Education increased the most, climbing 12 places from the 93rd to the 81st spot, while the ranking for Transport rose by seven places from the 83rd to the 76th spot.

LUXEMBOURG

Luxembourg

Ordinary Residents: Cost of Living

Figure 52.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Luxembourg, Luxembourg



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 13th position to the 14th position between 2005 and 2010. The ranking remained the same from the 14th position to the 14th between 2011 to 2016 and decreased from the 10th position to the 9th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing declined the most, falling by seven places from the 15th to the 22nd position, while the ranking for Health dropped by five places from the 25th to the 30th position. On the other hand, the ranking for Education rose the most, climbing two places from the 4th to the 2nd position. Recreation did not change overall during this period.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help dropped the most, falling by 14 places from the 21st to the 35th position, while the ranking for Clothing fell by 12 places from the 37th to the 49th position. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing two places from the 18th to the 16th position.

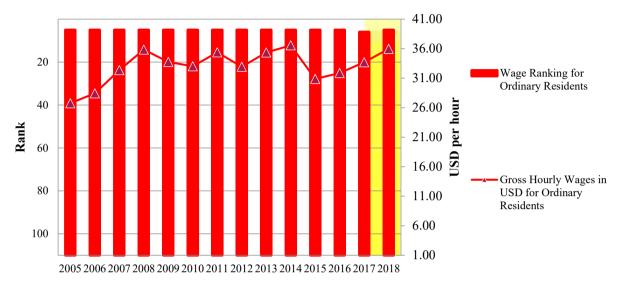
For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the rankings for Household Supplies & Domestic Help and Miscellaneous Goods & Services increased by seven places from the 22nd to the 15th spot, and the 14th to the 7th spot respectively. Education did not change overall during this period.

LUXEMBOURG

Luxembourg

Ordinary Residents: Wage

Figure 52.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Luxembourg, Luxembourg



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Luxembourg, as represented by the red line in Figure 52.c, improved from a low of 26.76 USD in 2005 to a high of 36.56 USD in 2014 before falling to 35.98 USD in 2018. The Wage Ranking for Ordinary Residents in Luxembourg, as denoted by the red bars, remained unchanged at 5th from 2005 to 2018.

LUXEMBOURG

Luxembourg

Ordinary Residents: Purchasing Power

Figure 52.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Luxembourg, Luxembourg



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Luxembourg. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Luxembourg are represented by the grey and red line respectively in Figure 52.d. In the first sub-period, Luxembourg's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Luxembourg was 80.7 percent that of their counterparts in New York. This climbed to 88.99 percent in 2010. However, the Wages Index for Ordinary Residents in Luxembourg dropped from 188.39 to 163.81 in the same period.

The cost of living index climbed whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Luxembourg, as denoted by the green line in Figure 52.d, followed a general declining trend from 238.96 to 184.08 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Luxembourg fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Luxembourg, as denoted by the green bars in Figure 52.d, decreased from the 3rd to the 4th position.

In the second sub-period, Luxembourg's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Luxembourg was 97.81 percent that of their counterparts in New York. This fell to 66.28 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Luxembourg fell from 171.33 to 131.02 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Luxembourg followed a general upward trend from 175.16 to 197.68 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Luxembourg fell from the 7th to the 8th spot.

For the third sub-period, Luxembourg's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Luxembourg was 70.19 percent that of their counterparts in New York. This rose to 73.81 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Luxembourg climbed from 137.57 to 143.9 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Luxembourg followed a general falling trend from 196 to 194.96 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Luxembourg remained the same at the 7th spot.

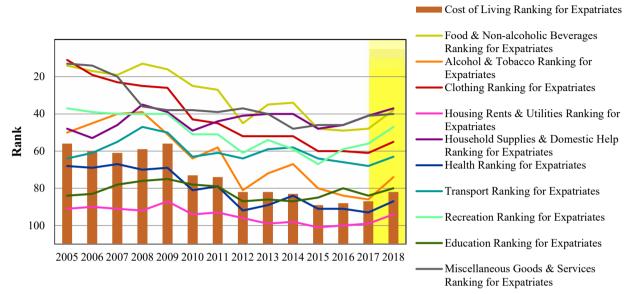
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Luxembourg has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Luxembourg, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

LYON

France

Expatriates: Cost of Living

Figure 53.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Lyon, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Lyon is currently the third-largest city in France, after Paris and Marseille. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 56th to the 82nd position between 2005 and 2018 (see Figure 53a).

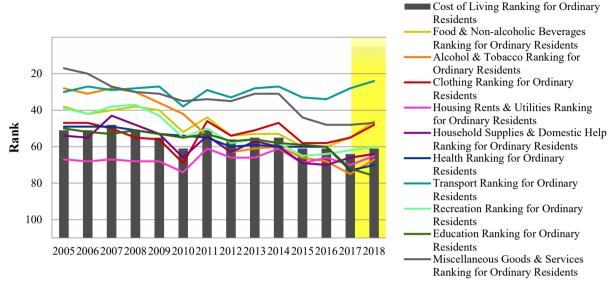
The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing declined the most, falling by 44 places from the 11th to the 55th position, while the ranking for Miscellaneous Goods & Services fell by 27 places from the 13th to the 40th position. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing 11 places from the 48th to the 37th position, while the ranking for Education increased by four places from the 84th to the 80th position.

LYON

France

Ordinary Residents: Cost of Living

Figure 53.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Lyon, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 51st spot to the 61st spot between 2005 and 2010. The ranking climbed from the 51st spot to the 61st between 2011 to 2016 and dropped from the 64th spot to the 61st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Clothing fell the most, falling by 22 places from the 47th to the 69th spot, while the ranking for Miscellaneous Goods & Services declined by 18 places from the 17th to the 35th spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help declined by 16 places from the 44th to the 60th position, and 54th to the 70th position respectively.

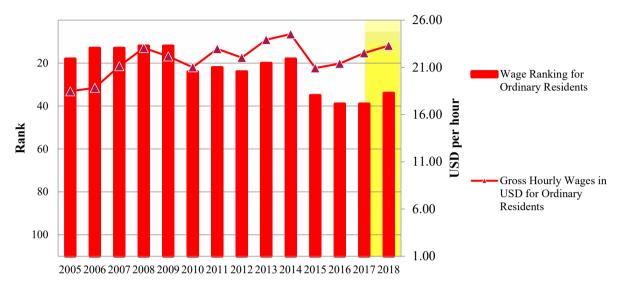
For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Education decreased the most, falling by four places from the 72nd to the 76th position. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing nine places from

the 55th to the 46th position, while the ranking for Alcohol & Tobacco rose by eight places from the 75th to the 67th position.

LYON France

Ordinary Residents: Wage

Figure 53.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Lyon, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Lyon, as represented by the red line in Figure 53.c, increased from a low of 18.47 USD in 2005 to a high of 24.52 USD in 2014 before decreasing to 23.3 USD in 2018. The Wage Ranking for Ordinary Residents in Lyon, as denoted by the red bars, improved from 18th to 34th across 2005 and 2018.

LYON France

Ordinary Residents: Purchasing Power

Figure 53.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Lyon, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Lyon. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Lyon are represented by the grey and red line respectively in Figure 53.d. In the first sub-period, Lyon's Cost of Living Index fell overall. In 2005, the cost of living for ordinary residents in Lyon was 59.56 percent that of their counterparts in New York. This fell to 58.77 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Lyon fell from 133.07 to 104.27 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lyon, as denoted by the green line in Figure 53.d, followed a general declining trend from 223.49 to 177.43 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Lyon declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Lyon, as denoted by the green bars in Figure 53.d, declined from the 5th to the 6th position.

In the second sub-period, Lyon's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Lyon was 61.24 percent that of their counterparts in New York. This dropped to 40.07 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Lyon declined from 111.16 to 87.96 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lyon followed a general upward trend from 181.52 to 219.52 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Lyon increased from the 4th to the 3rd position.

For the third sub-period, Lyon's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Lyon was 38.4 percent that of their counterparts in New York. This rose to 40.56 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Lyon climbed from 91.99 to 93.19 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Lyon followed a general downward trend from 239.55 to 229.73 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Lyon dropped from the 2nd to the 3rd spot.

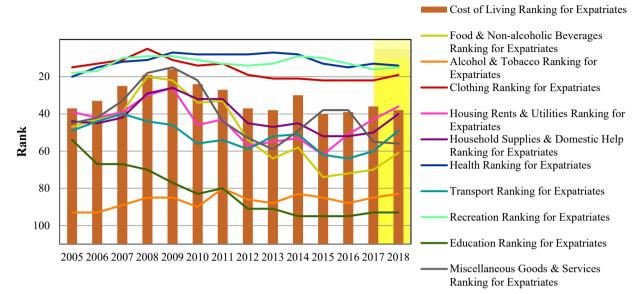
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Lyon has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Lyon, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

MADRID

Spain

Expatriates: Cost of Living

Figure 54.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Madrid, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Madrid is the capital of Spain and the most populous city in Spain currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 37th to the 38th position between 2005 and 2018 (see Figure 54a).

The city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Education decreased the most, falling by 39 places from the 54th to the 93rd spot, while the ranking for Food & Non-alcoholic Beverages declined by 14 places from the 47th to the 61st spot. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing 10 places from the 93rd to the 83rd spot, while the ranking for Health rose by six places from the 20th to the 14th spot. Transport did not change overall during this period.

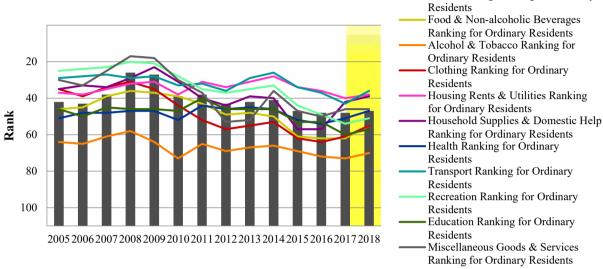
Cost of Living Ranking for Ordinary

MADRID

Spain

Ordinary Residents: Cost of Living

Figure 54.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Madrid, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 42nd position to the 39th position between 2005 and 2010. The ranking increased from the 38th position to the 48th between 2011 to 2016 and dropped from the 48th position to the 47th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the rankings for Alcohol & Tobacco and Clothing declined by nine places from the 64th to the 73rd spot, and 35th to the 44th spot respectively. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing seven places from the 46th to the 39th spot, while the ranking for Household Supplies & Domestic Help rose by four places from the 35th to the 31st spot. Miscellaneous Goods & Services did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 19 places from the 43rd to the 62nd spot, while the ranking for Household Supplies & Domestic Help declined by 17 places from the 40th to the 57th spot.

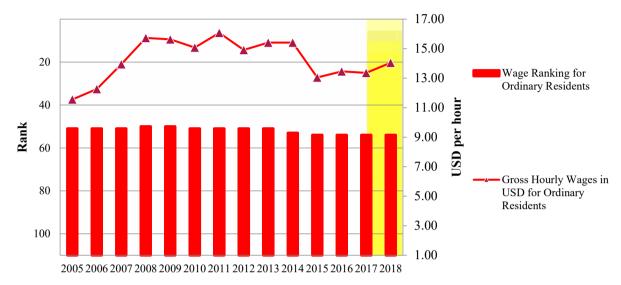
For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the rankings for Food & Non-alcoholic Beverages and Transport increased by seven places from the 62nd to the 55th spot, and the 43rd to the 36th spot respectively. Miscellaneous Goods & Services did not change overall during this period.

MADRID

Spain

Ordinary Residents: Wage

Figure 54.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Madrid, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Madrid, as represented by the red line in Figure 54.c, improved from a low of 11.55 USD in 2005 to a high of 16.07 USD in 2011 before dropping to 14.04 USD in 2018. The Wage Ranking for Ordinary Residents in Madrid, as denoted by the red bars, improved from 51st to 54th across 2005 and 2018.

MADRID

Spain

Ordinary Residents: Purchasing Power

Figure 54.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Madrid, Spain



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Madrid. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Madrid are represented by the grey and red line respectively in Figure 54.d. In the first sub-period, Madrid's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Madrid was 65.16 percent that of their counterparts in New York. This climbed to 72.7 percent in 2010. However, the Wages Index for Ordinary Residents in Madrid dropped from 83.21 to 74.82 in the same period.

The cost of living index climbed whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Madrid, as denoted by the green line in Figure 54.d, followed a general falling trend from 127.81 to 102.92 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Madrid fell relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Madrid, as denoted by the green bars in Figure 54.d, remained the same at the 50th position.

In the second sub-period, Madrid's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Madrid was 72.34 percent that of their counterparts in New York. This declined to 48.39 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Madrid dropped from 77.82 to 55.29 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Madrid followed a general rising trend from 107.57 to 114.26 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Madrid decreased from the 50th to the 58th position.

For the third sub-period, Madrid's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Madrid was 49.39 percent that of their counterparts in New York. This rose to 52.06 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Madrid climbed from 54.57 to 56.14 in the same period.

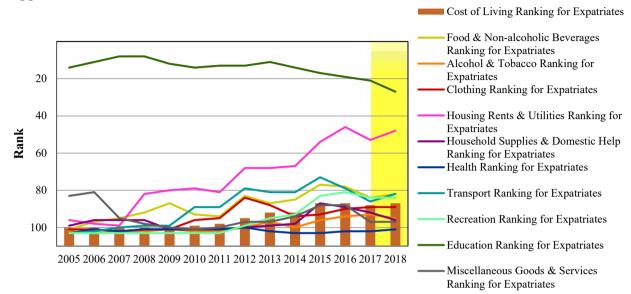
The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Madrid followed a general declining trend from 110.49 to 107.83 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Madrid remained the same at the 57th position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Madrid has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Madrid, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

MANILA Philippines

Expatriates: Cost of Living

Figure 55.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Manila, Philippines



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Manila is the capital of Philippines and one of the most densely populated cities in the world. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 100th to the 87th position between 2005 and 2018 (see Figure 55a).

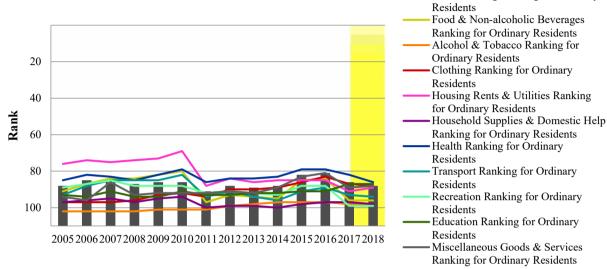
The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services dropped the most, falling by 14 places from the 83rd to the 97th position, while the ranking for Education decreased by 13 places from the 14th to the 27th position. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 48 places from the 96th to the 48th position, while the ranking for Transport increased by 21 places from the 103rd to the 82nd position.

Cost of Living Ranking for Ordinary

MANILA Philippines

Ordinary Residents: Cost of Living

Figure 55.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Manila, Philippines



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, dropped from the 88th spot to the 86th spot between 2005 and 2010. The ranking declined from the 91st spot to the 81st between 2011 to 2016 and increased from the 86th spot to the 88th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the rankings for Food & Non-alcoholic Beverages and Transport increased by 11 places from the 91st to the 80th spot, and the 93rd to the 82nd spot respectively.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 13 places from the 97th to the 84th position, while the rankings for Clothing and Miscellaneous Goods & Services increased by 11 places from the 94th to the 83rd position, and the 92nd to the 81st position respectively.

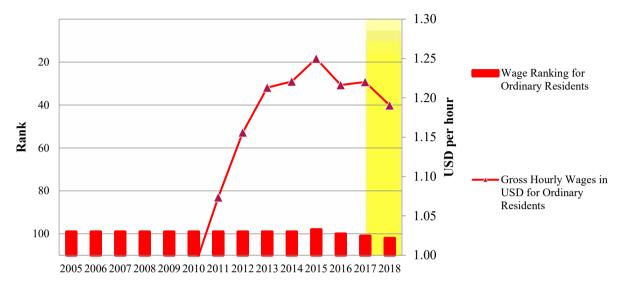
For the third sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Health decreased the most, falling by four places from the 82nd to the 86th spot, while the rankings for Alcohol & Tobacco, Clothing, Household Supplies & Domestic Help, and Transport decreased by one

place from the 98th to the 99th spot, 87th to the 88th spot, 97th to the 98th spot, and 93rd to the 94th spot respectively. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing two places from the 91st to the 89th spot, while the ranking for Miscellaneous Goods & Services increased by one place from the 89th to the 88th spot. Education, Food & Non-alcoholic Beverages and Recreation did not change overall during this period.

MANILA Philippines

Ordinary Residents: Wage

Figure 55.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Manila, Philippines



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

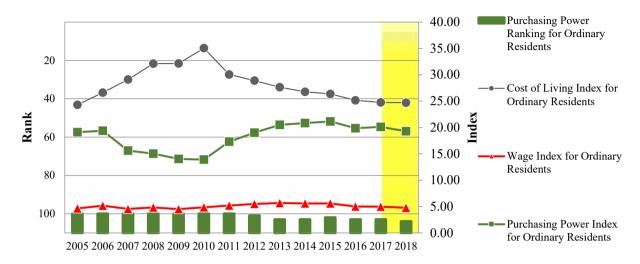
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Manila, as represented by the red line in Figure 55.c, rose from a low of 0.64 USD in 2005 to a high of 1.25 USD in 2015 before decreasing to 1.19 USD in 2018. The Wage Ranking for Ordinary Residents in Manila, as denoted by the red bars, rose from 99th to 102nd across 2005 and 2018.

MANILA Philippines

Ordinary Residents: Purchasing Power

Figure 55.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Manila, Philippines



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Manila. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Manila are represented by the grey and red line respectively in Figure 55.d. In the first sub-period, Manila's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Manila was 24.32 percent that of their counterparts in New York. This climbed to 35.05 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Manila rose from 4.64 to 4.87 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Manila, as denoted by the green line in Figure 55.d, followed a general declining trend from 19.11 to 13.9 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Manila fell relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Manila, as denoted by the green bars in Figure 55.d, remained the same at the 100th position.

In the second sub-period, Manila's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Manila was 30.04 percent that of their counterparts in New York. This declined to 25.16 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Manila decreased from 5.2 to 5 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Manila followed a general rising trend from 17.3 to 19.87 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Manila declined from the 100th to the 103rd position.

For the third sub-period, Manila's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Manila was 24.78 percent that of their counterparts in New York. This fell to 24.69 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Manila dropped from 4.98 to 4.76 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Manila followed a general falling trend from 20.11 to 19.28 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Manila declined from the 103rd to the 104th position.

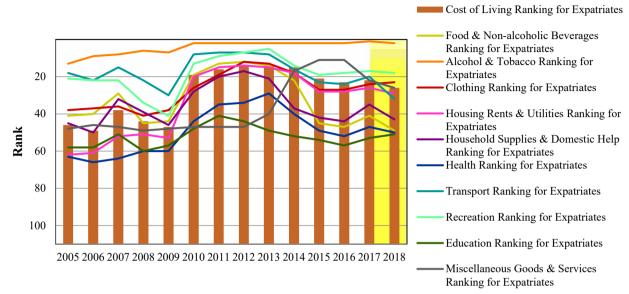
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Manila has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Manila, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

MELBOURNE

Australia

Expatriates: Cost of Living

Figure 56.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Melbourne, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Melbourne is the most populous city of the state of Victoria in Australia. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 46th to the 26th position between 2005 and 2018 (see Figure 56a).

The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Transport decreased the most, falling by 14 places from the 18th to the 32nd position, while the ranking for Food & Non-alcoholic Beverages decreased by eight places from the 41st to the 49th position. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 33 places from the 62nd to the 29th position, while the ranking for Miscellaneous Goods & Services rose by 22 places from the 48th to the 26th position.

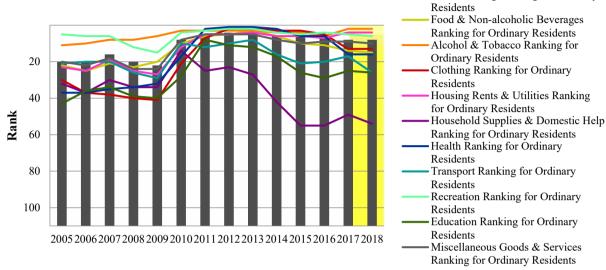
Cost of Living Ranking for Ordinary

MELBOURNE

Australia

Ordinary Residents: Cost of Living

Figure 56.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Melbourne, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 20th position to the 8th position between 2005 and 2010. The ranking increased from the 5th position to the 7th between 2011 to 2016 and remained the same from the 8th position to the 8th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Health increased the most, climbing 20 places from the 37th to the 17th spot, while the ranking for Household Supplies & Domestic Help rose by 18 places from the 32nd to the 14th spot.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help fell the most, falling by 30 places from the 25th to the 55th position, while the ranking for Education dropped by 21 places from the 8th to the 29th position. On the other hand, the ranking for Clothing rose the most, climbing two places from the 7th to the 5th position.

For the third sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Transport decreased

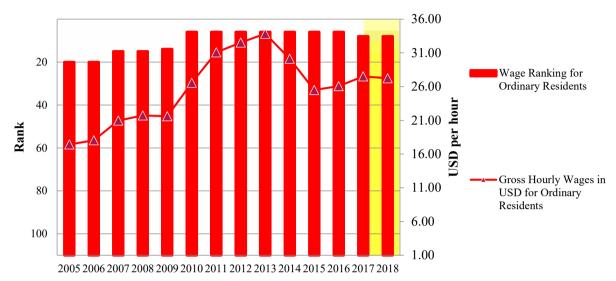
the most, falling by nine places from the 17th to the 26th position, while the ranking for Household Supplies & Domestic Help fell by five places from the 49th to the 54th position. Alcohol & Tobacco, Clothing, Health and Housing Rents & Utilities did not change overall during this period.

MELBOURNE

Australia

Ordinary Residents: Wage

Figure 56.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Melbourne, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

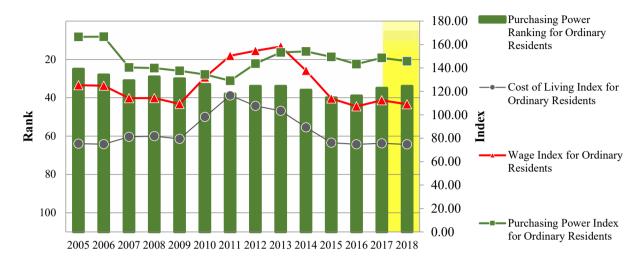
The Gross Hourly Wages in USD for Ordinary Residents in Melbourne, as represented by the red line in Figure 56.c, improved from a low of 17.42 USD in 2005 to a high of 33.84 USD in 2013 before decreasing to 27.24 USD in 2018. The Wage Ranking for Ordinary Residents in Melbourne, as denoted by the red bars, fell from 20th to 8th across 2005 and 2018.

MELBOURNE

Australia

Ordinary Residents: Purchasing Power

Figure 56.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Melbourne, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Melbourne. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Melbourne are represented by the grey and red line respectively in Figure 56.d. In the first sub-period, Melbourne's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Melbourne was 75.38 percent that of their counterparts in New York. This increased to 98.14 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Melbourne rose from 125.3 to 131.91 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Melbourne, as denoted by the green line in Figure 56.d, followed a general declining trend from 166.52 to 134.41 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Melbourne decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Melbourne, as denoted by the green bars in Figure 56.d, dropped from the 25th to the 33rd position.

In the second sub-period, Melbourne's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Melbourne was 116.54 percent that of their counterparts in New York. This declined to 74.74 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Melbourne dropped from 150.46 to 107.13 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Melbourne followed a general upward trend from 129.11 to 143.34 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Melbourne fell from the 38th to the 39th position.

For the third sub-period, Melbourne's Cost of Living Index dropped overall. In 2017, the cost of living for ordinary residents in Melbourne was 75.64 percent that of their counterparts in New York. This dropped to 74.72 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Melbourne fell from 112.42 to 108.94 in the same period.

The cost of living index dropped at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Melbourne followed a general declining trend from 148.62 to 145.79 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Melbourne climbed from the 35th to the 34th position.

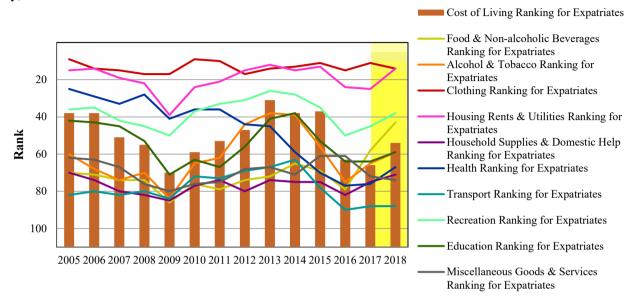
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Melbourne has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Melbourne, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

MEXICO CITY

Mexico

Expatriates: Cost of Living

Figure 57.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Mexico City, Mexico



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Mexico City is the capital of Mexico and the most populous city in North America currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 38th to the 54th position between 2005 and 2018 (see Figure 57a).

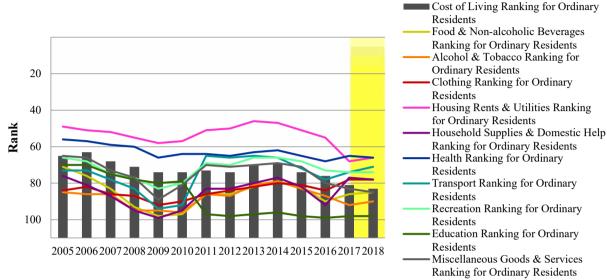
The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Health dropped the most, falling by 42 places from the 25th to the 67th spot, while the ranking for Education decreased by 17 places from the 42nd to the 59th spot. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 27 places from the 70th to the 43rd spot, while the rankings for Alcohol & Tobacco and Housing Rents & Utilities increased by one place from the 60th to the 59th spot, and the 15th to the 14th spot respectively.

MEXICO CITY

Mexico

Ordinary Residents: Cost of Living

Figure 57.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Mexico City, Mexico



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 65th position to the 74th position between 2005 and 2010. The ranking climbed from the 73rd position to the 76th between 2011 to 2016 and increased from the 81st position to the 83rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages dropped the most, falling by 26 places from the 71st to the 97th spot, while the rankings for Household Supplies & Domestic Help and Transport decreased by 19 places from the 76th to the 95th spot, and 73rd to the 92nd spot respectively.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Transport declined the most, falling by 13 places from the 65th to the 78th position, while the ranking for Miscellaneous Goods & Services decreased by 10 places from the 70th to the 80th position. On the other hand, the ranking for Clothing increased the most, climbing two places from the 86th to the 84th position.

For the third sub-period, the city's cost of living ranking increased in four consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous

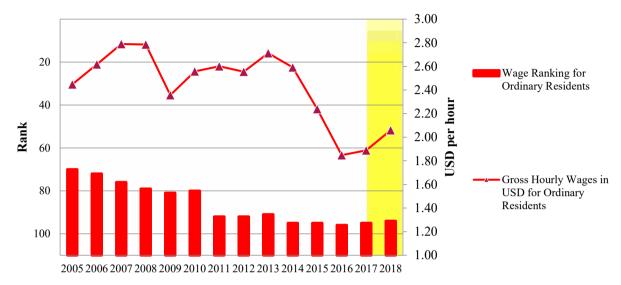
Goods & Services dropped the most, falling by two places from the 83rd to the 85th position, while the rankings for Health and Household Supplies & Domestic Help decreased by one place from the 65th to the 66th position, and 77th to the 78th position respectively. On the other hand, the ranking for Transport rose the most, climbing three places from the 74th to the 71st position, while the rankings for Alcohol & Tobacco and Housing Rents & Utilities increased by two places from the 92nd to the 90th position, and the 68th to the 66th position respectively. Clothing, Education and Recreation did not change overall during this period.

MEXICO CITY

Mexico

Ordinary Residents: Wage

Figure 57.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Mexico City, Mexico



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

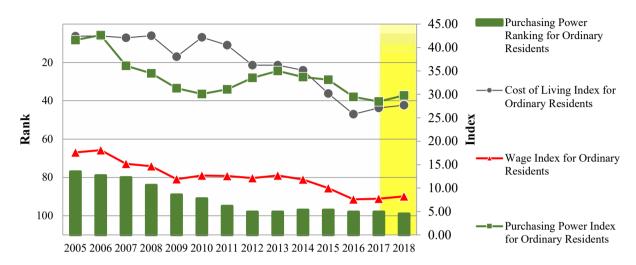
The Gross Hourly Wages in USD for Ordinary Residents in Mexico City, as represented by the red line in Figure 57.c, increased from 2.45 USD in 2005 to a high of 2.79 USD from 2007 to 2008. It then (c ('fell', 'decreased', 'dropped'), 1L)} to a low of 1.85 USD in 2016 before, finally, improving again to 2.06 USD in 2018. The Wage Ranking for Ordinary Residents in Mexico City, as denoted by the red bars, increased from 70th to 94th across 2005 and 2018.

MEXICO CITY

Mexico

Ordinary Residents: Purchasing Power

Figure 57.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Mexico City, Mexico



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Mexico City. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Mexico City are represented by the grey and red line respectively in Figure 57.d. In the first sub-period, Mexico City's Cost of Living Index dropped overall. In 2005, the cost of living for ordinary residents in Mexico City was 42.42 percent that of their counterparts in New York. This dropped to 42.18 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Mexico City declined from 17.61 to 12.69 in the same period.

The cost of living index dropped at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Mexico City, as denoted by the green line in Figure 57.d, followed a general falling trend from 41.59 to 30.1 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Mexico City dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Mexico City, as denoted by the green bars in Figure 57.d, decreased from the 77th to the 91st position.

In the second sub-period, Mexico City's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Mexico City was 40.51 percent that of their counterparts in New York. This dropped to 25.76 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Mexico City declined from 12.59 to 7.59 in the same period.

The cost of living index dropped at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Mexico City followed a general falling trend from 31.09 to 29.48 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Mexico City declined from the 95th to the 98th spot.

For the third sub-period, Mexico City's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Mexico City was 27.09 percent that of their counterparts in New York. This climbed to 27.67 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Mexico City rose from 7.71 to 8.24 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Mexico City followed a general upward trend from 28.47 to 29.77 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Mexico City fell from the 98th to the 99th position.

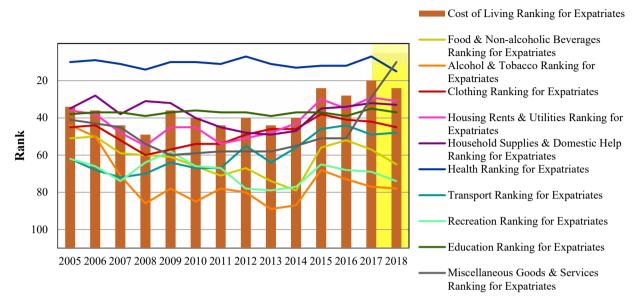
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Mexico City has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Mexico City, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

MIAMI

United States

Expatriates: Cost of Living

Figure 58.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Miami, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Miami is the cultural, economic and financial centre of South Florida in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 34th to the 24th position between 2005 and 2018 (see Figure 58a).

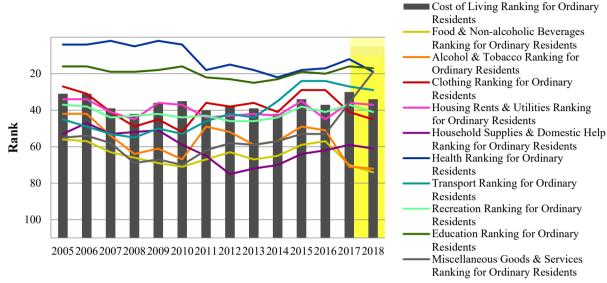
The city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco decreased the most, falling by 34 places from the 44th to the 78th position, while the ranking for Food & Non-alcoholic Beverages dropped by 14 places from the 51st to the 65th position. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 31 places from the 41st to the 10th position, while the ranking for Transport rose by 14 places from the 62nd to the 48th position. Clothing did not change overall during this period.

MIAMI

United States

Ordinary Residents: Cost of Living

Figure 58.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Miami, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 31st spot to the 35th spot between 2005 and 2010. The ranking declined from the 40th spot to the 37th between 2011 to 2016 and rose from the 30th spot to the 34th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the rankings for Alcohol & Tobacco and Clothing declined by 25 places from the 42nd to the 67th position, and 27th to the 52nd position respectively. Education and Health did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco decreased the most, falling by two places from the 49th to the 51st position, while the ranking for Housing Rents & Utilities fell by one place from the 44th to the 45th position. On the other hand, the ranking for Transport rose the most, climbing 22 places from the 46th to the 24th position, while the ranking for Food & Non-alcoholic Beverages rose by 10 places from the 67th to the 57th position.

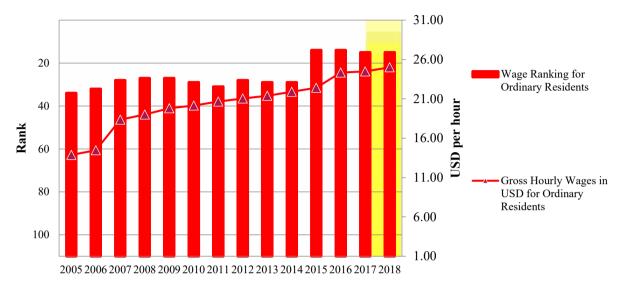
For the third sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Health dropped the

most, falling by seven places from the 12th to the 19th spot, while the rankings for Clothing, Food & Non-alcoholic Beverages, and Recreation decreased by four places from the 41st to the 45th spot, 70th to the 74th spot, and 37th to the 41st spot respectively. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 17 places from the 36th to the 19th spot.

MIAMI United States

Ordinary Residents: Wage

Figure 58.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Miami, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

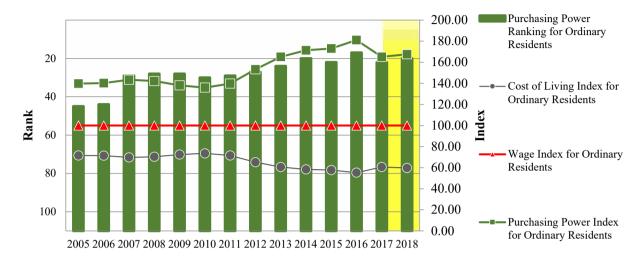
The Gross Hourly Wages in USD for Ordinary Residents in Miami, as represented by the red line in Figure 58.c, improved from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Miami, as denoted by the red bars, fell from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Miami is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

MIAMI

United States

Ordinary Residents: Purchasing Power

Figure 58.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Miami, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Miami. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Miami are represented by the grey and red line respectively in Figure 58.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Miami belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Miami will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Miami's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Miami was 71.59 percent that of their counterparts in New York. This rose to 73.59 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Miami, as denoted by the green line in Figure 58.d, followed a general declining trend from 139.69 to 135.9 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Miami fell relative to that of their New York counterparts over the first

sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Miami, as denoted by the green bars in Figure 58.d, climbed from the 45th to the 30th spot.

In the second sub-period, Miami's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Miami was 71.51 percent that of their counterparts in New York. This declined to 55.24 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Miami followed a general upward trend from 139.84 to 181.04 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Miami climbed from the 29th to the 17th position.

For the third sub-period, Miami's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Miami was 60.55 percent that of their counterparts in New York. This fell to 59.7 percent in 2018.

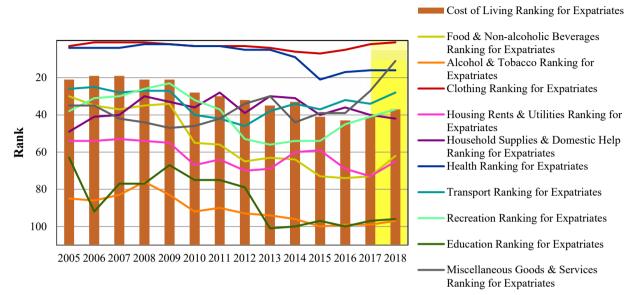
As a result, the Purchasing Power Index for Ordinary Residents in Miami followed a general rising trend from 165.14 to 167.52 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Miami increased from the 22nd to the 20th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Miami has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Miami, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

MILAN Italv

Expatriates: Cost of Living

Figure 59.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Milan, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Milan is the capital of Lombardy and is currently the second-most populous city in Italy after Rome. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 21st to the 37th position between 2005 and 2018 (see Figure 59a).

The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Education declined the most, falling by 33 places from the 63rd to the 96th position, while the ranking for Food & Non-alcoholic Beverages decreased by 32 places from the 30th to the 62nd position. On the other hand, the ranking for Miscellaneous Goods & Services increased the most, climbing 24 places from the 35th to the 11th position, while the ranking for Household Supplies & Domestic Help increased by seven places from the 49th to the 42nd position.

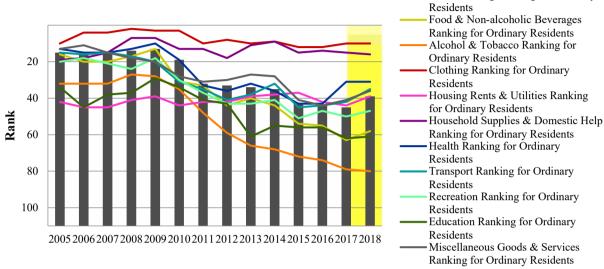
Cost of Living Ranking for Ordinary

MILAN

Italy

Ordinary Residents: Cost of Living

Figure 59.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Milan, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 15th position to the 19th position between 2005 and 2010. The ranking climbed from the 32nd position to the 44th between 2011 to 2016 and declined from the 45th position to the 39th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Transport decreased the most, falling by 16 places from the 15th to the 31st position, while the rankings for Food & Non-alcoholic Beverages and Miscellaneous Goods & Services dropped by 15 places from the 16th to the 31st position, and 13th to the 28th position respectively. On the other hand, the ranking for Clothing rose the most, climbing seven places from the 10th to the 3rd position, while the ranking for Household Supplies & Domestic Help increased by six places from the 19th to the 13th position. Education did not change overall during this period.

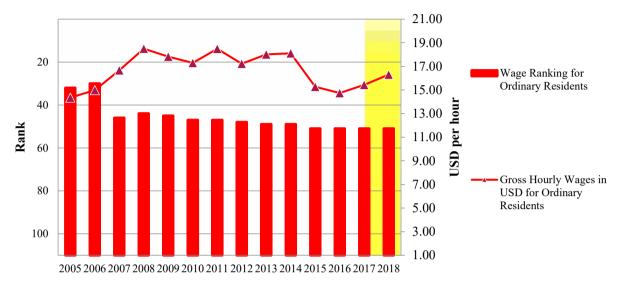
Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco fell the most, falling by 26 places from the 48th to the 74th spot, while the ranking for Food & Non-alcoholic Beverages declined by 22 places from the 33rd to the 55th spot. Housing Rents & Utilities did not change overall during this period.

For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the rankings for Alcohol & Tobacco and Household Supplies & Domestic Help fell by one place from the 79th to the 80th spot, and 15th to the 16th spot respectively. On the other hand, the ranking for Transport rose the most, climbing seven places from the 42nd to the 35th spot, while the rankings for Food & Non-alcoholic Beverages, Housing Rents & Utilities, and Miscellaneous Goods & Services rose by five places from the 63rd to the 58th spot, 44th to the 39th spot, and the 41st to the 36th spot respectively. Clothing and Health did not change overall during this period.

MILAN Italy

Ordinary Residents: Wage

Figure 59.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Milan, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Milan, as represented by the red line in Figure 59.c, improved from a low of 14.35 USD in 2005 to a high of 18.5 USD in 2008. It then fell to 14.75 USD in 2016 before, finally, improving to 16.3 USD in 2018. The Wage Ranking for Ordinary Residents in Milan, as denoted by the red bars, increased from 32nd to 51st across 2005 and 2018.

MILAN Italv

Ordinary Residents: Purchasing Power

Figure 59.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Milan, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Milan. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Milan are represented by the grey and red line respectively in Figure 59.d. In the first sub-period, Milan's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Milan was 79.02 percent that of their counterparts in New York. This increased to 84.02 percent in 2010. However, the Wages Index for Ordinary Residents in Milan declined from 104.2 to 85.82 in the same period.

The cost of living index increased whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Milan, as denoted by the green line in Figure 59.d, followed a general downward trend from 130.92 to 102.14 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Milan declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Milan, as denoted by the green bars in Figure 59.d, decreased from the 49th to the 53rd spot.

In the second sub-period, Milan's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Milan was 78.68 percent that of their counterparts in New York. This decreased to 51.7 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Milan fell from 89.49 to 60.6 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Milan followed a general rising trend from 113.74 to 117.2 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Milan dropped from the 48th to the 54th spot.

For the third sub-period, Milan's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Milan was 53.42 percent that of their counterparts in New York. This increased to 56.07 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Milan rose from 63.02 to 65.2 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Milan followed a general falling trend from 117.97 to 116.28 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Milan fell from the 52nd to the 54th position.

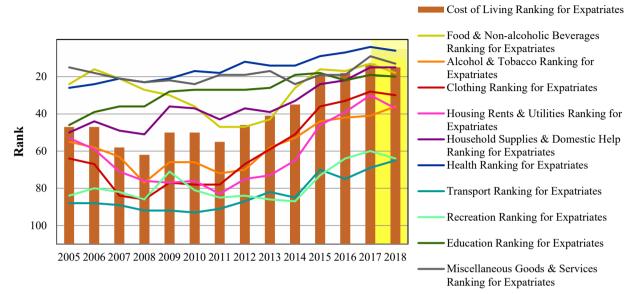
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Milan has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Milan, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

MINNEAPOLIS

United States

Expatriates: Cost of Living

Figure 60.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Minneapolis, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Minneapolis is currently the largest city in the state of Minnesota in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 47th to the 15th spot between 2005 and 2018 (see Figure 60a).

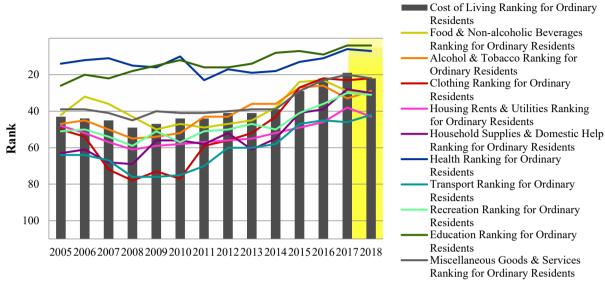
All of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2018, the ranking for Household Supplies & Domestic Help rose the most, climbing 35 places from the 50th to the 15th position, while the ranking for Clothing rose by 34 places from the 64th to the 30th position.

MINNEAPOLIS

United States

Ordinary Residents: Cost of Living

Figure 60.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Minneapolis, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 43rd spot to the 44th spot between 2005 and 2010. The ranking declined from the 44th spot to the 22nd between 2011 to 2016 and climbed from the 19th spot to the 22nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing decreased the most, falling by 27 places from the 50th to the 77th spot, while the ranking for Transport fell by 11 places from the 64th to the 75th spot. On the other hand, the ranking for Education rose the most, climbing 14 places from the 26th to the 12th spot, while the ranking for Household Supplies & Domestic Help rose by seven places from the 63rd to the 56th spot.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Clothing rose the most, climbing 37 places from the 59th to the 22nd spot, while the ranking for Food & Non-alcoholic Beverages rose by 26 places from the 49th to the 23rd spot.

For the third sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Housing Rents & Utilities declined the most, falling by five places from the 38th to the 43rd spot, while the

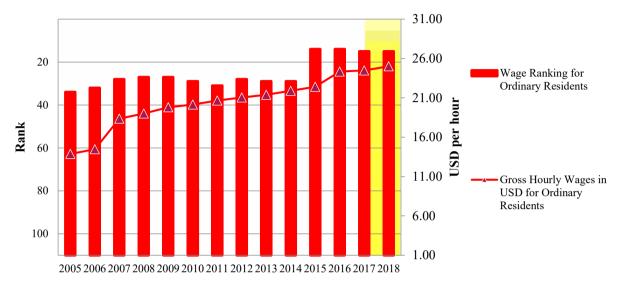
rankings for Food & Non-alcoholic Beverages, Household Supplies & Domestic Help, and Miscellaneous Goods & Services fell by two places from the 29th to the 31st spot, 28th to the 30th spot, and 20th to the 22nd spot respectively. On the other hand, the rankings for Alcohol & Tobacco and Transport increased by four places from the 33rd to the 29th spot, and the 46th to the 42nd spot respectively. Education did not change overall during this period.

MINNEAPOLIS

United States

Ordinary Residents: Wage

Figure 60.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Minneapolis, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

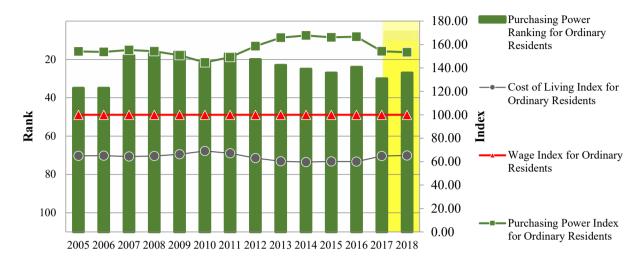
The Gross Hourly Wages in USD for Ordinary Residents in Minneapolis, as represented by the red line in Figure 60.c, improved from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Minneapolis, as denoted by the red bars, decreased from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Minneapolis is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

MINNEAPOLIS

United States

Ordinary Residents: Purchasing Power

Figure 60.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Minneapolis, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Minneapolis. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Minneapolis are represented by the grey and red line respectively in Figure 60.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Minneapolis belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Minneapolis will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Minneapolis's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Minneapolis was 64.88 percent that of their counterparts in New York. This climbed to 69.1 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Minneapolis, as denoted by the green line in Figure 60.d, followed a general declining trend from 154.13 to 144.72 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Minneapolis dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for

Ordinary Residents in Minneapolis, as denoted by the green bars in Figure 60.d, rose from the 35th to the 22nd spot.

In the second sub-period, Minneapolis's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Minneapolis was 67.07 percent that of their counterparts in New York. This decreased to 60.02 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Minneapolis followed a general rising trend from 149.1 to 166.61 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Minneapolis dropped from the 17th to the 24th spot.

For the third sub-period, Minneapolis's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Minneapolis was 64.84 percent that of their counterparts in New York. This rose to 65.21 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Minneapolis followed a general declining trend from 154.22 to 153.35 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Minneapolis climbed from the 30th to the 27th spot.

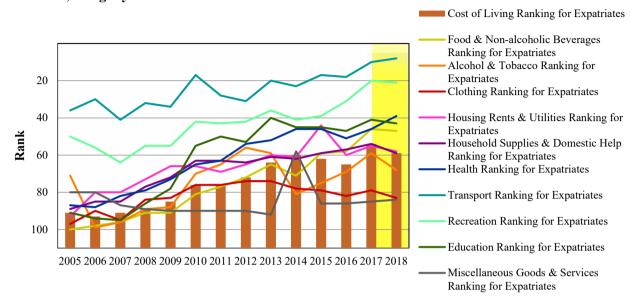
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Minneapolis has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Minneapolis, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

MONTEVIDEO

Uruguay

Expatriates: Cost of Living

Figure 61.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Montevideo, Uruguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Montevideo is the capital of Uruguay and the largest city of Uruguay currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 91st to the 59th spot between 2005 and 2018 (see Figure 61a).

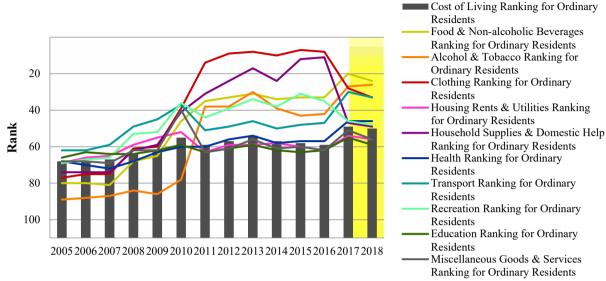
The city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services dropped the most, falling by four places from the 80th to the 84th position. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 53 places from the 100th to the 47th position, while the rankings for Education and Health rose by 48 places from the 91st to the 43rd position, and the 87th to the 39th position respectively.

MONTEVIDEO

Uruguay

Ordinary Residents: Cost of Living

Figure 61.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Montevideo, Uruguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 68th spot to the 55th spot between 2005 and 2010. The ranking remained the same from the 59th spot to the 59th between 2011 to 2016 and climbed from the 49th spot to the 50th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Clothing increased the most, climbing 38 places from the 77th to the 39th spot, while the ranking for Food & Non-alcoholic Beverages increased by 34 places from the 80th to the 46th spot.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco fell the most, falling by four places from the 38th to the 42nd position. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing 20 places from the 31st to the 11th position, while the ranking for Recreation rose by nine places from the 44th to the 35th position.

For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the rankings for Clothing and Miscellaneous Goods & Services declined by five places from the 28th to the 33rd spot, and

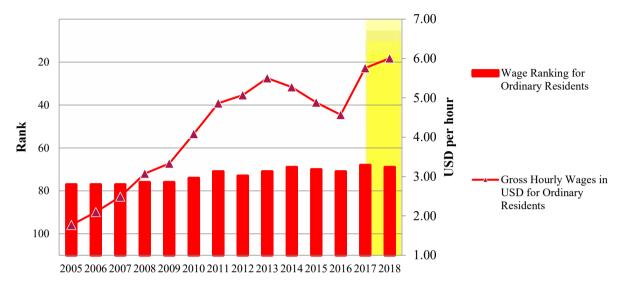
51st to the 56th spot respectively. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing one place from the 27th to the 26th spot. Health did not change overall during this period.

MONTEVIDEO

Uruguay

Ordinary Residents: Wage

Figure 61.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Montevideo, Uruguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

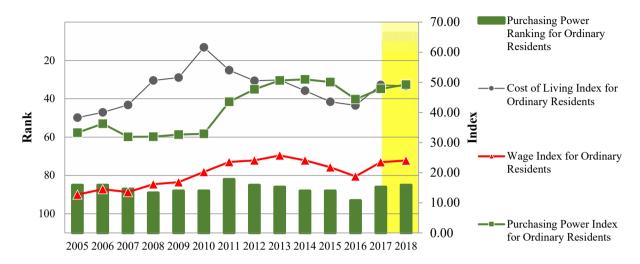
The Gross Hourly Wages in USD for Ordinary Residents in Montevideo, as represented by the red line in Figure 61.c, increased from a low of 1.77 USD in 2005 to a high of 6.01 USD in 2018. The Wage Ranking for Ordinary Residents in Montevideo, as denoted by the red bars, dropped from 77th to 69th across 2005 and 2018.

MONTEVIDEO

Uruguay

Ordinary Residents: Purchasing Power

Figure 61.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Montevideo, Uruguay



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Montevideo. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Montevideo are represented by the grey and red line respectively in Figure 61.d. In the first sub-period, Montevideo's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Montevideo was 38.29 percent that of their counterparts in New York. This climbed to 61.63 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Montevideo rose from 12.73 to 20.28 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Montevideo, as denoted by the green line in Figure 61.d, followed a general declining trend from 33.28 to 32.9 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Montevideo declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Montevideo, as denoted by the green bars in Figure 61.d, dropped from the 85th to the 88th position.

In the second sub-period, Montevideo's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Montevideo was 54.03 percent that of their counterparts in New York. This dropped to 42.31 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Montevideo decreased from 23.54 to 18.78 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Montevideo followed a general upward trend from 43.57 to 44.38 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Montevideo declined from the 82nd to the 93rd position.

For the third sub-period, Montevideo's Cost of Living Index dropped overall. In 2017, the cost of living for ordinary residents in Montevideo was 49.15 percent that of their counterparts in New York. This dropped to 48.79 percent in 2018. However, the Wages Index for Ordinary Residents in Montevideo rose from 23.52 to 24.02 in the same period.

The cost of living index dropped whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Montevideo followed a general upward trend from 47.86 to 49.23 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Montevideo climbed from the 86th to the 85th position.

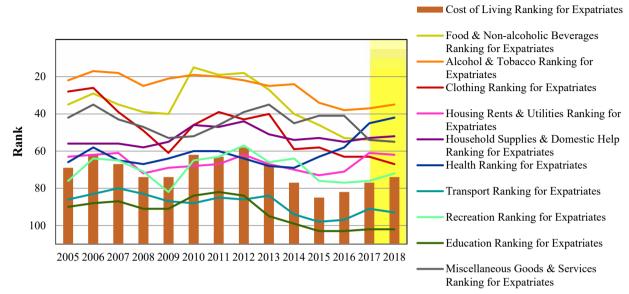
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Montevideo has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Montevideo, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

MONTREAL

Canada

Expatriates: Cost of Living

Figure 62.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Montreal, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Montreal is currently the most populous city in the Canadian province of Quebec. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 69th to the 74th spot between 2005 and 2018 (see Figure 62a).

The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing decreased the most, falling by 39 places from the 28th to the 67th spot, while the ranking for Food & Non-alcoholic Beverages declined by 20 places from the 35th to the 55th spot. On the other hand, the ranking for Health increased the most, climbing 24 places from the 66th to the 42nd spot, while the rankings for Household Supplies & Domestic Help and Recreation increased by four places from the 56th to the 52nd spot, and the 76th to the 72nd spot respectively.

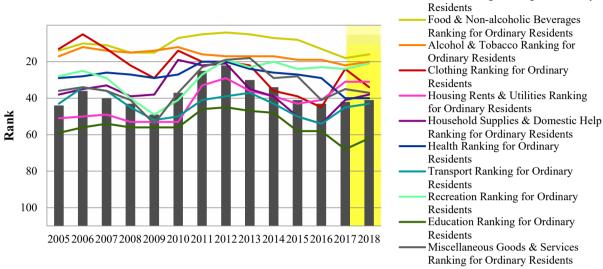
Cost of Living Ranking for Ordinary

MONTREAL

Canada

Ordinary Residents: Cost of Living

Figure 62.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Montreal, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 44th position to the 37th position between 2005 and 2010. The ranking increased from the 25th position to the 43rd between 2011 to 2016 and decreased from the 42nd position to the 41st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Recreation decreased the most, falling by 13 places from the 28th to the 41st position, while the ranking for Transport fell by seven places from the 43rd to the 50th position. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing 19 places from the 38th to the 19th position, while the ranking for Food & Non-alcoholic Beverages rose by seven places from the 14th to the 7th position.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help fell the most, falling by 32 places from the 22nd to the 54th spot, while the ranking for Clothing declined by 25 places from the 20th to the 45th spot. On the other hand, the ranking for Recreation rose the most, climbing four places from the 27th to the 23rd spot.

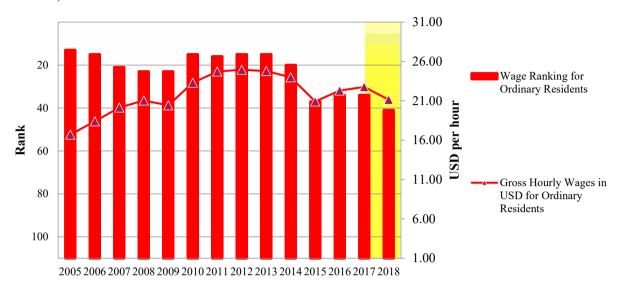
For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing decreased the most, falling by 10 places from the 24th to the 34th spot, while the ranking for Miscellaneous Goods & Services declined by two places from the 35th to the 37th spot. On the other hand, the ranking for Education increased the most, climbing six places from the 68th to the 62nd spot, while the rankings for Household Supplies & Domestic Help and Recreation rose by three places from the 41st to the 38th spot, and the 24th to the 21st spot respectively. Health and Housing Rents & Utilities did not change overall during this period.

MONTREAL

Canada

Ordinary Residents: Wage

Figure 62.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Montreal, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

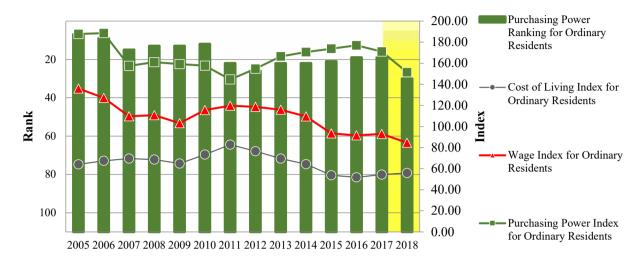
The Gross Hourly Wages in USD for Ordinary Residents in Montreal, as represented by the red line in Figure 62.c, rose from a low of 16.71 USD in 2005 to a high of 24.95 USD in 2012 before decreasing to 21.15 USD in 2018. The Wage Ranking for Ordinary Residents in Montreal, as denoted by the red bars, increased from 13th to 41st across 2005 and 2018.

MONTREAL

Canada

Ordinary Residents: Purchasing Power

Figure 62.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Montreal, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Montreal. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Montreal are represented by the grey and red line respectively in Figure 62.d. In the first sub-period, Montreal's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Montreal was 64.17 percent that of their counterparts in New York. This rose to 73.33 percent in 2010. However, the Wages Index for Ordinary Residents in Montreal declined from 136.02 to 115.69 in the same period.

The cost of living index rose whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Montreal, as denoted by the green line in Figure 62.d, followed a general declining trend from 187.72 to 157.77 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Montreal fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Montreal, as denoted by the green bars in Figure 62.d, declined from the 7th to the 12th position.

In the second sub-period, Montreal's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Montreal was 82.83 percent that of their counterparts in New York. This dropped to 51.78 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Montreal decreased from 119.76 to 91.62 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Montreal followed a general rising trend from 144.59 to 176.93 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Montreal rose from the 22nd to the 19th position.

For the third sub-period, Montreal's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Montreal was 54.39 percent that of their counterparts in New York. This climbed to 55.86 percent in 2018. However, the Wages Index for Ordinary Residents in Montreal declined from 93.04 to 84.59 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Montreal followed a general falling trend from 171.06 to 151.44 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Montreal fell from the 19th to the 30th position.

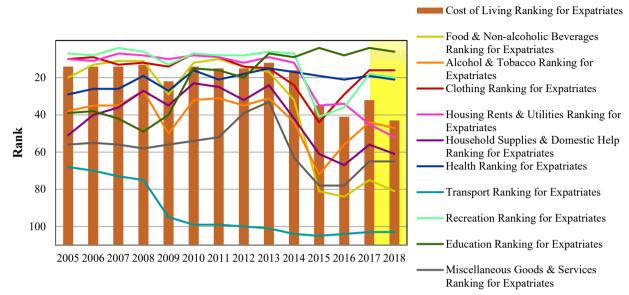
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Montreal has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Montreal, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

MOSCOW

Russia

Expatriates: Cost of Living

Figure 63.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Moscow, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Moscow is the capital of Russia and the largest city in the European continent currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 14th to the 43rd spot between 2005 and 2018 (see Figure 63a).

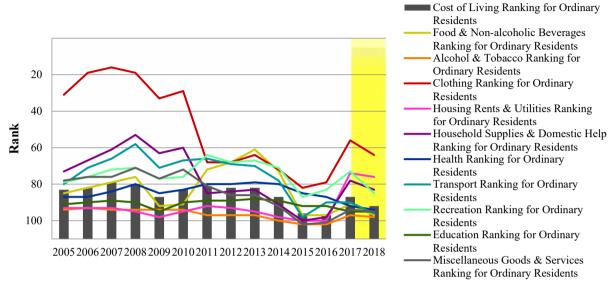
The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 61 places from the 20th to the 81st spot, while the ranking for Housing Rents & Utilities decreased by 42 places from the 10th to the 52nd spot. On the other hand, the ranking for Education increased the most, climbing 33 places from the 39th to the 6th spot, while the ranking for Health rose by eight places from the 29th to the 21st spot.

MOSCOW

Russia

Ordinary Residents: Cost of Living

Figure 63.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Moscow, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 83rd spot to the 83rd spot between 2005 and 2010. The ranking rose from the 81st spot to the 97th between 2011 to 2016 and rose from the 87th spot to the 92nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages declined the most, falling by six places from the 85th to the 91st position, while the ranking for Housing Rents & Utilities decreased by two places from the 93rd to the 95th position. On the other hand, the rankings for Household Supplies & Domestic Help and Transport rose by 13 places from the 73rd to the 60th position, and the 80th to the 67th position respectively. Alcohol & Tobacco did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 25 places from the 72nd to the 97th position, while the ranking for Transport declined by 24 places from the 66th to the 90th position.

For the third sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Recreation fell the

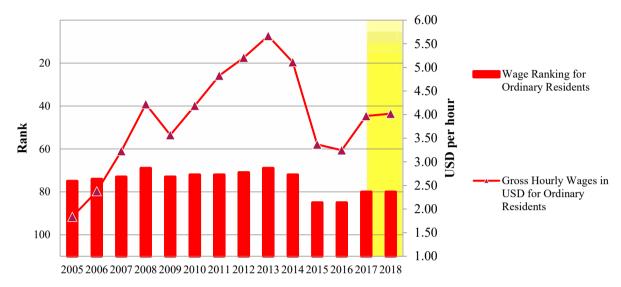
most, falling by 12 places from the 73rd to the 85th spot, while the ranking for Clothing dropped by eight places from the 56th to the 64th spot. Education did not change overall during this period.

MOSCOW

Russia

Ordinary Residents: Wage

Figure 63.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Moscow, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

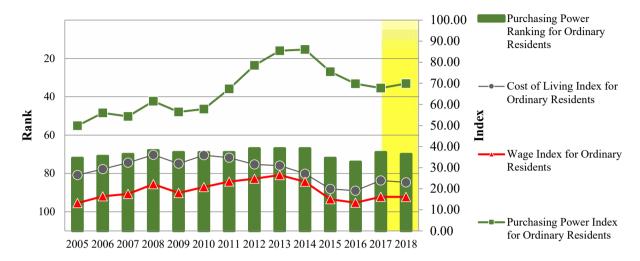
The Gross Hourly Wages in USD for Ordinary Residents in Moscow, as represented by the red line in Figure 63.c, rose from a low of 1.84 USD in 2005 to a high of 5.67 USD in 2013 before dropping to 4.02 USD in 2018. The Wage Ranking for Ordinary Residents in Moscow, as denoted by the red bars, improved from 75th to 80th across 2005 and 2018.

MOSCOW

Russia

Ordinary Residents: Purchasing Power

Figure 63.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Moscow, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Moscow. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Moscow are represented by the grey and red line respectively in Figure 63.d. In the first sub-period, Moscow's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Moscow was 26.53 percent that of their counterparts in New York. This increased to 35.95 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Moscow rose from 13.22 to 20.79 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Moscow, as denoted by the green line in Figure 63.d, followed a general rising trend from 49.87 to 57.83 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Moscow increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Moscow, as denoted by the green bars in Figure 63.d, rose from the 72nd to the 69th spot.

In the second sub-period, Moscow's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Moscow was 34.7 percent that of their counterparts in New York. This fell to 19.09 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Moscow fell from 23.37 to 13.33 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Moscow followed a general rising trend from 67.35 to 69.84 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Moscow dropped from the 69th to the 74th spot.

For the third sub-period, Moscow's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in Moscow was 23.92 percent that of their counterparts in New York. This declined to 22.99 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Moscow decreased from 16.22 to 16.07 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Moscow followed a general upward trend from 67.79 to 69.89 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Moscow fell from the 69th to the 70th position.

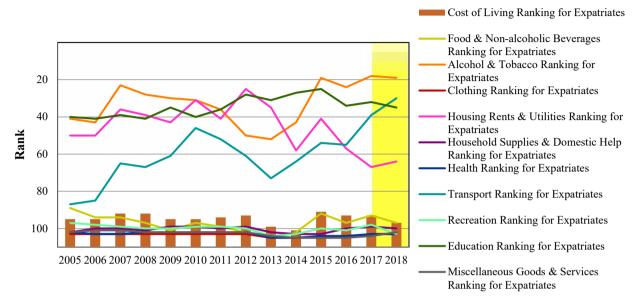
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Moscow has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Moscow, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

MUMBAI

India

Expatriates: Cost of Living

Figure 64.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Mumbai, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Mumbai is the capital of the state of Maharashtra in India, and it is currently the second-most populous city in India after Delhi. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 95th to the 97th spot between 2005 and 2018 (see Figure 64a).

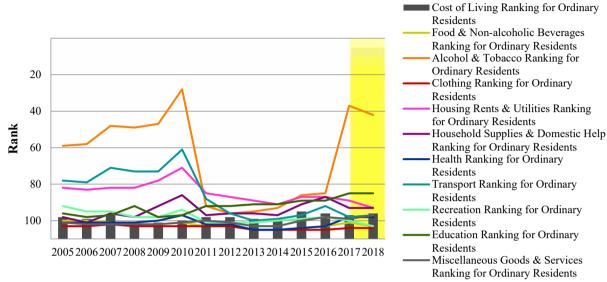
The city's cost of living ranking decreased in four consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities declined the most, falling by 14 places from the 50th to the 64th spot, while the ranking for Food & Non-alcoholic Beverages fell by eight places from the 89th to the 97th spot. On the other hand, the ranking for Transport rose the most, climbing 57 places from the 87th to the 30th spot, while the ranking for Alcohol & Tobacco increased by 22 places from the 41st to the 19th spot. Clothing and Miscellaneous Goods & Services did not change overall during this period.

MUMBAI

India

Ordinary Residents: Cost of Living

Figure 64.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Mumbai, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 98th position to the 100th position between 2005 and 2010. The ranking fell from the 98th position to the 96th between 2011 to 2016 and decreased from the 97th position to the 96th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Recreation declined the most, falling by two places from the 92nd to the 94th position, while the rankings for Education and Food & Non-alcoholic Beverages dropped by one place from the 96th to the 97th position, and 100th to the 101st position respectively. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 31 places from the 59th to the 28th position, while the ranking for Transport rose by 17 places from the 78th to the 61st position. Clothing and Miscellaneous Goods & Services did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2011 and 2016, the ranking for Transport fell the most, falling by four places from the 88th to the 92nd position, while the rankings for Clothing and Housing Rents & Utilities decreased by two places from the 103rd to the 105th position, and 85th to the 87th position respectively. On the other hand, the ranking

for Household Supplies & Domestic Help increased the most, climbing 10 places from the 97th to the 87th position, while the ranking for Alcohol & Tobacco increased by seven places from the 92nd to the 85th position. Food & Non-alcoholic Beverages did not change overall during this period.

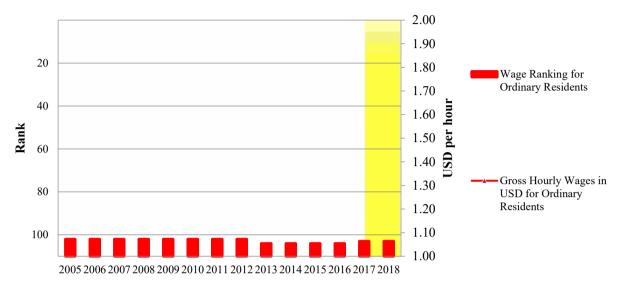
For the third sub-period, the city's cost of living ranking decreased in four consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco decreased the most, falling by five places from the 37th to the 42nd spot, while the ranking for Housing Rents & Utilities fell by four places from the 89th to the 93rd spot. On the other hand, the ranking for Miscellaneous Goods & Services increased the most, climbing two places from the 99th to the 97th spot, while the ranking for Transport increased by one place from the 98th to the 97th spot. Clothing, Education, Health and Household Supplies & Domestic Help did not change overall during this period.

MUMBAI

India

Ordinary Residents: Wage

Figure 64.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Mumbai, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

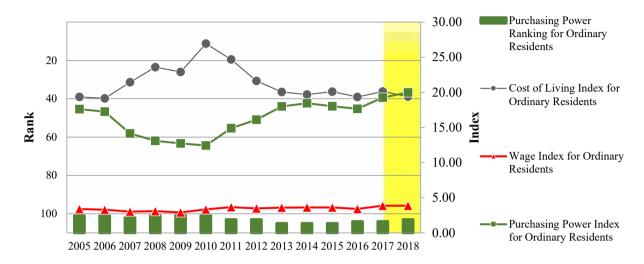
The Gross Hourly Wages in USD for Ordinary Residents in Mumbai, as represented by the red line in Figure 64.c, increased from a low of 0.47 USD in 2005 to a high of 0.97 USD in 2018. The Wage Ranking for Ordinary Residents in Mumbai, as denoted by the red bars, increased from 102nd to 103rd across 2005 and 2018.

MUMBAI

India

Ordinary Residents: Purchasing Power

Figure 64.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Mumbai, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Mumbai. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Mumbai are represented by the grey and red line respectively in Figure 64.d. In the first sub-period, Mumbai's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Mumbai was 19.35 percent that of their counterparts in New York. This rose to 26.93 percent in 2010. However, the Wages Index for Ordinary Residents in Mumbai decreased from 3.39 to 3.35 in the same period.

The cost of living index rose whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Mumbai, as denoted by the green line in Figure 64.d, followed a general declining trend from 17.61 to 12.44 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Mumbai dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Mumbai, as denoted by the green bars in Figure 64.d, remained the same at the 101st position.

In the second sub-period, Mumbai's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Mumbai was 24.68 percent that of their counterparts in New York. This declined to 19.35 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Mumbai dropped from 3.68 to 3.42 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Mumbai followed a general rising trend from 14.91 to 17.67 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Mumbai decreased from the 103rd to the 104th spot.

For the third sub-period, Mumbai's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in Mumbai was 20.13 percent that of their counterparts in New York. This declined to 19.4 percent in 2018. However, the Wages Index for Ordinary Residents in Mumbai remained the same at 3.88 in the same period.

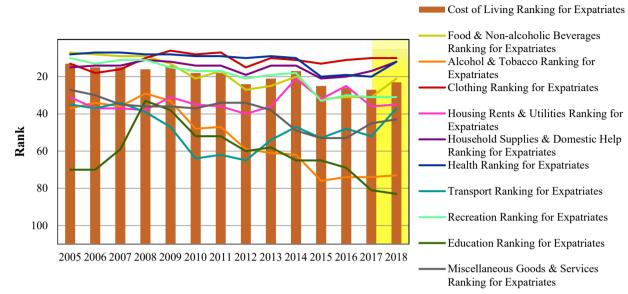
The cost of living index declined whereas the wage index remained the same over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Mumbai followed a general rising trend from 19.26 to 19.99 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Mumbai climbed from the 104th to the 103rd position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Mumbai has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Mumbai, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

MUNICH Germany

Expatriates: Cost of Living

Figure 65.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Munich, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Munich is the capital and is currently the most populous city of Bavaria in Germany. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 13th to the 23rd position between 2005 and 2018 (see Figure 65a).

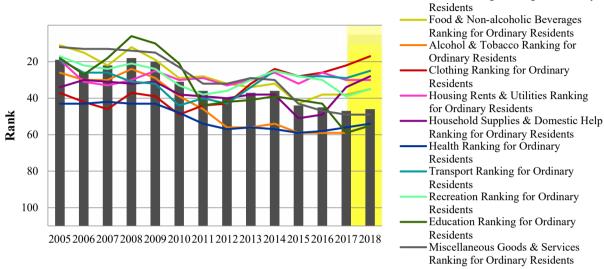
The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco declined the most, falling by 36 places from the 37th to the 73rd spot, while the ranking for Recreation dropped by 21 places from the 10th to the 31st spot. On the other hand, the rankings for Clothing and Household Supplies & Domestic Help rose by three places from the 13th to the 10th spot, and the 15th to the 12th spot respectively.

Cost of Living Ranking for Ordinary

MUNICH Germany

Ordinary Residents: Cost of Living

Figure 65.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Munich, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 19th position to the 31st position between 2005 and 2010. The ranking rose from the 36th position to the 45th between 2011 to 2016 and declined from the 47th position to the 46th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Transport fell the most, falling by 25 places from the 19th to the 44th spot, while the ranking for Food & Non-alcoholic Beverages dropped by 18 places from the 11th to the 29th spot.

Over the second sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services fell the most, falling by 15 places from the 32nd to the 47th position, while the ranking for Alcohol & Tobacco declined by 13 places from the 46th to the 59th position. On the other hand, the ranking for Clothing increased the most, climbing 18 places from the 44th to the 26th position, while the ranking for Transport rose by 12 places from the 40th to the 28th position.

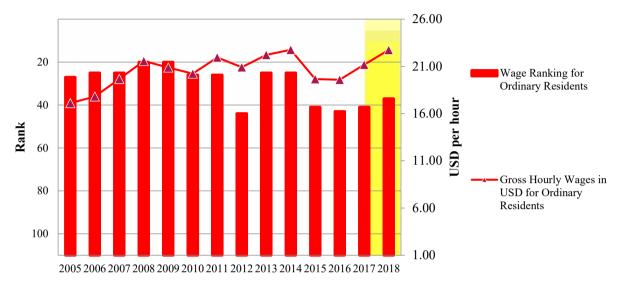
For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies

& Domestic Help rose the most, climbing six places from the 34th to the 28th position, while the ranking for Clothing rose by five places from the 22nd to the 17th position. Housing Rents & Utilities and Miscellaneous Goods & Services did not change overall during this period.

MUNICH Germany

Ordinary Residents: Wage

Figure 65.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Munich, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

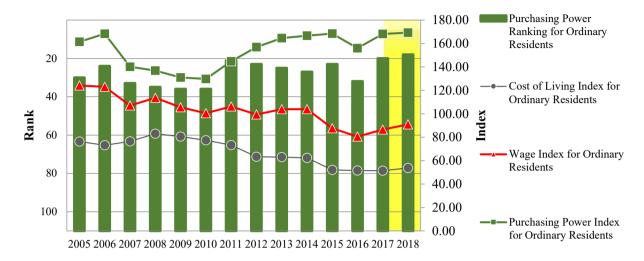
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Munich, as represented by the red line in Figure 65.c, rose from a low of 17.11 USD in 2005 to a high of 22.75 USD in 2014 before decreasing to 22.74 USD in 2018. The Wage Ranking for Ordinary Residents in Munich, as denoted by the red bars, rose from 27th to 37th across 2005 and 2018.

MUNICH Germany

Ordinary Residents: Purchasing Power

Figure 65.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Munich, Germany



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Munich. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Munich are represented by the grey and red line respectively in Figure 65.d. In the first sub-period, Munich's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Munich was 76.35 percent that of their counterparts in New York. This rose to 77.39 percent in 2010. However, the Wages Index for Ordinary Residents in Munich fell from 124.09 to 100.43 in the same period.

The cost of living index rose whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Munich, as denoted by the green line in Figure 65.d, followed a general falling trend from 161.49 to 129.77 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Munich fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Munich, as denoted by the green bars in Figure 65.d, fell from the 30th to the 36th position.

In the second sub-period, Munich's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Munich was 73.35 percent that of their counterparts in New York. This dropped to 51.6 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Munich fell from 106.25 to 80.5 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Munich followed a general rising trend from 144.85 to 156.03 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Munich fell from the 21st to the 32nd position.

For the third sub-period, Munich's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Munich was 51.42 percent that of their counterparts in New York. This climbed to 53.71 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Munich rose from 86.51 to 90.92 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Munich followed a general upward trend from 168.23 to 169.28 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Munich climbed from the 20th to the 18th position.

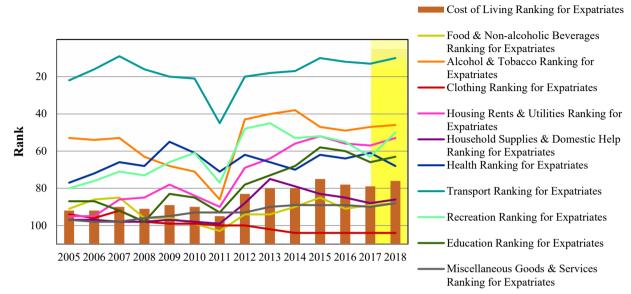
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Munich has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Munich, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

NAIROBI

Kenya

Expatriates: Cost of Living

Figure 66.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Nairobi, Kenya



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Nairobi is the capital of Kenya and the largest city of Kenya currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 92nd to the 76th spot between 2005 and 2018 (see Figure 66a).

The city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing fell the most, falling by 10 places from the 94th to the 104th position. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 42 places from the 95th to the 53rd position, while the ranking for Recreation increased by 30 places from the 80th to the 50th position.

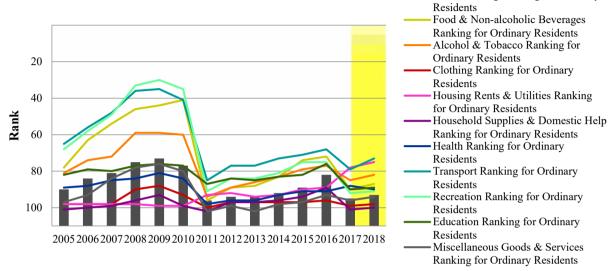
Cost of Living Ranking for Ordinary

NAIROBI

Kenya

Ordinary Residents: Cost of Living

Figure 66.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Nairobi, Kenya



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 90th spot to the 77th spot between 2005 and 2010. The ranking decreased from the 96th spot to the 82nd between 2011 to 2016 and decreased from the 95th spot to the 93rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Housing Rents & Utilities declined the most, falling by one place from the 98th to the 99th position. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 37 places from the 78th to the 41st position, while the ranking for Recreation rose by 33 places from the 68th to the 35th position.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 24 places from the 96th to the 72nd spot, while the rankings for Alcohol & Tobacco and Transport rose by 17 places from the 94th to the 77th spot, and the 85th to the 68th spot respectively.

For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Health fell the most,

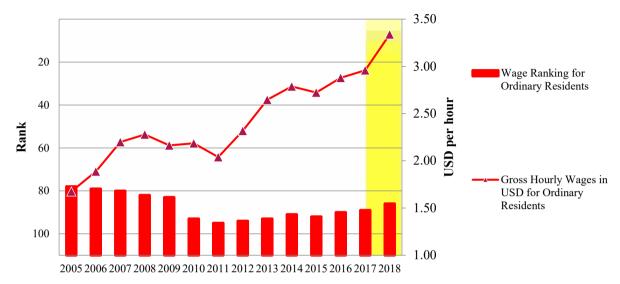
falling by two places from the 88th to the 90th position. On the other hand, the ranking for Transport rose the most, climbing six places from the 79th to the 73rd position, while the rankings for Alcohol & Tobacco, Food & Non-alcoholic Beverages, and Housing Rents & Utilities rose by three places from the 85th to the 82nd position, 90th to the 87th position, and the 78th to the 75th position respectively.

NAIROBI

Kenya

Ordinary Residents: Wage

Figure 66.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Nairobi, Kenya



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

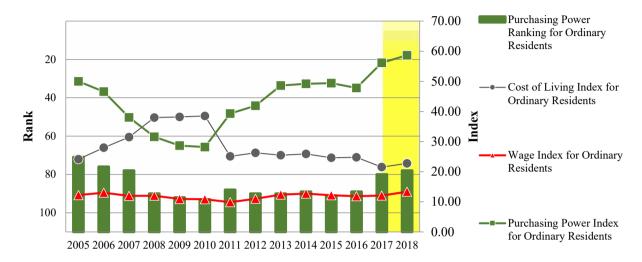
The Gross Hourly Wages in USD for Ordinary Residents in Nairobi, as represented by the red line in Figure 66.c, increased from a low of 1.67 USD in 2005 to a high of 3.34 USD in 2018. The Wage Ranking for Ordinary Residents in Nairobi, as denoted by the red bars, improved from 78th to 86th across 2005 and 2018.

NAIROBI

Kenya

Ordinary Residents: Purchasing Power

Figure 66.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Nairobi, Kenya



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Nairobi. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Nairobi are represented by the grey and red line respectively in Figure 66.d. In the first sub-period, Nairobi's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Nairobi was 24.15 percent that of their counterparts in New York. This climbed to 38.51 percent in 2010. However, the Wages Index for Ordinary Residents in Nairobi declined from 12.25 to 10.85 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Nairobi, as denoted by the green line in Figure 66.d, followed a general declining trend from 49.99 to 28.18 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Nairobi fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Nairobi, as denoted by the green bars in Figure 66.d, decreased from the 71st to the 93rd position.

In the second sub-period, Nairobi's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Nairobi was 25.12 percent that of their counterparts in New York. This declined to 24.76 percent in 2016. However, the Wages Index for Ordinary Residents in Nairobi increased from 9.87 to 11.83 in the same period.

The cost of living index declined whereas the wage index increased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Nairobi followed a general rising trend from 39.31 to 47.78 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Nairobi decreased from the 88th to the 89th spot.

For the third sub-period, Nairobi's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Nairobi was 21.52 percent that of their counterparts in New York. This rose to 22.76 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Nairobi climbed from 12.08 to 13.35 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Nairobi followed a general upward trend from 56.15 to 58.66 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Nairobi increased from the 80th to the 78th position.

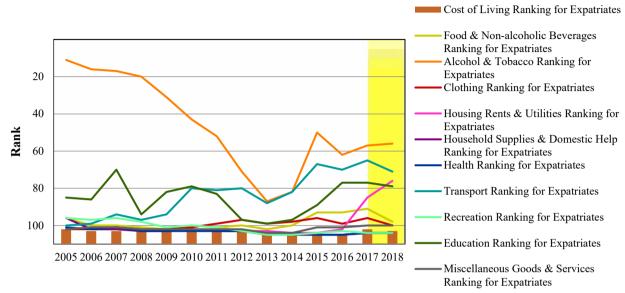
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Nairobi has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Nairobi, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

NEW DELHI

India

Expatriates: Cost of Living

Figure 67.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in New Delhi, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

New Delhi is the capital of India and the seat of all three branches of the Government of India. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 102nd to the 103rd spot between 2005 and 2018 (see Figure 67a).

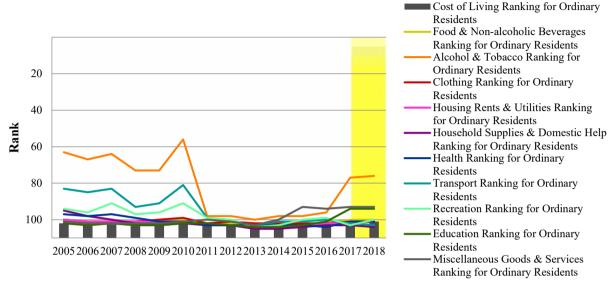
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco fell the most, falling by 45 places from the 11th to the 56th spot, while the rankings for Household Supplies & Domestic Help and Recreation fell by eight places from the 96th to the 104th spot, and 96th to the 104th spot respectively. On the other hand, the ranking for Transport rose the most, climbing 29 places from the 100th to the 71st spot, while the ranking for Housing Rents & Utilities rose by 26 places from the 102nd to the 76th spot.

NEW DELHI

India

Ordinary Residents: Cost of Living

Figure 67.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in New Delhi, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 102nd spot to the 102nd spot between 2005 and 2010. The ranking decreased from the 102nd spot to the 101st between 2011 to 2016 and remained the same from the 101st spot to the 101st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help dropped the most, falling by seven places from the 95th to the 102nd position, while the ranking for Health declined by four places from the 97th to the 101st position. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing seven places from the 63rd to the 56th position, while the ranking for Recreation rose by three places from the 94th to the 91st position. Education and Miscellaneous Goods & Services did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in four consumption categories across the study period. Between 2011 and 2016, the rankings for Health and Transport fell by one place from the 103rd to the 104th position, and 99th to the 100th position respectively. On the other hand, the ranking for Miscellaneous Goods & Services

rose the most, climbing six places from the 100th to the 94th position, while the ranking for Alcohol & Tobacco rose by two places from the 98th to the 96th position. Clothing, Food & Non-alcoholic Beverages, Household Supplies & Domestic Help and Recreation did not change overall during this period.

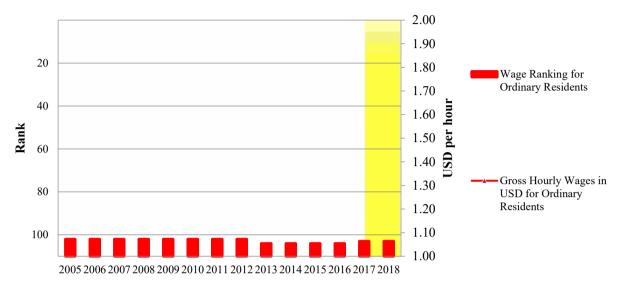
For the third sub-period, the city's cost of living ranking increased in three consumption categories across the study period. Between 2017 and 2018, the rankings for Household Supplies & Domestic Help and Transport dropped by one place from the 103rd to the 104th position, and 102nd to the 103rd position respectively. On the other hand, the ranking for Recreation increased the most, climbing three places from the 103rd to the 100th position, while the rankings for Alcohol & Tobacco and Housing Rents & Utilities increased by one place from the 77th to the 76th position, and the 102nd to the 101st position respectively. Clothing, Education, Food & Non-alcoholic Beverages, Health and Miscellaneous Goods & Services did not change overall during this period.

NEW DELHI

India

Ordinary Residents: Wage

Figure 67.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in New Delhi, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

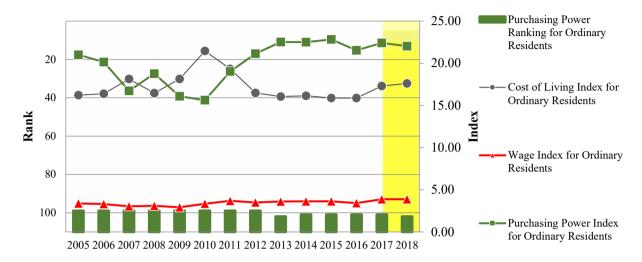
The Gross Hourly Wages in USD for Ordinary Residents in New Delhi, as represented by the red line in Figure 67.c, improved from a low of 0.47 USD in 2005 to a high of 0.97 USD in 2018. The Wage Ranking for Ordinary Residents in New Delhi, as denoted by the red bars, rose from 102nd to 103rd across 2005 and 2018.

NEW DELHI

India

Ordinary Residents: Purchasing Power

Figure 67.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in New Delhi, India



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in New Delhi. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in New Delhi are represented by the grey and red line respectively in Figure 67.d. In the first sub-period, New Delhi's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in New Delhi was 16.22 percent that of their counterparts in New York. This rose to 21.45 percent in 2010. However, the Wages Index for Ordinary Residents in New Delhi dropped from 3.39 to 3.35 in the same period.

The cost of living index rose whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in New Delhi, as denoted by the green line in Figure 67.d, followed a general declining trend from 21.01 to 15.62 between 2005 and 2010. In other words, the purchasing power of ordinary residents in New Delhi dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in New Delhi, as denoted by the green bars in Figure 67.d, remained the same at the 99th spot.

In the second sub-period, New Delhi's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in New Delhi was 19.34 percent that of their counterparts in New York. This fell to 15.88 percent in 2016. Similarly, the Wages Index for Ordinary Residents in New Delhi dropped from 3.68 to 3.42 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in New Delhi followed a general rising trend from 19.03 to 21.54 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in New Delhi decreased from the 99th to the 101st position.

For the third sub-period, New Delhi's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in New Delhi was 17.3 percent that of their counterparts in New York. This rose to 17.6 percent in 2018. However, the Wages Index for Ordinary Residents in New Delhi remained the same at 3.88 in the same period.

The cost of living index rose whereas the wage index remained the same over this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in New Delhi followed a general downward trend from 22.41 to 22.03 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in New Delhi decreased from the 101st to the 102nd spot.

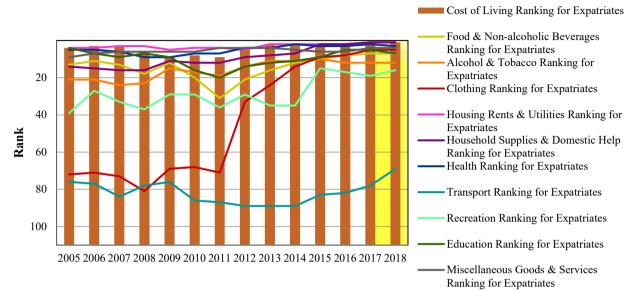
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in New Delhi has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in New Delhi, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

NEW YORK

United States

Expatriates: Cost of Living

Figure 68.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in New York, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

New York is currently the most densely populated city in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 4th to the 1st spot between 2005 and 2018 (see Figure 68a).

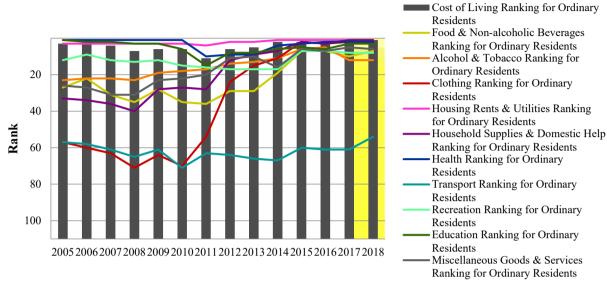
The city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Education decreased the most, falling by three places from the 4th to the 7th spot. On the other hand, the ranking for Clothing rose the most, climbing 67 places from the 72nd to the 5th spot, while the ranking for Recreation rose by 23 places from the 39th to the 16th spot.

NEW YORK

United States

Ordinary Residents: Cost of Living

Figure 68.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in New York, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 3rd spot to the 6th spot between 2005 and 2010. The ranking declined from the 11th spot to the 2nd between 2011 to 2016 and remained the same from the 1st spot to the 1st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Transport declined the most, falling by 14 places from the 57th to the 71st spot, while the ranking for Clothing declined by 13 places from the 57th to the 70th spot. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing six places from the 33rd to the 27th spot, while the ranking for Alcohol & Tobacco rose by five places from the 23rd to the 18th spot. Health and Housing Rents & Utilities did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Clothing rose the most, climbing 51 places from the 54th to the 3rd spot, while the ranking for Food & Non-alcoholic Beverages rose by 29 places from the 36th to the 7th spot.

For the third sub-period, the city's cost of living ranking increased in two consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous

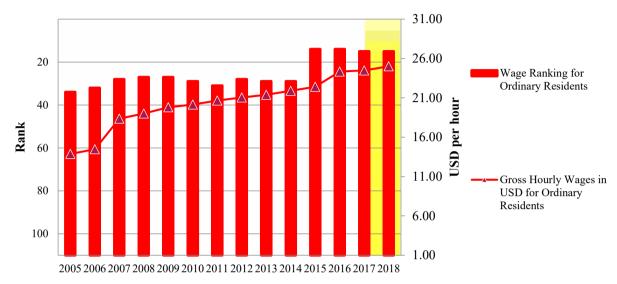
Goods & Services declined the most, falling by one place from the 5th to the 6th spot. On the other hand, the ranking for Transport rose the most, climbing seven places from the 61st to the 54th spot, while the ranking for Food & Non-alcoholic Beverages increased by three places from the 10th to the 7th spot. Alcohol & Tobacco, Clothing, Education, Health, Household Supplies & Domestic Help, Housing Rents & Utilities and Recreation did not change overall during this period.

NEW YORK

United States

Ordinary Residents: Wage

Figure 68.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in New York, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

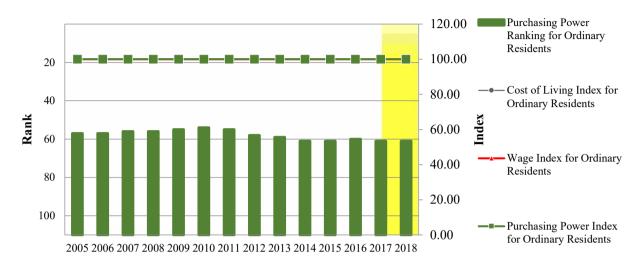
The Gross Hourly Wages in USD for Ordinary Residents in New York, as represented by the red line in Figure 68.c, increased from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in New York, as denoted by the red bars, dropped from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, New York is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

NEW YORK

United States

Ordinary Residents: Purchasing Power

Figure 68.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in New York, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in New York. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

Since New York is the base city of our study, its Purchasing Power Index for Ordinary Residents, Wages Index for Ordinary Residents, and Cost of Living Index for Ordinary Residents will be at the base level of 100.00 for the entire study period. It is represented by the purple line in Figure 68.d.

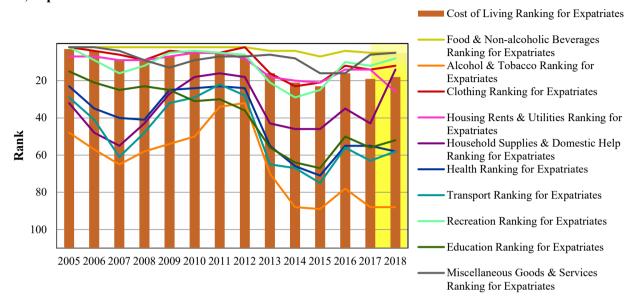
Between 2005 to 2010, the city's Purchasing Power Ranking for Ordinary Residents, as denoted by the green bars in Figure 68.d, increased from the 57th to the 54th position. This suggests that over this period, ordinary residents in three more cities saw their purchasing power fall behind New York's base level. Over the second sub-period, this ranking dropped from the 55th to the 60th position. Lastly, in the third sub-period, the Purchasing Power Ranking for Ordinary Residents remained the same at the 61st position.

OSAKA / KOBE

Japan

Expatriates: Cost of Living

Figure 69.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Osaka / Kobe, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Osaka is the third-largest city in Japan and an important centre for commerce, while Kobe is currently the sixth-largest city in Japan and hosts one of the busiest ports in the countries. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 3rd to the 18th spot between 2005 and 2018 (see Figure 69a).

The city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco declined the most, falling by 40 places from the 48th to the 88th position, while the ranking for Education fell by 37 places from the 15th to the 52nd position. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing 18 places from the 32nd to the 14th position.

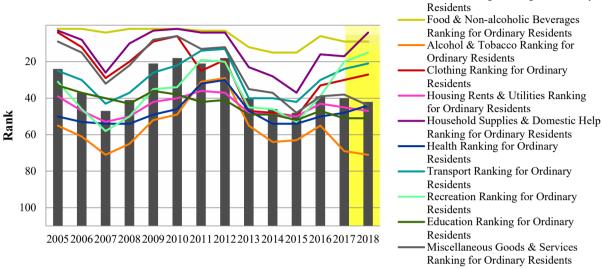
Cost of Living Ranking for Ordinary

OSAKA / KOBE

Japan

Ordinary Residents: Cost of Living

Figure 69.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Osaka / Kobe, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 24th position to the 18th position between 2005 and 2010. The ranking climbed from the 21st position to the 39th between 2011 to 2016 and rose from the 40th position to the 42nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Education declined the most, falling by five places from the 33rd to the 38th position, while the ranking for Recreation declined by three places from the 31st to the 34th position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing six places from the 55th to the 49th position, while the ranking for Health rose by four places from the 50th to the 46th position. Food & Non-alcoholic Beverages did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services fell the most, falling by 26 places from the 13th to the 39th position, while the ranking for Alcohol & Tobacco dropped by 24 places from the 31st to the 55th position.

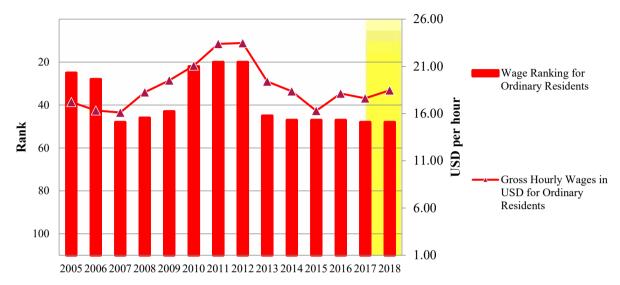
For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous Goods & Services decreased the most, falling by six places from the 38th to the 44th position, while the rankings for Alcohol & Tobacco and Housing Rents & Utilities dropped by two places from the 69th to the 71st position, and 45th to the 47th position respectively. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing 13 places from the 17th to the 4th position, while the ranking for Recreation increased by five places from the 20th to the 15th position. Education and Food & Non-alcoholic Beverages did not change overall during this period.

OSAKA / KOBE

Japan

Ordinary Residents: Wage

Figure 69.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Osaka / Kobe, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Osaka / Kobe, as represented by the red line in Figure 69.c, dropped from 17.24 USD in 2005 to a low of 16.11 USD in 2007. It then rose to a high of 23.47 USD in 2012. Subsequently, it fell again to 16.29 USD in 2015 before, finally increasing to 18.47 USD in 2018. The Wage Ranking for Ordinary Residents in Osaka / Kobe, as denoted by the red bars, improved from 25th to 48th across 2005 and 2018.

OSAKA / KOBE

Japan

Ordinary Residents: Purchasing Power

Figure 69.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Osaka / Kobe, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Osaka / Kobe. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Osaka / Kobe are represented by the grey and red line respectively in Figure 69.d. In the first sub-period, Osaka / Kobe's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Osaka / Kobe was 73.72 percent that of their counterparts in New York. This rose to 84.2 percent in 2010. However, the Wages Index for Ordinary Residents in Osaka / Kobe decreased from 124.1 to 104.65 in the same period.

The cost of living index rose whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Osaka / Kobe, as denoted by the green line in Figure 69.d, followed a general declining trend from 168.49 to 124.28 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Osaka / Kobe decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Osaka / Kobe, as denoted by the green bars in Figure 69.d, decreased from the 23rd to the 38th spot.

In the second sub-period, Osaka / Kobe's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Osaka / Kobe was 88.18 percent that of their counterparts in New York. This declined to 54.12 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Osaka / Kobe dropped from 113.2 to 74.5 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Osaka / Kobe followed a general upward trend from 128.38 to 137.67 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Osaka / Kobe dropped from the 39th to the 44th position.

For the third sub-period, Osaka / Kobe's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Osaka / Kobe was 54.97 percent that of their counterparts in New York. This rose to 55.82 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Osaka / Kobe climbed from 71.92 to 73.84 in the same period.

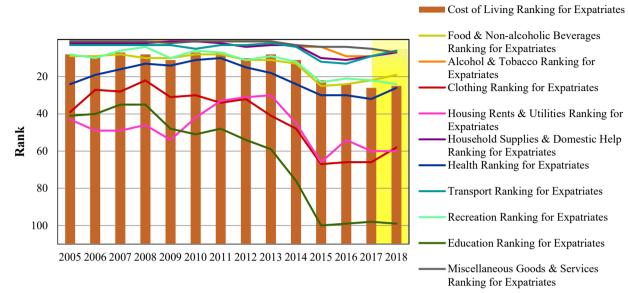
The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Osaka / Kobe followed a general upward trend from 130.84 to 132.3 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Osaka / Kobe rose from the 44th to the 43rd position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Osaka / Kobe has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Osaka / Kobe, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

OSLO Norway

Expatriates: Cost of Living

Figure 70.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Oslo, Norway



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

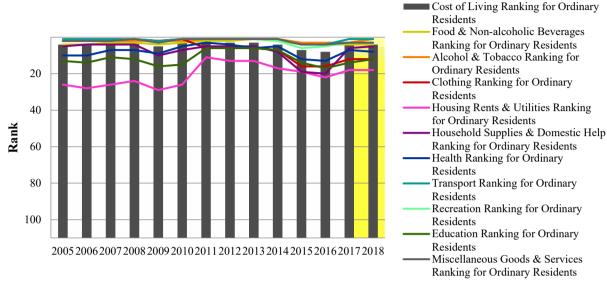
Oslo is the capital of Norway and the most populous city of Norway currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 8th to the 25th position between 2005 and 2018 (see Figure 70a).

All of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2018, the ranking for Education fell the most, falling by 58 places from the 41st to the 99th position, while the ranking for Clothing declined by 19 places from the 39th to the 58th position.

OSLO Norway

Ordinary Residents: Cost of Living

Figure 70.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Oslo, Norway



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 4th spot to the 3rd spot between 2005 and 2010. The ranking climbed from the 2nd spot to the 8th between 2011 to 2016 and remained the same from the 4th spot to the 4th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the rankings for Education and Household Supplies & Domestic Help dropped by two places from the 13th to the 15th position, and 5th to the 7th position respectively. On the other hand, the ranking for Health rose the most, climbing five places from the 10th to the 5th position, while the rankings for Clothing, Food & Non-alcoholic Beverages, Miscellaneous Goods & Services, and Recreation rose by one place from the 2nd to the 1st position, 4th to the 3rd position, 2nd to the 1st position, and the 2nd to the 1st position respectively. Alcohol & Tobacco, Housing Rents & Utilities and Transport did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help declined the most, falling by 15 places from the 5th to the 20th

position, while the rankings for Education and Housing Rents & Utilities decreased by 11 places from the 6th to the 17th position, and 11th to the 22nd position respectively.

For the third sub-period, the city's cost of living ranking increased in three consumption categories across the study period. Between 2017 and 2018, the ranking for Health declined the most, falling by one place from the 7th to the 8th position. On the other hand, the rankings for Alcohol & Tobacco and Education increased by two places from the 3rd to the 1st position, and the 14th to the 12th position respectively. Clothing, Food & Non-alcoholic Beverages, Housing Rents & Utilities, Miscellaneous Goods & Services, Recreation and Transport did not change overall during this period.

OSLO Norway

Ordinary Residents: Wage

Figure 70.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Oslo, Norway



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

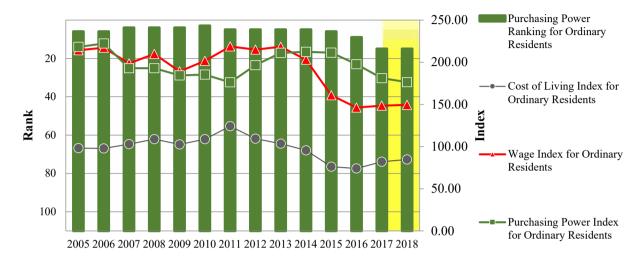
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Oslo, as represented by the red line in Figure 70.c, improved from a low of 29.75 USD in 2005 to a high of 46.69 USD in 2013 before falling to 37.37 USD in 2018. The Wage Ranking for Ordinary Residents in Oslo, as denoted by the red bars, remained unchanged at 4th from 2005 to 2018.

OSLO Norway

Ordinary Residents: Purchasing Power

Figure 70.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Oslo, Norway



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Oslo. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Oslo are represented by the grey and red line respectively in Figure 70.d. In the first sub-period, Oslo's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Oslo was 98.26 percent that of their counterparts in New York. This increased to 108.8 percent in 2010. However, the Wages Index for Ordinary Residents in Oslo fell from 214.17 to 201.64 in the same period.

The cost of living index increased whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Oslo, as denoted by the green line in Figure 70.d, followed a general declining trend from 218.23 to 185.33 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Oslo dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Oslo, as denoted by the green bars in Figure 70.d, increased from the 6th to the 3rd position.

In the second sub-period, Oslo's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Oslo was 124.14 percent that of their counterparts in New York. This fell to 74 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Oslo decreased from 218.69 to 146.29 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Oslo followed a general upward trend from 176.17 to 197.68 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Oslo fell from the 5th to the 9th spot.

For the third sub-period, Oslo's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Oslo was 82.01 percent that of their counterparts in New York. This increased to 84.74 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Oslo rose from 148.53 to 149.44 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Oslo followed a general downward trend from 181.11 to 176.35 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Oslo remained the same at the 15th spot.

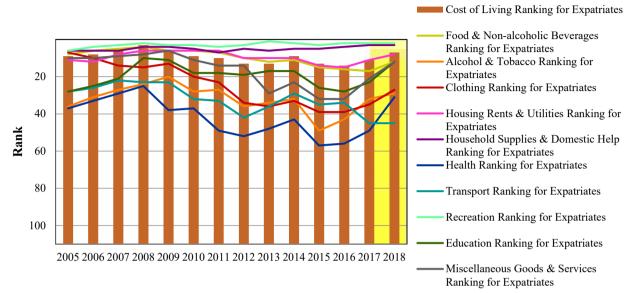
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Oslo has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Oslo, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

PARIS

France

Expatriates: Cost of Living

Figure 71.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Paris, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Paris is the capital of France and the most populous city of France currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 9th to the 7th position between 2005 and 2018 (see Figure 71a).

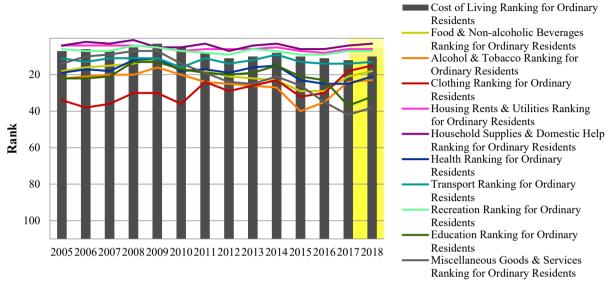
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing fell the most, falling by 20 places from the 7th to the 27th spot, while the ranking for Transport fell by 17 places from the 28th to the 45th spot. On the other hand, the ranking for Education increased the most, climbing 16 places from the 28th to the 12th spot, while the ranking for Alcohol & Tobacco rose by seven places from the 36th to the 29th spot.

PARIS

France

Ordinary Residents: Cost of Living

Figure 71.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Paris, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 7th spot to the 5th spot between 2005 and 2010. The ranking increased from the 8th spot to the 11th between 2011 to 2016 and dropped from the 12th spot to the 10th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Transport decreased the most, falling by five places from the 11th to the 16th position, while the ranking for Housing Rents & Utilities dropped by three places from the 4th to the 7th position. On the other hand, the ranking for Education rose the most, climbing five places from the 22nd to the 17th position, while the ranking for Alcohol & Tobacco rose by two places from the 22nd to the 20th position. Miscellaneous Goods & Services did not change overall during this period.

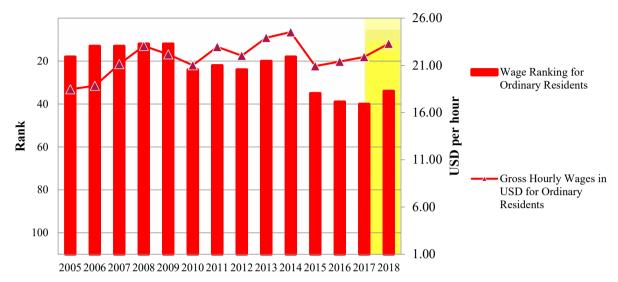
Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services declined the most, falling by 16 places from the 19th to the 35th position, while the rankings for Alcohol & Tobacco and Food & Non-alcoholic Beverages dropped by 11 places from the 24th to the 35th position, and 18th to the 29th position respectively.

For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Education rose the most, climbing five places from the 37th to the 32nd position, while the rankings for Health and Miscellaneous Goods & Services increased by four places from the 25th to the 21st position, and the 42nd to the 38th position respectively. Housing Rents & Utilities and Recreation did not change overall during this period.

PARIS France

Ordinary Residents: Wage

Figure 71.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Paris, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

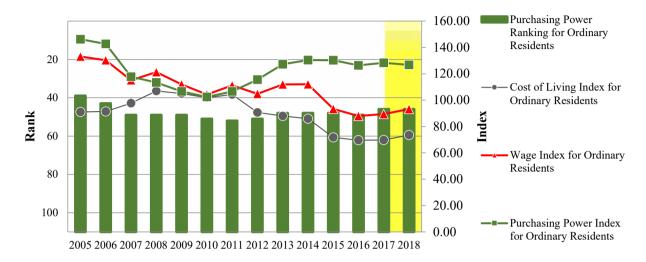
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Paris, as represented by the red line in Figure 71.c, increased from a low of 18.47 USD in 2005 to a high of 24.52 USD in 2014 before falling to 23.3 USD in 2018. The Wage Ranking for Ordinary Residents in Paris, as denoted by the red bars, improved from 18th to 34th across 2005 and 2018.

PARIS France

Ordinary Residents: Purchasing Power

Figure 71.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Paris, France



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Paris. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Paris are represented by the grey and red line respectively in Figure 71.d. In the first sub-period, Paris's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Paris was 91.04 percent that of their counterparts in New York. This increased to 101.83 percent in 2010. However, the Wages Index for Ordinary Residents in Paris declined from 133.07 to 104.27 in the same period.

The cost of living index increased whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Paris, as denoted by the green line in Figure 71.d, followed a general declining trend from 146.21 to 102.4 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Paris decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Paris, as denoted by the green bars in Figure 71.d, dropped from the 39th to the 51st position.

In the second sub-period, Paris's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Paris was 104.27 percent that of their counterparts in New York. This dropped to 69.61 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Paris fell from 111.16 to 87.96 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Paris followed a general rising trend from 106.61 to 126.37 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Paris increased from the 52nd to the 49th spot.

For the third sub-period, Paris's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Paris was 69.71 percent that of their counterparts in New York. This increased to 73.48 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Paris rose from 89.43 to 93.19 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Paris followed a general falling trend from 128.29 to 126.81 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Paris remained the same at the 46th spot.

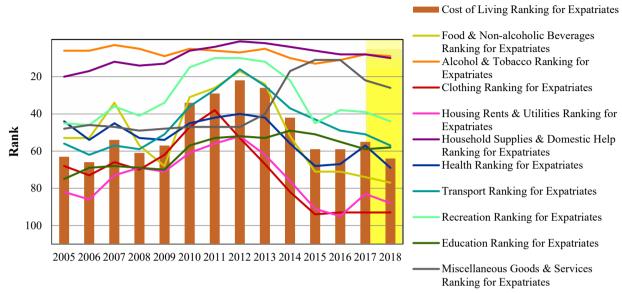
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Paris has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Paris, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

PERTH

Australia

Expatriates: Cost of Living

Figure 72.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Perth, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Perth is the capital and is currently the largest city of Western Australia. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 63rd to the 64th position between 2005 and 2018 (see Figure 72a).

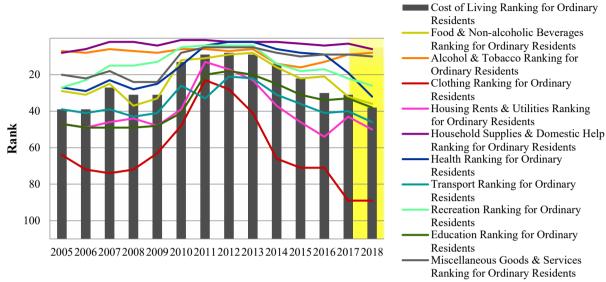
The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the rankings for Clothing and Health decreased by 25 places from the 68th to the 93rd spot, and 44th to the 69th spot respectively. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 22 places from the 48th to the 26th spot, while the ranking for Education increased by 17 places from the 75th to the 58th spot.

PERTH

Australia

Ordinary Residents: Cost of Living

Figure 72.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Perth, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 39th position to the 13th position between 2005 and 2010. The ranking rose from the 9th position to the 30th between 2011 to 2016 and rose from the 31st position to the 38th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Recreation rose the most, climbing 22 places from the 27th to the 5th position, while the ranking for Food & Non-alcoholic Beverages increased by 17 places from the 29th to the 12th position.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Clothing decreased the most, falling by 48 places from the 23rd to the 71st position, while the ranking for Housing Rents & Utilities declined by 41 places from the 13th to the 54th position.

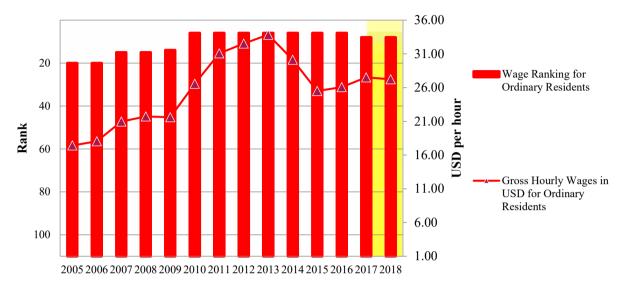
For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Health dropped the most, falling by 13 places from the 19th to the 32nd position, while the ranking for Housing Rents & Utilities dropped by seven places from the 43rd to the 50th position. On the other hand,

the ranking for Alcohol & Tobacco rose the most, climbing one place from the 9th to the 8th position. Clothing did not change overall during this period.

PERTH Australia

Ordinary Residents: Wage

Figure 72.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Perth, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Perth, as represented by the red line in Figure 72.c, improved from a low of 17.42 USD in 2005 to a high of 33.84 USD in 2013 before falling to 27.24 USD in 2018. The Wage Ranking for Ordinary Residents in Perth, as denoted by the red bars, dropped from 20th to 8th across 2005 and 2018.

PERTH Australia

Ordinary Residents: Purchasing Power

Figure 72.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Perth, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Perth. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Perth are represented by the grey and red line respectively in Figure 72.d. In the first sub-period, Perth's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Perth was 67.58 percent that of their counterparts in New York. This climbed to 89.53 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Perth increased from 125.3 to 131.91 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Perth, as denoted by the green line in Figure 72.d, followed a general downward trend from 185.74 to 147.34 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Perth decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Perth, as denoted by the green bars in Figure 72.d, declined from the 16th to the 19th spot.

In the second sub-period, Perth's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Perth was 103.66 percent that of their counterparts in New York. This declined to 58 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Perth dropped from 150.46 to 107.13 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Perth followed a general rising trend from 145.15 to 184.7 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Perth rose from the 19th to the 14th spot.

For the third sub-period, Perth's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in Perth was 59.85 percent that of their counterparts in New York. This declined to 57.04 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Perth fell from 112.42 to 108.94 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Perth followed a general rising trend from 187.82 to 190.98 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Perth remained the same at the 10th spot.

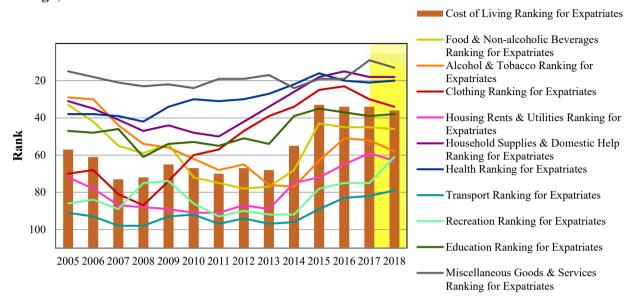
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Perth has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Perth, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

PITTSBURGH

United States

Expatriates: Cost of Living

Figure 73.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Pittsburgh, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Pittsburgh is located in the state of Pennsylvania in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 57th to the 36th spot between 2005 and 2018 (see Figure 73a).

The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco dropped the most, falling by 29 places from the 29th to the 58th position, while the ranking for Food & Non-alcoholic Beverages decreased by 13 places from the 33rd to the 46th position. On the other hand, the ranking for Clothing rose the most, climbing 36 places from the 70th to the 34th position, while the ranking for Recreation increased by 25 places from the 86th to the 61st position.

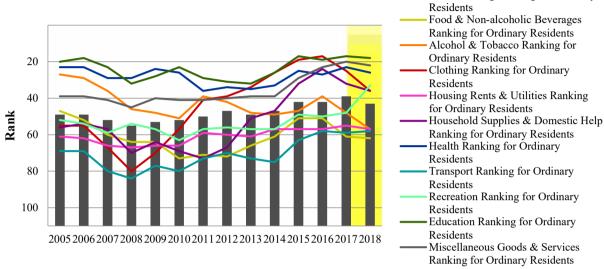
Cost of Living Ranking for Ordinary

PITTSBURGH

United States

Ordinary Residents: Cost of Living

Figure 73.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Pittsburgh, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 49th spot to the 52nd spot between 2005 and 2010. The ranking dropped from the 50th spot to the 42nd between 2011 to 2016 and rose from the 39th spot to the 43rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages declined the most, falling by 26 places from the 47th to the 73rd position, while the ranking for Alcohol & Tobacco dropped by 24 places from the 27th to the 51st position.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help rose the most, climbing 49 places from the 73rd to the 24th position, while the ranking for Clothing rose by 24 places from the 41st to the 17th position. Alcohol & Tobacco did not change overall during this period.

For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing dropped the most, falling by 11 places from the 25th to the 36th position, while the ranking for Alcohol

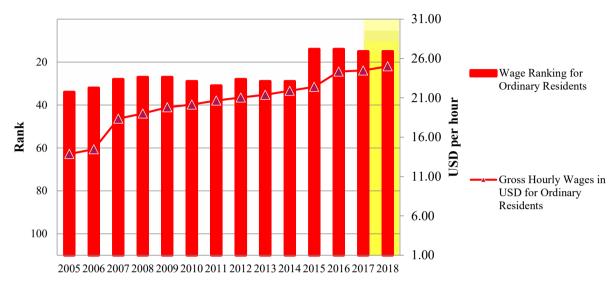
& Tobacco fell by nine places from the 48th to the 57th position. On the other hand, the ranking for Recreation rose the most, climbing 15 places from the 48th to the 33rd position, while the ranking for Transport rose by one place from the 59th to the 58th position.

PITTSBURGH

United States

Ordinary Residents: Wage

Figure 73.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Pittsburgh, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Pittsburgh, as represented by the red line in Figure 73.c, improved from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Pittsburgh, as denoted by the red bars, fell from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Pittsburgh is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

PITTSBURGH

United States

Ordinary Residents: Purchasing Power

Figure 73.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Pittsburgh, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Pittsburgh. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Pittsburgh are represented by the grey and red line respectively in Figure 73.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Pittsburgh belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Pittsburgh will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Pittsburgh's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Pittsburgh was 61.44 percent that of their counterparts in New York. This rose to 63.2 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Pittsburgh, as denoted by the green line in Figure 73.d, followed a general downward trend from 162.76 to 158.24 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Pittsburgh declined relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary

Residents in Pittsburgh, as denoted by the green bars in Figure 73.d, increased from the 28th to the 11th spot.

In the second sub-period, Pittsburgh's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Pittsburgh was 61.59 percent that of their counterparts in New York. This fell to 52.27 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Pittsburgh followed a general rising trend from 162.35 to 191.31 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Pittsburgh remained the same at the 11th position.

For the third sub-period, Pittsburgh's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Pittsburgh was 55.17 percent that of their counterparts in New York. This increased to 55.57 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in Pittsburgh followed a general downward trend from 181.25 to 179.96 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Pittsburgh remained the same at the 14th position.

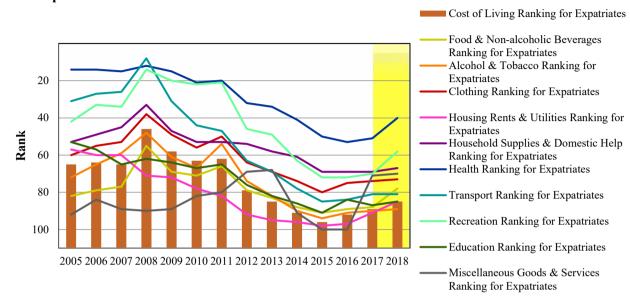
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Pittsburgh has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Pittsburgh, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

PRAGUE

Czech Republic

Expatriates: Cost of Living

Figure 74.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Prague, Czech Republic



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Prague is the capital of Czech Republic and the largest city in the Czech Republic currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 65th to the 85th spot between 2005 and 2018 (see Figure 74a).

The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Transport fell the most, falling by 50 places from the 31st to the 81st position, while the ranking for Education declined by 32 places from the 53rd to the 85th position. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 22 places from the 92nd to the 70th position, while the ranking for Food & Non-alcoholic Beverages increased by four places from the 82nd to the 78th position.

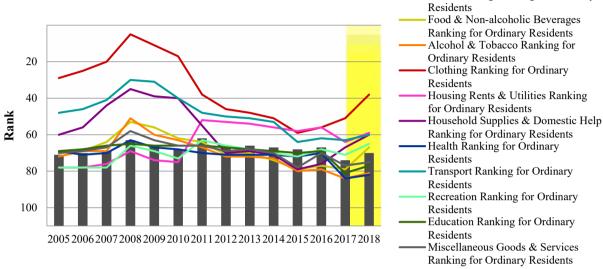
Cost of Living Ranking for Ordinary

PRAGUE

Czech Republic

Ordinary Residents: Cost of Living

Figure 74.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Prague, Czech Republic



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 71st spot to the 68th spot between 2005 and 2010. The ranking climbed from the 62nd spot to the 67th between 2011 to 2016 and declined from the 74th spot to the 70th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help increased the most, climbing 20 places from the 60th to the 40th position, while the ranking for Clothing increased by 12 places from the 29th to the 17th position.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help fell the most, falling by 21 places from the 55th to the 76th position, while the ranking for Clothing declined by 18 places from the 38th to the 56th position. Health did not change overall during this period.

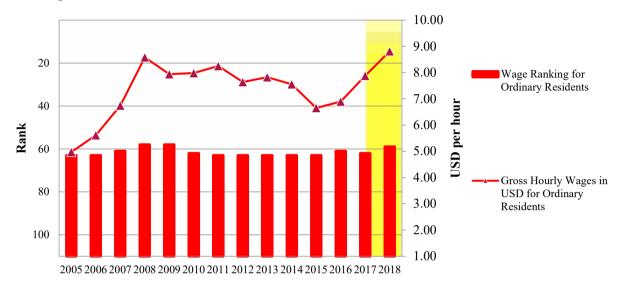
For the third sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2017 and 2018, the ranking for Clothing rose

the most, climbing 13 places from the 51st to the 38th position, while the ranking for Food & Non-alcoholic Beverages increased by 12 places from the 79th to the 67th position.

PRAGUE Czech Republic

Ordinary Residents: Wage

Figure 74.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Prague, Czech Republic



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Prague, as represented by the red line in Figure 74.c, improved from a low of 4.97 USD in 2005 to a high of 8.81 USD in 2018. The Wage Ranking for Ordinary Residents in Prague, as denoted by the red bars, fell from 63rd to 59th across 2005 and 2018.

PRAGUE

Czech Republic

Ordinary Residents: Purchasing Power

Figure 74.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Prague, Czech Republic



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Prague. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Prague are represented by the grey and red line respectively in Figure 74.d. In the first sub-period, Prague's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Prague was 35.67 percent that of their counterparts in New York. This climbed to 47.78 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Prague rose from 35.78 to 39.62 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Prague, as denoted by the green line in Figure 74.d, followed a general declining trend from 100.46 to 82.91 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Prague declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Prague, as denoted by the green bars in Figure 74.d, fell from the 56th to the 59th spot.

In the second sub-period, Prague's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Prague was 50.69 percent that of their counterparts in New York. This decreased to 31.33 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Prague decreased from 39.95 to 28.35 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Prague followed a general upward trend from 78.81 to 90.51 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Prague remained the same at the 63rd spot.

For the third sub-period, Prague's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Prague was 31.29 percent that of their counterparts in New York. This increased to 34.01 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Prague increased from 32.17 to 35.25 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Prague followed a general rising trend from 102.81 to 103.65 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Prague remained the same at the 59th spot.

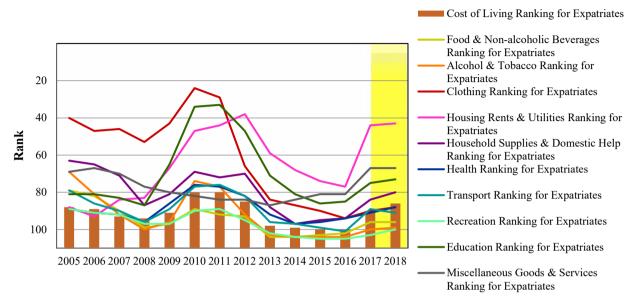
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Prague has been higher than 100 - the base index value some of the time. This suggests that the ordinary residents in Prague, given the same number of working hours, some of the time, have been able to afford more goods and services than their counterparts in New York.

PRETORIA

South Africa

Expatriates: Cost of Living

Figure 75.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Pretoria, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

One of South Africa's three capital cities, Pretoria serves as the administrative capital of the nation and houses most of South Africa's foreign embassies. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 88th to the 86th spot between 2005 and 2018 (see Figure 75a).

The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing decreased the most, falling by 48 places from the 40th to the 88th position, while the ranking for Alcohol & Tobacco declined by 30 places from the 69th to the 99th position. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 45 places from the 88th to the 43rd position, while the ranking for Education rose by eight places from the 81st to the 73rd position.

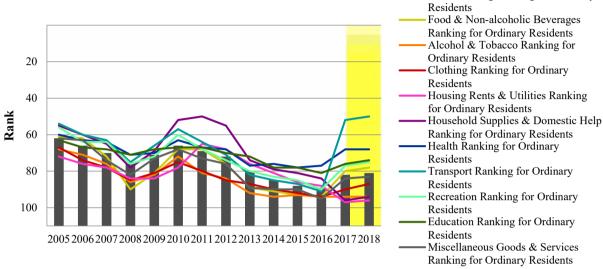
Cost of Living Ranking for Ordinary

PRETORIA

South Africa

Ordinary Residents: Cost of Living

Figure 75.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Pretoria, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 62nd spot to the 66th spot between 2005 and 2010. The ranking climbed from the 69th spot to the 89th between 2011 to 2016 and fell from the 82nd spot to the 81st between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing decreased the most, falling by eight places from the 67th to the 75th spot, while the ranking for Food & Non-alcoholic Beverages declined by seven places from the 61st to the 68th spot. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing three places from the 55th to the 52nd spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help decreased the most, falling by 34 places from the 50th to the 84th position, while the ranking for Transport dropped by 27 places from the 64th to the 91st position.

For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing increased

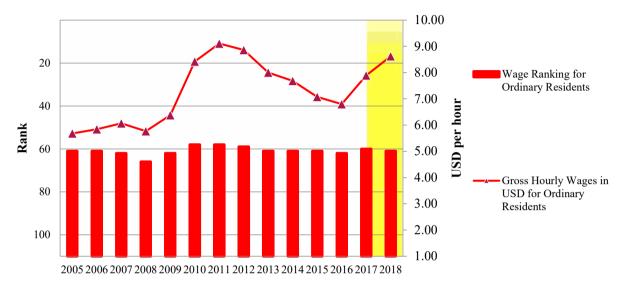
the most, climbing three places from the 90th to the 87th spot, while the rankings for Education, Food & Non-alcoholic Beverages, Household Supplies & Domestic Help, Recreation, and Transport increased by two places from the 76th to the 74th spot, 80th to the 78th spot, 96th to the 94th spot, 77th to the 75th spot, and the 52nd to the 50th spot respectively. Alcohol & Tobacco and Health did not change overall during this period.

PRETORIA

South Africa

Ordinary Residents: Wage

Figure 75.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Pretoria, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Pretoria, as represented by the red line in Figure 75.c, increased from a low of 5.68 USD in 2005 to a high of 9.11 USD in 2011 before dropping to 8.63 USD in 2018. The Wage Ranking for Ordinary Residents in Pretoria, as denoted by the red bars, remained unchanged at 61st from 2005 to 2018.

PRETORIA

South Africa

Ordinary Residents: Purchasing Power

Figure 75.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Pretoria, South Africa



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Pretoria. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Pretoria are represented by the grey and red line respectively in Figure 75.d. In the first sub-period, Pretoria's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Pretoria was 42.55 percent that of their counterparts in New York. This rose to 48.15 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Pretoria rose from 41.42 to 41.8 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Pretoria, as denoted by the green line in Figure 75.d, followed a general downward trend from 96.23 to 86.81 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Pretoria decreased relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Pretoria, as denoted by the green bars in Figure 75.d, climbed from the 59th to the 57th position.

In the second sub-period, Pretoria's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Pretoria was 44.4 percent that of their counterparts in New York. This fell to 22.43 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Pretoria declined from 44.1 to 27.94 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Pretoria followed a general rising trend from 99.34 to 124.55 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Pretoria increased from the 56th to the 50th position.

For the third sub-period, Pretoria's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Pretoria was 26.73 percent that of their counterparts in New York. This increased to 27.79 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Pretoria rose from 32.23 to 34.49 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Pretoria followed a general upward trend from 120.59 to 124.11 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Pretoria climbed from the 50th to the 49th position.

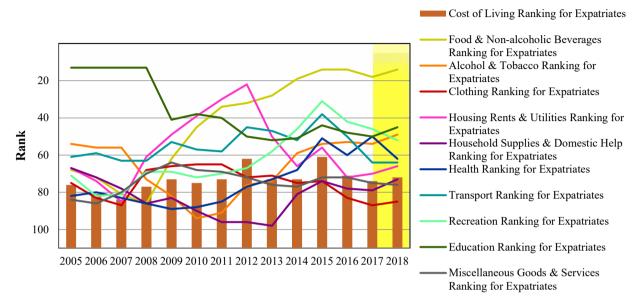
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Pretoria has been higher than 100 - the base index value some of the time. This suggests that the ordinary residents in Pretoria, given the same number of working hours, some of the time, have been able to afford more goods and services than their counterparts in New York.

OINGDAO

China

Expatriates: Cost of Living

Figure 76.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Qingdao, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

A major city on China's east coast, Qingdao is also a major nodal city of the One Belt, One Road Initiative. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 76th to the 72nd position between 2005 and 2018 (see Figure 76a).

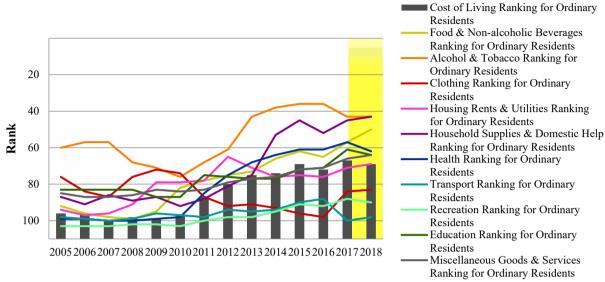
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Education decreased the most, falling by 32 places from the 13th to the 45th spot, while the ranking for Clothing declined by 10 places from the 75th to the 85th spot. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing 54 places from the 68th to the 14th spot, while the ranking for Health rose by 20 places from the 82nd to the 62nd spot.

QINGDAO

China

Ordinary Residents: Cost of Living

Figure 76.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Qingdao, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 96th spot to the 97th spot between 2005 and 2010. The ranking dropped from the 87th spot to the 72nd between 2011 to 2016 and climbed from the 67th spot to the 69th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Alcohol & Tobacco declined the most, falling by 16 places from the 60th to the 76th spot, while the ranking for Household Supplies & Domestic Help declined by five places from the 87th to the 92nd spot. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 15 places from the 94th to the 79th spot, while the ranking for Food & Non-alcoholic Beverages rose by 10 places from the 92nd to the 82nd spot. Recreation did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Clothing decreased the most, falling by 11 places from the 87th to the 98th position. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing 36 places from the 88th to the 52nd position, while the ranking for Alcohol & Tobacco increased by 32 places from the 68th to the 36th position.

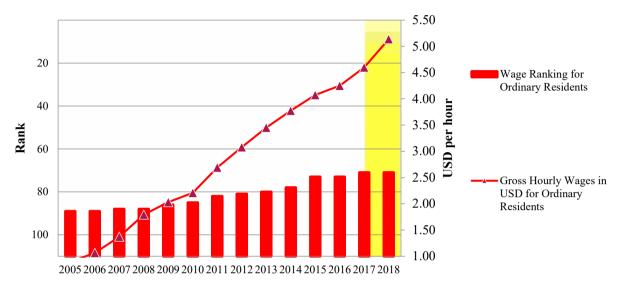
For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Health fell the most, falling by five places from the 57th to the 62nd spot, while the ranking for Education fell by three places from the 61st to the 64th spot. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing seven places from the 57th to the 50th spot, while the rankings for Household Supplies & Domestic Help, Housing Rents & Utilities, Miscellaneous Goods & Services, and Transport increased by two places from the 45th to the 43rd spot, 71st to the 69th spot, 66th to the 64th spot, and the 100th to the 98th spot respectively. Alcohol & Tobacco did not change overall during this period.

QINGDAO

China

Ordinary Residents: Wage

Figure 76.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Qingdao, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Qingdao, as represented by the red line in Figure 76.c, increased from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Qingdao, as denoted by the red bars, fell from 89th to 71st across 2005 and 2018.

QINGDAO

China

Ordinary Residents: Purchasing Power

Figure 76.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Qingdao, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Qingdao. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Qingdao are represented by the grey and red line respectively in Figure 76.d. In the first sub-period, Qingdao's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Qingdao was 19.87 percent that of their counterparts in New York. This climbed to 28.26 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Qingdao rose from 6.44 to 10.96 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Qingdao, as denoted by the green line in Figure 76.d, followed a general upward trend from 32.42 to 38.8 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Qingdao increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Qingdao, as denoted by the green bars in Figure 76.d, climbed from the 87th to the 82nd position.

In the second sub-period, Qingdao's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Qingdao was 31.9 percent that of their counterparts in New York. This decreased to 29.57 percent in 2016. However, the Wages Index for Ordinary Residents in Qingdao climbed from 13.03 to 17.46 in the same period.

The cost of living index decreased whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Qingdao followed a general upward trend from 40.86 to 59.05 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Qingdao climbed from the 85th to the 79th spot.

For the third sub-period, Qingdao's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Qingdao was 36.41 percent that of their counterparts in New York. This decreased to 35.5 percent in 2018. However, the Wages Index for Ordinary Residents in Qingdao climbed from 18.78 to 20.55 in the same period.

The cost of living index decreased whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Qingdao followed a general upward trend from 51.59 to 57.87 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Qingdao climbed from the 85th to the 79th position.

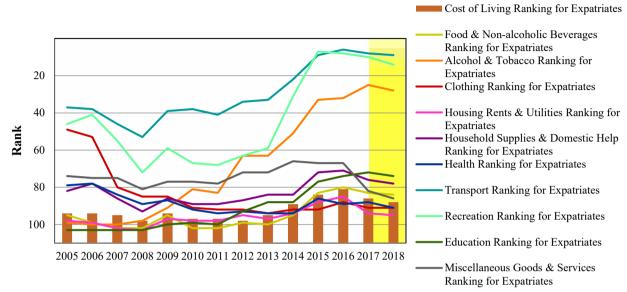
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Qingdao has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Qingdao, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

QUITO

Ecuador

Expatriates: Cost of Living

Figure 77.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Quito, Ecuador



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The second-highest official capital city in the world, Quito is the capital of Ecuador and the largest city of Ecuador currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 94th to the 88th position between 2005 and 2018 (see Figure 77a).

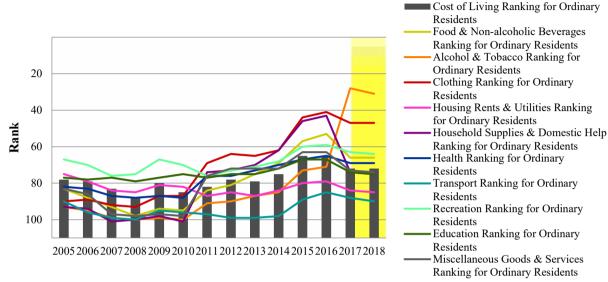
The city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing dropped the most, falling by 42 places from the 49th to the 91st position, while the rankings for Health and Miscellaneous Goods & Services fell by 12 places from the 79th to the 91st position, and 74th to the 86th position respectively. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing 71 places from the 99th to the 28th position, while the ranking for Recreation increased by 32 places from the 46th to the 14th position.

QUITO

Ecuador

Ordinary Residents: Cost of Living

Figure 77.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Quito, Ecuador



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 78th position to the 85th position between 2005 and 2010. The ranking declined from the 82nd position to the 65th between 2011 to 2016 and remained the same from the 72nd position to the 72nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Miscellaneous Goods & Services fell the most, falling by 15 places from the 83rd to the 98th position, while the ranking for Food & Non-alcoholic Beverages declined by 12 places from the 83rd to the 95th position. On the other hand, the ranking for Clothing increased the most, climbing three places from the 90th to the 87th position, while the ranking for Education rose by two places from the 77th to the 75th position.

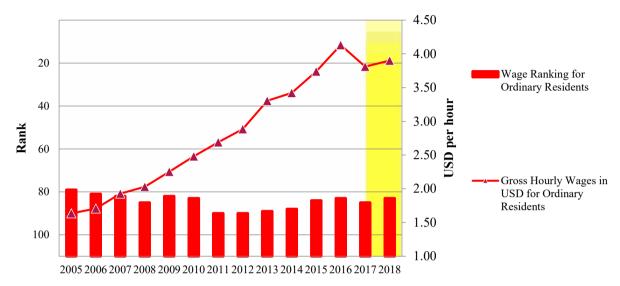
Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help increased by 31 places from the 84th to the 53rd position, and the 74th to the 43rd position respectively.

For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco decreased the most, falling by three places from the 28th to the 31st position, while the ranking for Transport decreased by two places from the 88th to the 90th position. Clothing, Food & Non-alcoholic Beverages and Health did not change overall during this period.

QUITO Ecuador

Ordinary Residents: Wage

Figure 77.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Quito, Ecuador



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

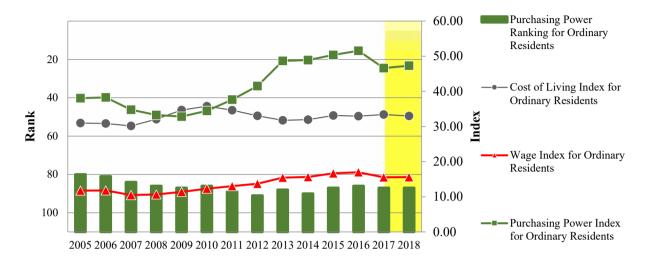
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Quito, as represented by the red line in Figure 77.c, improved from a low of 1.64 USD in 2005 to a high of 4.13 USD in 2016 before falling to 3.9 USD in 2018. The Wage Ranking for Ordinary Residents in Quito, as denoted by the red bars, improved from 79th to 83rd across 2005 and 2018.

QUITO Ecuador

Ordinary Residents: Purchasing Power

Figure 77.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Quito, Ecuador



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Quito. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Quito are represented by the grey and red line respectively in Figure 77.d. In the first sub-period, Quito's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Quito was 30.98 percent that of their counterparts in New York. This climbed to 35.77 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Quito rose from 11.77 to 12.32 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Quito, as denoted by the green line in Figure 77.d, followed a general declining trend from 38.06 to 34.44 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Quito dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Quito, as denoted by the green bars in Figure 77.d, declined from the 80th to the 86th spot.

In the second sub-period, Quito's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Quito was 34.62 percent that of their counterparts in New York. This fell to 32.94 percent in 2016. However, the Wages Index for Ordinary Residents in Quito rose from 13.03 to 16.98 in the same period.

The cost of living index fell whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Quito followed a general rising trend from 37.63 to 51.55 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Quito rose from the 89th to the 86th position.

For the third sub-period, Quito's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in Quito was 33.39 percent that of their counterparts in New York. This declined to 32.99 percent in 2018. However, the Wages Index for Ordinary Residents in Quito rose from 15.56 to 15.6 in the same period.

The cost of living index declined whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Quito followed a general upward trend from 46.61 to 47.3 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Quito remained the same at the 87th position.

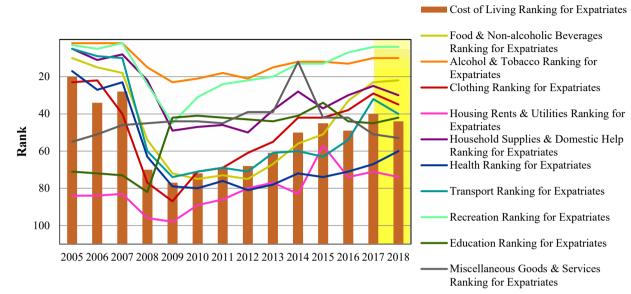
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Quito has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Quito, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

REYKJAVIK

Iceland

Expatriates: Cost of Living

Figure 78.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Reykjavik, Iceland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Reykjavik is the capital of Iceland and the centre of Iceland's cultural, economic and governmental activity. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 20th to the 44th position between 2005 and 2018 (see Figure 78a).

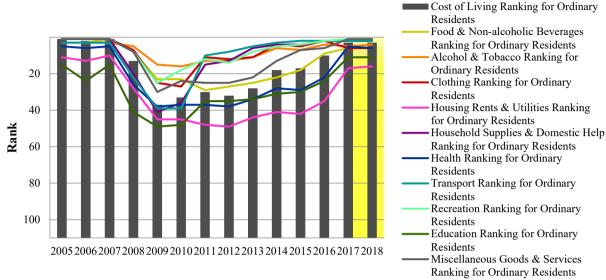
The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Health dropped the most, falling by 43 places from the 17th to the 60th position, while the ranking for Transport decreased by 35 places from the 5th to the 40th position. On the other hand, the ranking for Education increased the most, climbing 29 places from the 71st to the 42nd position, while the ranking for Housing Rents & Utilities increased by 10 places from the 84th to the 74th position.

REYKJAVIK

Iceland

Ordinary Residents: Cost of Living

Figure 78.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Reykjavik, Iceland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 1st spot to the 33rd spot between 2005 and 2010. The ranking declined from the 30th spot to the 10th between 2011 to 2016 and remained the same from the 3rd spot to the 3rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Transport fell the most, falling by 36 places from the 3rd to the 39th spot, while the ranking for Household Supplies & Domestic Help declined by 35 places from the 1st to the 36th spot.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 20 places from the 29th to the 9th position, while the ranking for Miscellaneous Goods & Services rose by 19 places from the 25th to the 6th position.

For the third sub-period, the city's cost of living ranking increased in two consumption categories across the study period. Between 2017 and 2018, the ranking for Health decreased the most, falling by one place from the 5th to the 6th position. On the other hand, the rankings for Alcohol & Tobacco and Housing Rents & Utilities rose by one place from the 5th to the 4th

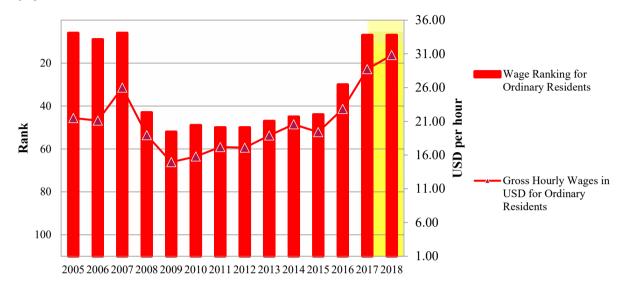
position, and the 17th to the 16th position respectively. Clothing, Education, Food & Non-alcoholic Beverages, Household Supplies & Domestic Help, Miscellaneous Goods & Services, Recreation and Transport did not change overall during this period.

REYKJAVIK

Iceland

Ordinary Residents: Wage

Figure 78.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Reykjavik, Iceland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

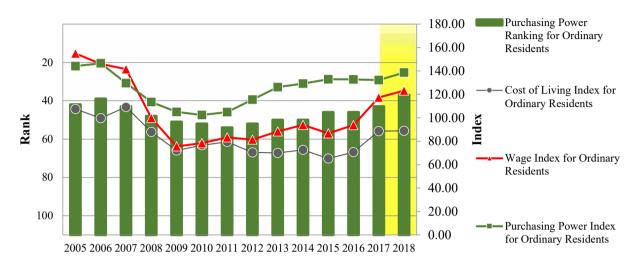
The Gross Hourly Wages in USD for Ordinary Residents in Reykjavik, as represented by the red line in Figure 78.c, decreased from 21.49 USD USD in 2005 to a low of 14.95 USD in 2009 before improving to a high of 30.81 USD in 2018. The Wage Ranking for Ordinary Residents in Reykjavik, as denoted by the red bars, increased from 6th to 7th across 2005 and 2018.

REYKJAVIK

Iceland

Ordinary Residents: Purchasing Power

Figure 78.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Reykjavik, Iceland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Reykjavik. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Reykjavik are represented by the grey and red line respectively in Figure 78.d. In the first sub-period, Reykjavik's Cost of Living Index fell overall. In 2005, the cost of living for ordinary residents in Reykjavik was 107.44 percent that of their counterparts in New York. This fell to 76.55 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Reykjavik declined from 154.92 to 78.37 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Reykjavik, as denoted by the green line in Figure 78.d, followed a general downward trend from 144.18 to 102.38 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Reykjavik dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Reykjavik, as denoted by the green bars in Figure 78.d, declined from the 42nd to the 52nd spot.

In the second sub-period, Reykjavik's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Reykjavik was 79.4 percent that of their counterparts in New York. This fell to 70.69 percent in 2016. However, the Wages Index for Ordinary Residents in Reykjavik increased from 83.23 to 93.81 in the same period.

The cost of living index fell whereas the wage index increased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Reykjavik followed a general upward trend from 104.82 to 132.7 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Reykjavik increased from the 54th to the 46th spot.

For the third sub-period, Reykjavik's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Reykjavik was 88.66 percent that of their counterparts in New York. This rose to 88.85 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Reykjavik increased from 117.28 to 123.2 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Reykjavik followed a general rising trend from 132.27 to 138.67 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Reykjavik increased from the 43rd to the 37th position.

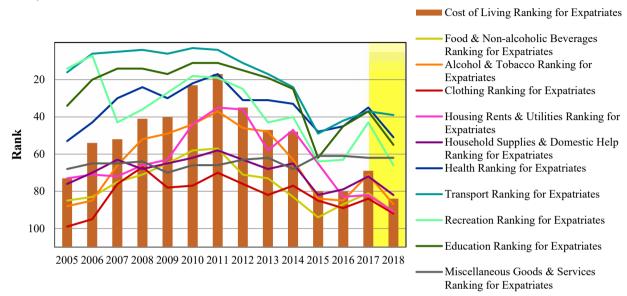
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Reykjavik has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Reykjavik, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

RIO DE JANEIRO

Brazil

Expatriates: Cost of Living

Figure 79.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Rio De Janeiro, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Rio De Janeiro is currently the second-most populous municipality in Brazil, with parts of the city designated by UNESCO as a World Heritage Site. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 73rd to the 84th spot between 2005 and 2018 (see Figure 79a).

The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation declined the most, falling by 52 places from the 14th to the 66th position, while the ranking for Transport declined by 23 places from the 16th to the 39th position. On the other hand, the ranking for Clothing rose the most, climbing seven places from the 99th to the 92nd position, while the ranking for Miscellaneous Goods & Services rose by six places from the 68th to the 62nd position.

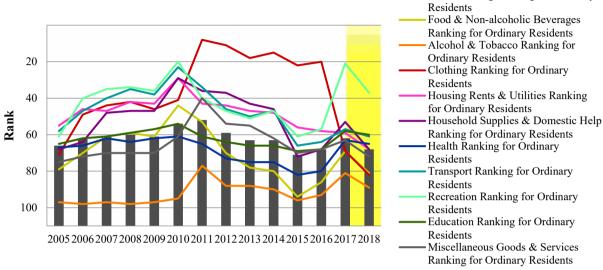
Cost of Living Ranking for Ordinary

RIO DE JANEIRO

Brazil

Ordinary Residents: Cost of Living

Figure 79.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Rio De Janeiro, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 66th spot to the 54th spot between 2005 and 2010. The ranking climbed from the 52nd spot to the 68th between 2011 to 2016 and rose from the 62nd spot to the 68th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Recreation rose the most, climbing 41 places from the 61st to the 20th position, while the ranking for Household Supplies & Domestic Help rose by 39 places from the 68th to the 29th position.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages fell the most, falling by 33 places from the 53rd to the 86th spot, while the ranking for Household Supplies & Domestic Help dropped by 32 places from the 36th to the 68th spot.

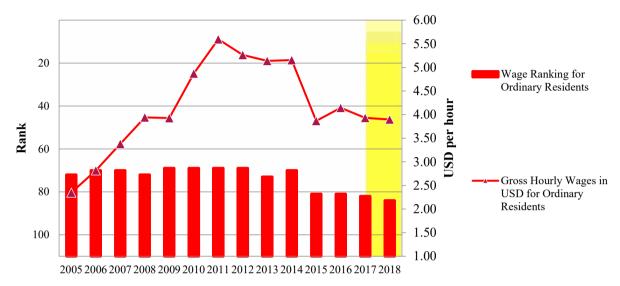
For the third sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2017 and 2018, the ranking for Recreation decreased the most, falling by 16 places from the 21st to the 37th spot, while the ranking for Household Supplies & Domestic Help declined by 15 places from the 53rd to the 68th spot.

RIO DE JANEIRO

Brazil

Ordinary Residents: Wage

Figure 79.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Rio De Janeiro, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

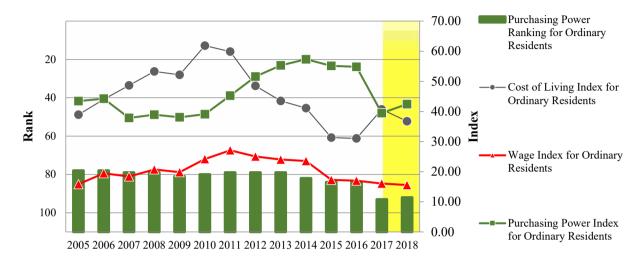
The Gross Hourly Wages in USD for Ordinary Residents in Rio De Janeiro, as represented by the red line in Figure 79.c, improved from a low of 2.35 USD in 2005 to a high of 5.6 USD in 2011 before decreasing to 3.9 USD in 2018. The Wage Ranking for Ordinary Residents in Rio De Janeiro, as denoted by the red bars, improved from 72nd to 84th across 2005 and 2018.

RIO DE JANEIRO

Brazil

Ordinary Residents: Purchasing Power

Figure 79.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Rio De Janeiro, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Rio De Janeiro. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Rio De Janeiro are represented by the grey and red line respectively in Figure 79.d. In the first sub-period, Rio De Janeiro's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Rio De Janeiro was 38.94 percent that of their counterparts in New York. This rose to 61.85 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Rio De Janeiro climbed from 15.86 to 24.17 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Rio De Janeiro, as denoted by the green line in Figure 79.d, followed a general declining trend from 43.45 to 39.08 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Rio De Janeiro decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Rio De Janeiro, as denoted by the green bars in Figure 79.d, declined from the 78th to the 80th spot.

In the second sub-period, Rio De Janeiro's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Rio De Janeiro was 59.85 percent that of their counterparts in New York. This dropped to 31.05 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Rio De Janeiro dropped from 27.1 to 17.02 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Rio De Janeiro followed a general upward trend from 45.28 to 54.84 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Rio De Janeiro fell from the 79th to the 84th spot.

For the third sub-period, Rio De Janeiro's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Rio De Janeiro was 40.67 percent that of their counterparts in New York. This decreased to 36.74 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Rio De Janeiro fell from 16.05 to 15.58 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Rio De Janeiro followed a general rising trend from 39.47 to 42.41 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Rio De Janeiro climbed from the 93rd to the 92nd position.

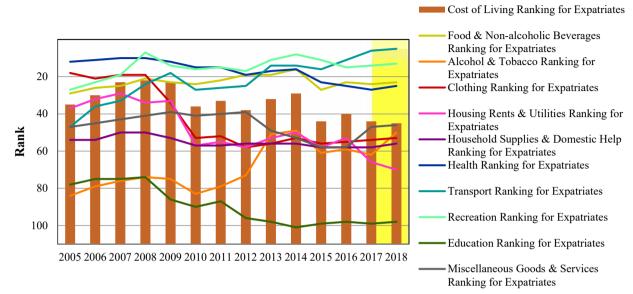
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Rio De Janeiro has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Rio De Janeiro, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

ROME

Italy

Expatriates: Cost of Living

Figure 80.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Rome, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Rome is the capital of Italy and the country's most populous metropolitan city currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 35th to the 45th spot between 2005 and 2018 (see Figure 80a).

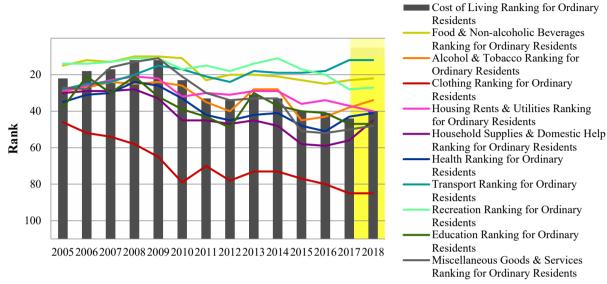
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing fell the most, falling by 35 places from the 18th to the 53rd position, while the ranking for Housing Rents & Utilities decreased by 33 places from the 37th to the 70th position. On the other hand, the ranking for Transport rose the most, climbing 42 places from the 47th to the 5th position, while the ranking for Alcohol & Tobacco rose by 34 places from the 84th to the 50th position.

ROME

Italy

Ordinary Residents: Cost of Living

Figure 80.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Rome, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 22nd position to the 23rd position between 2005 and 2010. The ranking climbed from the 33rd position to the 41st between 2011 to 2016 and fell from the 44th position to the 40th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing fell the most, falling by 33 places from the 46th to the 79th position, while the ranking for Household Supplies & Domestic Help fell by 15 places from the 30th to the 45th position. On the other hand, the ranking for Transport rose the most, climbing 11 places from the 28th to the 17th position, while the ranking for Miscellaneous Goods & Services increased by six places from the 27th to the 21st position.

Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services fell the most, falling by 22 places from the 30th to the 52nd spot, while the ranking for Household Supplies & Domestic Help fell by 14 places from the 45th to the 59th spot. On the other hand, the ranking for Transport rose the most, climbing three

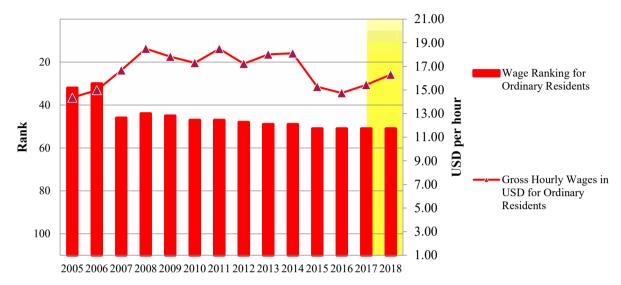
places from the 21st to the 18th spot, while the ranking for Education increased by two places from the 43rd to the 41st spot.

For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Housing Rents & Utilities fell the most, falling by three places from the 37th to the 40th spot. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing 11 places from the 56th to the 45th spot, while the ranking for Alcohol & Tobacco rose by four places from the 38th to the 34th spot. Clothing, Education and Transport did not change overall during this period.

ROME Italy

Ordinary Residents: Wage

Figure 80.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Rome, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Rome, as represented by the red line in Figure 80.c, rose from a low of 14.35 USD in 2005 to a high of 18.5 USD in 2008. It then dropped to 14.75 USD in 2016 before, finally, increasing to 16.3 USD in 2018. The Wage Ranking for Ordinary Residents in Rome, as denoted by the red bars, rose from 32nd to 51st across 2005 and 2018.

ROME Italy

Ordinary Residents: Purchasing Power

Figure 80.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Rome, Italy



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Rome. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Rome are represented by the grey and red line respectively in Figure 80.d. In the first sub-period, Rome's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Rome was 74.01 percent that of their counterparts in New York. This climbed to 82.34 percent in 2010. However, the Wages Index for Ordinary Residents in Rome fell from 104.2 to 85.82 in the same period.

The cost of living index climbed whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Rome, as denoted by the green line in Figure 80.d, followed a general declining trend from 139.77 to 104.22 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Rome declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Rome, as denoted by the green bars in Figure 80.d, dropped from the 44th to the 48th position.

In the second sub-period, Rome's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Rome was 77.91 percent that of their counterparts in New York. This fell to 52.94 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Rome declined from 89.49 to 60.6 in the same period.

The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Rome followed a general downward trend from 114.86 to 114.45 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Rome fell from the 47th to the 57th position.

For the third sub-period, Rome's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Rome was 53.46 percent that of their counterparts in New York. This climbed to 55.89 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Rome climbed from 63.02 to 65.2 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Rome followed a general downward trend from 117.87 to 116.65 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Rome remained the same at the 53rd spot.

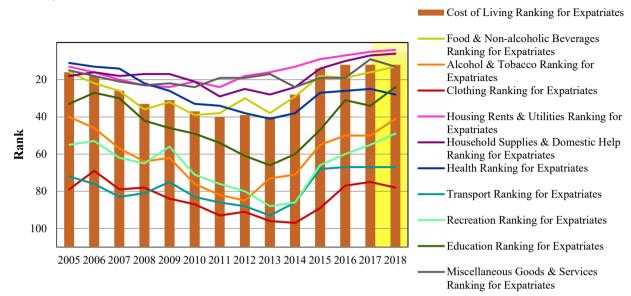
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Rome has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Rome, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

SAN FRANCISCO

United States

Expatriates: Cost of Living

Figure 81.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in San Francisco, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

As a bustling financial centre in Northern California, San Francisco is currently the 13th most populous city in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 16th to the 12th position between 2005 and 2018 (see Figure 81a).

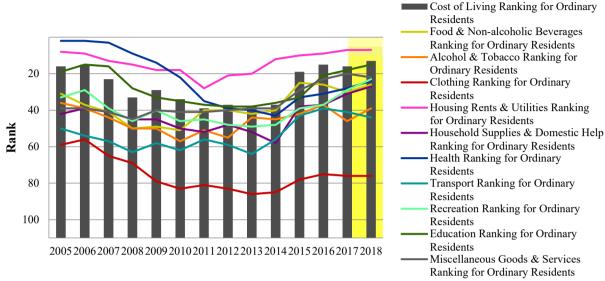
The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Health dropped the most, falling by 17 places from the 11th to the 28th position, while the ranking for Alcohol & Tobacco fell by one place from the 40th to the 41st position. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing 12 places from the 18th to the 6th position, while the rankings for Education and Housing Rents & Utilities rose by nine places from the 33rd to the 24th position, and the 13th to the 4th position respectively.

SAN FRANCISCO

United States

Ordinary Residents: Cost of Living

Figure 81.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in San Francisco, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 16th spot to the 34th spot between 2005 and 2010. The ranking fell from the 39th spot to the 15th between 2011 to 2016 and decreased from the 16th spot to the 13th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Clothing fell the most, falling by 24 places from the 59th to the 83rd position, while the ranking for Alcohol & Tobacco dropped by 21 places from the 36th to the 57th position.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Housing Rents & Utilities increased the most, climbing 19 places from the 28th to the 9th position, while the ranking for Miscellaneous Goods & Services increased by 18 places from the 41st to the 23rd position.

For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Transport declined the most, falling by three places from the 41st to the 44th position, while the ranking for Miscellaneous Goods & Services decreased by two places from the 20th to the 22nd position.

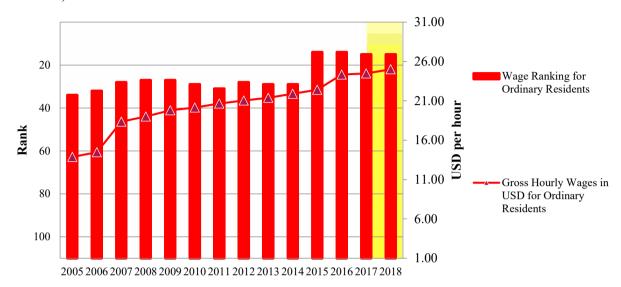
On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing seven places from the 46th to the 39th position, while the ranking for Recreation increased by six places from the 29th to the 23rd position. Clothing and Housing Rents & Utilities did not change overall during this period.

SAN FRANCISCO

United States

Ordinary Residents: Wage

Figure 81.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in San Francisco, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

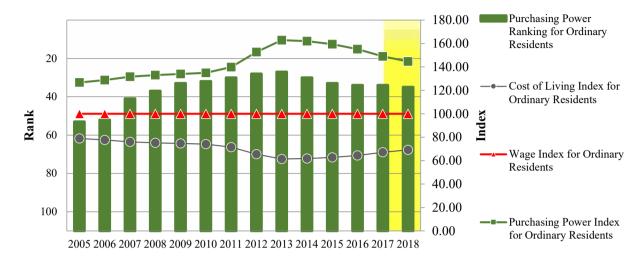
The Gross Hourly Wages in USD for Ordinary Residents in San Francisco, as represented by the red line in Figure 81.c, increased from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in San Francisco, as denoted by the red bars, decreased from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, San Francisco is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

SAN FRANCISCO

United States

Ordinary Residents: Purchasing Power

Figure 81.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in San Francisco, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in San Francisco. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in San Francisco are represented by the grey and red line respectively in Figure 81.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and San Francisco belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in San Francisco will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, San Francisco's Cost of Living Index fell overall. In 2005, the cost of living for ordinary residents in San Francisco was 78.94 percent that of their counterparts in New York. This fell to 74.12 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in San Francisco, as denoted by the green line in Figure 81.d, followed a general upward trend from 126.69 to 134.92 between 2005 and 2010. In other words, the purchasing power of ordinary residents in San Francisco climbed relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for

Ordinary Residents in San Francisco, as denoted by the green bars in Figure 81.d, climbed from the 53rd to the 32nd position.

In the second sub-period, San Francisco's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in San Francisco was 71.52 percent that of their counterparts in New York. This declined to 64.43 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in San Francisco followed a general upward trend from 139.82 to 155.22 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in San Francisco declined from the 30th to the 34th position.

For the third sub-period, San Francisco's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in San Francisco was 67.11 percent that of their counterparts in New York. This climbed to 69.16 percent in 2018.

As a result, the Purchasing Power Index for Ordinary Residents in San Francisco followed a general declining trend from 149.02 to 144.59 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in San Francisco decreased from the 34th to the 35th position.

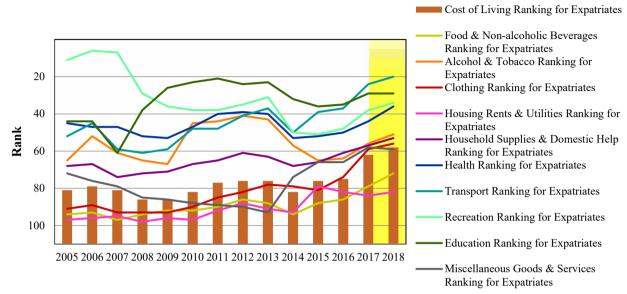
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in San Francisco has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in San Francisco, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

SANTIAGO

Chile

Expatriates: Cost of Living

Figure 82.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Santiago, Chile



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Santiago is the capital of Chile and Chile's largest city and its cultural, political, financial centre. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 81st to the 58th spot between 2005 and 2018 (see Figure 82a).

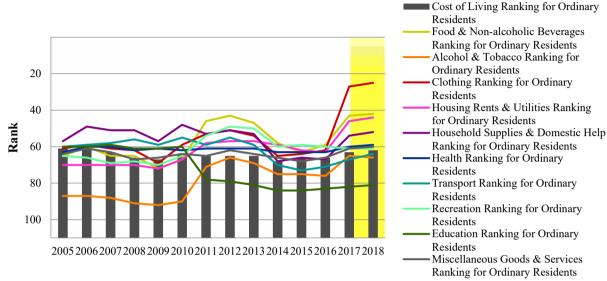
The city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation declined the most, falling by 23 places from the 11th to the 34th spot. On the other hand, the ranking for Clothing rose the most, climbing 35 places from the 91st to the 56th spot, while the ranking for Transport rose by 32 places from the 52nd to the 20th spot.

SANTIAGO

Chile

Ordinary Residents: Cost of Living

Figure 82.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Santiago, Chile



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 61st position to the 64th position between 2005 and 2010. The ranking rose from the 65th position to the 66th between 2011 to 2016 and dropped from the 63rd position to the 62nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Alcohol & Tobacco dropped the most, falling by three places from the 87th to the 90th position, while the ranking for Food & Non-alcoholic Beverages fell by two places from the 65th to the 67th position. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing nine places from the 57th to the 48th position, while the ranking for Transport rose by five places from the 60th to the 55th position. Education, Miscellaneous Goods & Services and Recreation did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help dropped the most, falling by 14 places from the 53rd to the 67th spot, while the ranking for Food & Non-alcoholic Beverages declined by 13 places from the 46th to the 59th spot.

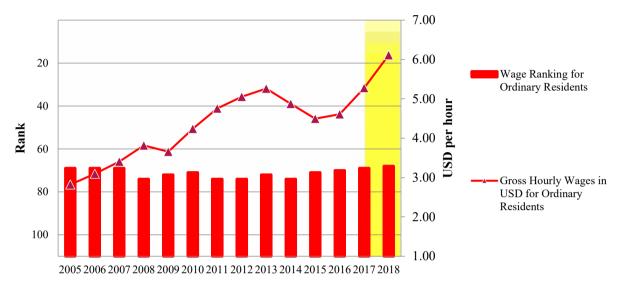
For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco declined the most, falling by one place from the 65th to the 66th position. On the other hand, the ranking for Transport increased the most, climbing three places from the 67th to the 64th position, while the rankings for Clothing, Household Supplies & Domestic Help, and Housing Rents & Utilities increased by two places from the 27th to the 25th position, 54th to the 52nd position, and the 46th to the 44th position respectively. Recreation did not change overall during this period.

SANTIAGO

Chile

Ordinary Residents: Wage

Figure 82.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Santiago, Chile



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

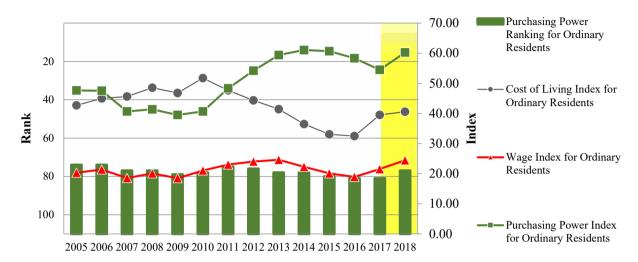
The Gross Hourly Wages in USD for Ordinary Residents in Santiago, as represented by the red line in Figure 82.c, rose from a low of 2.82 USD in 2005 to a high of 6.11 USD in 2018. The Wage Ranking for Ordinary Residents in Santiago, as denoted by the red bars, dropped from 69th to 68th across 2005 and 2018.

SANTIAGO

Chile

Ordinary Residents: Purchasing Power

Figure 82.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Santiago, Chile



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Santiago. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Santiago are represented by the grey and red line respectively in Figure 82.d. In the first sub-period, Santiago's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Santiago was 42.68 percent that of their counterparts in New York. This rose to 51.76 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Santiago increased from 20.32 to 21.04 in the same period.

The cost of living index rose at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Santiago, as denoted by the green line in Figure 82.d, followed a general downward trend from 47.66 to 40.65 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Santiago decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Santiago, as denoted by the green bars in Figure 82.d, fell from the 74th to the 78th position.

In the second sub-period, Santiago's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Santiago was 47.63 percent that of their counterparts in New York. This fell to 32.49 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Santiago fell from 23.02 to 18.95 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Santiago followed a general rising trend from 48.34 to 58.32 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Santiago decreased from the 75th to the 81st spot.

For the third sub-period, Santiago's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Santiago was 39.53 percent that of their counterparts in New York. This increased to 40.56 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Santiago increased from 21.55 to 24.44 in the same period.

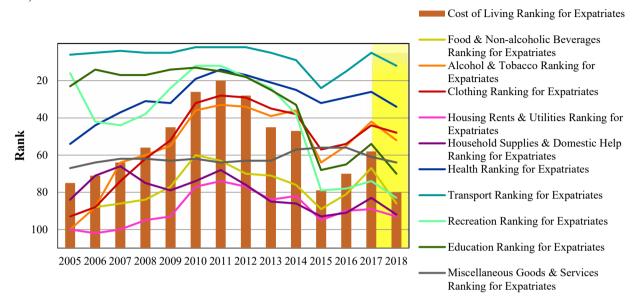
The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Santiago followed a general upward trend from 54.51 to 60.27 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Santiago rose from the 81st to the 77th position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Santiago has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Santiago, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

Brazil

Expatriates: Cost of Living

Figure 83.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Sao Paulo, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

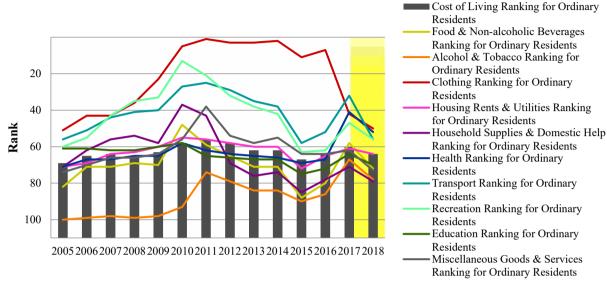
Sao Paulo is the capital of the Brazilian state of Sao Paolo and is not only currently Brazil's largest city by population but also the world's 12th largest city proper. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 75th to the 80th position between 2005 and 2018 (see Figure 83a).

The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation decreased the most, falling by 67 places from the 16th to the 83rd position, while the ranking for Education dropped by 47 places from the 23rd to the 70th position. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing 48 places from the 100th to the 52nd position, while the ranking for Clothing rose by 45 places from the 93rd to the 48th position.

Brazil

Ordinary Residents: Cost of Living

Figure 83.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Sao Paulo, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 69th position to the 58th position between 2005 and 2010. The ranking rose from the 56th position to the 64th between 2011 to 2016 and increased from the 60th position to the 64th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Recreation rose the most, climbing 47 places from the 60th to the 13th position, while the ranking for Clothing increased by 46 places from the 51st to the 5th position.

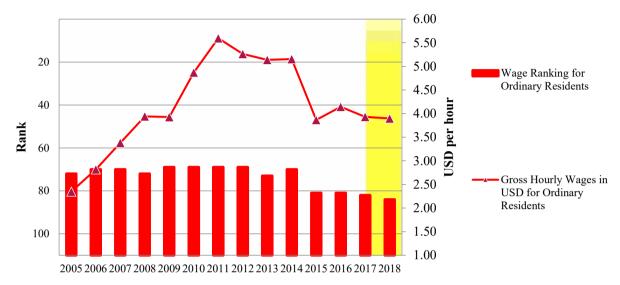
Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Recreation declined the most, falling by 41 places from the 21st to the 62nd position, while the ranking for Household Supplies & Domestic Help declined by 35 places from the 43rd to the 78th position.

For the third sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2017 and 2018, the ranking for Transport declined the most, falling by 24 places from the 32nd to the 56th position, while the ranking for Food & Non-alcoholic Beverages declined by 14 places from the 58th to the 72nd position.

Brazil

Ordinary Residents: Wage

Figure 83.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Sao Paulo, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

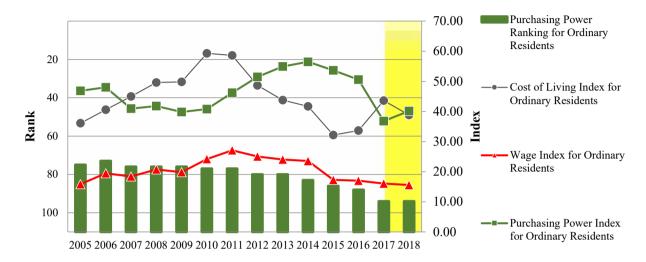
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Sao Paulo, as represented by the red line in Figure 83.c, rose from a low of 2.35 USD in 2005 to a high of 5.6 USD in 2011 before falling to 3.9 USD in 2018. The Wage Ranking for Ordinary Residents in Sao Paulo, as denoted by the red bars, improved from 72nd to 84th across 2005 and 2018.

Brazil

Ordinary Residents: Purchasing Power

Figure 83.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Sao Paulo, Brazil



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Sao Paulo. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Sao Paulo are represented by the grey and red line respectively in Figure 83.d. In the first sub-period, Sao Paulo's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Sao Paulo was 36.11 percent that of their counterparts in New York. This increased to 59.31 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Sao Paulo rose from 15.86 to 24.17 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sao Paulo, as denoted by the green line in Figure 83.d, followed a general downward trend from 46.85 to 40.76 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Sao Paulo declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Sao Paulo, as denoted by the green bars in Figure 83.d, dropped from the 75th to the 77th spot.

In the second sub-period, Sao Paulo's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Sao Paulo was 58.62 percent that of their counterparts in New York. This fell to 33.66 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Sao Paulo decreased from 27.1 to 17.02 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sao Paulo followed a general rising trend from 46.23 to 50.58 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Sao Paulo declined from the 77th to the 88th spot.

For the third sub-period, Sao Paulo's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Sao Paulo was 43.63 percent that of their counterparts in New York. This fell to 38.8 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Sao Paulo dropped from 16.05 to 15.58 in the same period.

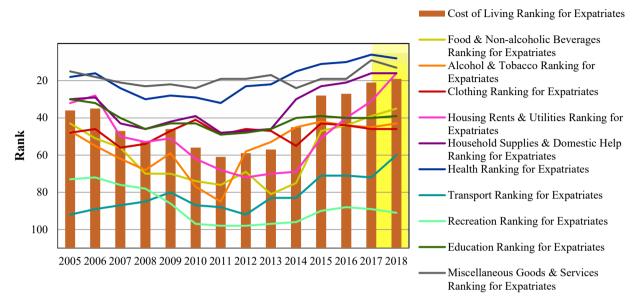
The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sao Paulo followed a general rising trend from 36.8 to 40.15 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Sao Paulo remained the same at the 94th spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Sao Paulo has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Sao Paulo, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

SEATTLE United States

Expatriates: Cost of Living

Figure 84.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Seattle, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Seattle is currently the largest city in the state of Washington and is the 15th largest city in the United States. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 36th to the 19th spot between 2005 and 2018 (see Figure 84a).

The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Recreation dropped the most, falling by 18 places from the 73rd to the 91st spot, while the ranking for Education dropped by nine places from the 30th to the 39th spot. On the other hand, the ranking for Transport rose the most, climbing 32 places from the 92nd to the 60th spot, while the ranking for Housing Rents & Utilities rose by 16 places from the 32nd to the 16th spot.

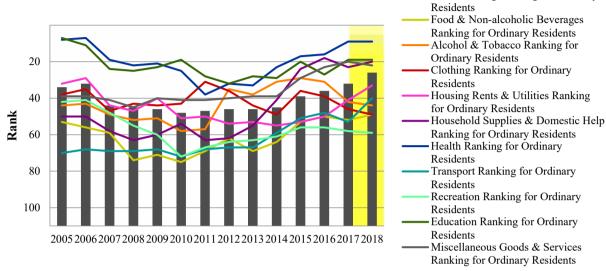
Cost of Living Ranking for Ordinary

SEATTLE

United States

Ordinary Residents: Cost of Living

Figure 84.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Seattle, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 34th spot to the 48th spot between 2005 and 2010. The ranking dropped from the 47th spot to the 36th between 2011 to 2016 and declined from the 32nd spot to the 26th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Recreation dropped the most, falling by 30 places from the 42nd to the 72nd position, while the ranking for Food & Non-alcoholic Beverages dropped by 22 places from the 53rd to the 75th position.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Clothing decreased the most, falling by eight places from the 31st to the 39th spot. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing 45 places from the 63rd to the 18th spot, while the ranking for Alcohol & Tobacco rose by 26 places from the 57th to the 31st spot. Housing Rents & Utilities did not change overall during this period.

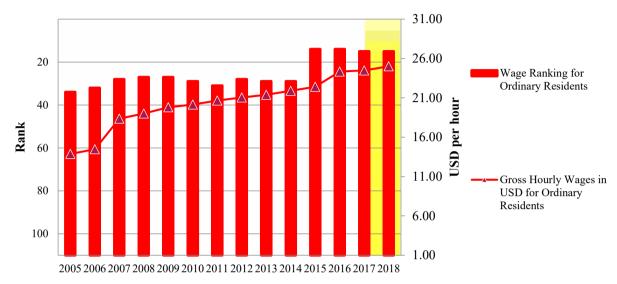
For the third sub-period, the city's cost of living ranking decreased in four consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing declined the most, falling by three places from the 46th to the 49th spot, while the rankings for Alcohol

& Tobacco and Miscellaneous Goods & Services decreased by two places from the 42nd to the 44th spot, and 20th to the 22nd spot respectively. On the other hand, the ranking for Transport rose the most, climbing 13 places from the 53rd to the 40th spot, while the ranking for Housing Rents & Utilities rose by eight places from the 41st to the 33rd spot. Education and Health did not change overall during this period.

SEATTLE United States

Ordinary Residents: Wage

Figure 84.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Seattle, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

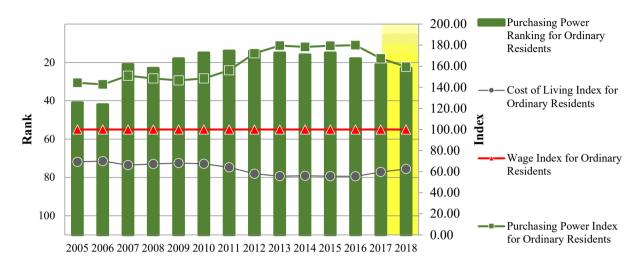
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Seattle, as represented by the red line in Figure 84.c, improved from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Seattle, as denoted by the red bars, dropped from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Seattle is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

SEATTLE United States

Ordinary Residents: Purchasing Power

Figure 84.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Seattle, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Seattle. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Seattle are represented by the grey and red line respectively in Figure 84.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Seattle belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Seattle will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Seattle's Cost of Living Index declined overall. In 2005, the cost of living for ordinary residents in Seattle was 69.29 percent that of their counterparts in New York. This declined to 67.38 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Seattle, as denoted by the green line in Figure 84.d, followed a general upward trend from 144.31 to 148.41 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Seattle climbed relative to that of their New York counterparts

over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Seattle, as denoted by the green bars in Figure 84.d, climbed from the 41st to the 15th spot.

In the second sub-period, Seattle's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Seattle was 64.04 percent that of their counterparts in New York. This fell to 55.57 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Seattle followed a general upward trend from 156.15 to 179.97 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Seattle decreased from the 14th to the 18th spot.

For the third sub-period, Seattle's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Seattle was 59.72 percent that of their counterparts in New York. This rose to 62.66 percent in 2018.

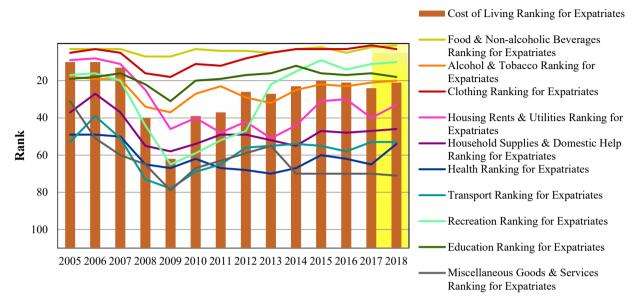
As a result, the Purchasing Power Index for Ordinary Residents in Seattle followed a general downward trend from 167.46 to 159.58 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Seattle dropped from the 21st to the 23rd position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Seattle has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Seattle, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

SEOUL South Korea

Expatriates: Cost of Living

Figure 85.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Seoul, South Korea



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

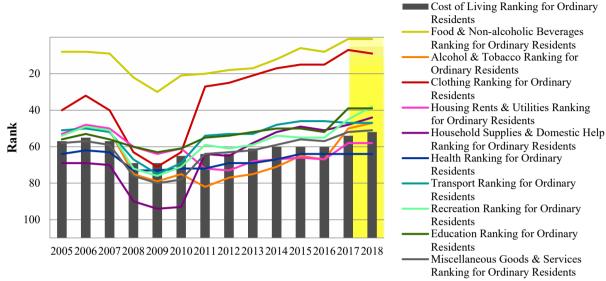
Seoul is the capital of South Korea and the largest metropolis in South Korea currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 10th to the 21st position between 2005 and 2018 (see Figure 85a).

The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Miscellaneous Goods & Services decreased the most, falling by 40 places from the 31st to the 71st spot, while the ranking for Housing Rents & Utilities decreased by 24 places from the 9th to the 33rd spot. On the other hand, the ranking for Recreation increased the most, climbing seven places from the 17th to the 10th spot, while the rankings for Clothing and Food & Non-alcoholic Beverages rose by two places from the 5th to the 3rd spot, and the 3rd to the 1st spot respectively. Transport did not change overall during this period.

SEOUL South Korea

Ordinary Residents: Cost of Living

Figure 85.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Seoul, South Korea



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 57th position to the 65th position between 2005 and 2010. The ranking fell from the 64th position to the 60th between 2011 to 2016 and dropped from the 54th position to the 52nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help declined the most, falling by 24 places from the 69th to the 93rd position, while the ranking for Clothing declined by 23 places from the 40th to the 63rd position.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco rose the most, climbing 15 places from the 82nd to the 67th position, while the ranking for Household Supplies & Domestic Help rose by 13 places from the 64th to the 51st position.

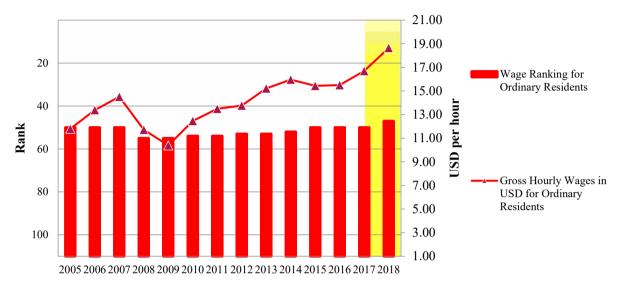
For the third sub-period, the city's cost of living ranking increased in four consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing declined the most, falling by two places from the 7th to the 9th position. On the other hand, the ranking for Recreation increased the most, climbing seven places from the 45th to the 38th position,

while the ranking for Household Supplies & Domestic Help increased by four places from the 48th to the 44th position. Education, Food & Non-alcoholic Beverages, Health, Housing Rents & Utilities and Transport did not change overall during this period.

SEOUL South Korea

Ordinary Residents: Wage

Figure 85.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Seoul, South Korea



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

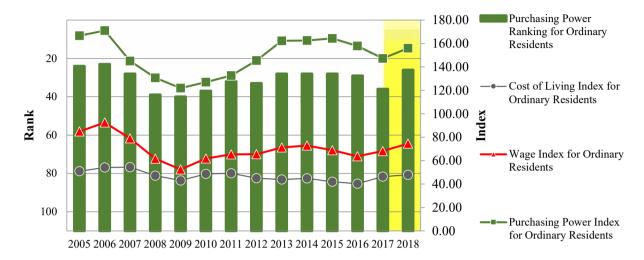
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Seoul, as represented by the red line in Figure 85.c, decreased from 11.8 USD USD in 2005 to a low of 10.39 USD in 2009 before increasing to a high of 18.64 USD in 2018. The Wage Ranking for Ordinary Residents in Seoul, as denoted by the red bars, dropped from 50th to 47th across 2005 and 2018.

SEOUL South Korea

Ordinary Residents: Purchasing Power

Figure 85.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Seoul, South Korea



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Seoul. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Seoul are represented by the grey and red line respectively in Figure 85.d. In the first sub-period, Seoul's Cost of Living Index decreased overall. In 2005, the cost of living for ordinary residents in Seoul was 51.02 percent that of their counterparts in New York. This decreased to 48.69 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Seoul dropped from 84.97 to 61.85 in the same period.

The cost of living index decreased at a slower rate than the wage index in this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Seoul, as denoted by the green line in Figure 85.d, followed a general downward trend from 166.71 to 127.02 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Seoul declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Seoul, as denoted by the green bars in Figure 85.d, decreased from the 24th to the 37th position.

In the second sub-period, Seoul's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Seoul was 49.27 percent that of their counterparts in New York. This fell to 40.34 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Seoul decreased from 65.33 to 63.68 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Seoul followed a general upward trend from 132.6 to 157.87 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Seoul climbed from the 32nd to the 29th spot.

For the third sub-period, Seoul's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Seoul was 46.31 percent that of their counterparts in New York. This rose to 47.8 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Seoul increased from 68.21 to 74.55 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Seoul followed a general upward trend from 147.27 to 155.98 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Seoul increased from the 36th to the 26th spot.

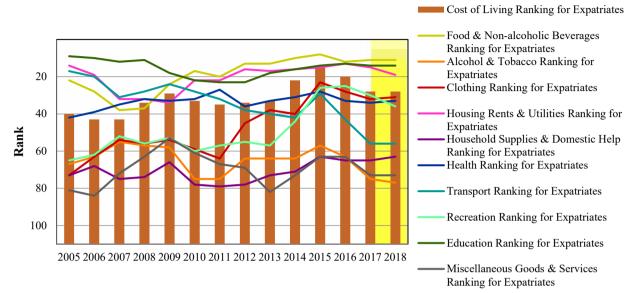
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Seoul has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Seoul, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

SHANGHAI

China

Expatriates: Cost of Living

Figure 86.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Shanghai, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Shanghai is currently the most populous urban area in China and is a global centre for finance, innovation, and transportation. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 40th to the 28th spot between 2005 and 2018 (see Figure 86a).

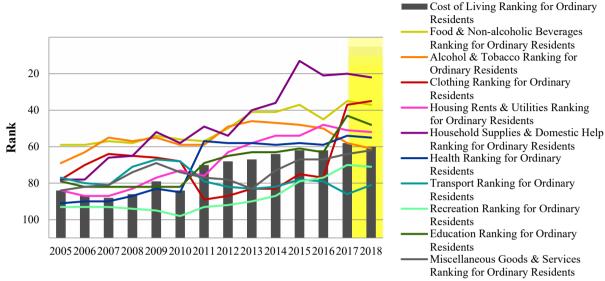
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Transport dropped the most, falling by 39 places from the 17th to the 56th position, while the ranking for Alcohol & Tobacco fell by 10 places from the 67th to the 77th position. On the other hand, the ranking for Clothing increased the most, climbing 42 places from the 73rd to the 31st position, while the ranking for Recreation increased by 29 places from the 65th to the 36th position.

SHANGHAI

China

Ordinary Residents: Cost of Living

Figure 86.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Shanghai, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 84th spot to the 84th spot between 2005 and 2010. The ranking dropped from the 70th spot to the 62nd between 2011 to 2016 and increased from the 58th spot to the 60th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Recreation decreased the most, falling by five places from the 93rd to the 98th position, while the ranking for Education fell by three places from the 79th to the 82nd position. On the other hand, the ranking for Household Supplies & Domestic Help rose the most, climbing 20 places from the 78th to the 58th position, while the ranking for Housing Rents & Utilities rose by 11 places from the 84th to the 73rd position.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Health dropped the most, falling by two places from the 57th to the 59th spot. On the other hand, the rankings for Household Supplies & Domestic Help and Housing Rents & Utilities increased by

28 places from the 49th to the 21st spot, and the 76th to the 48th spot respectively. Transport did not change overall during this period.

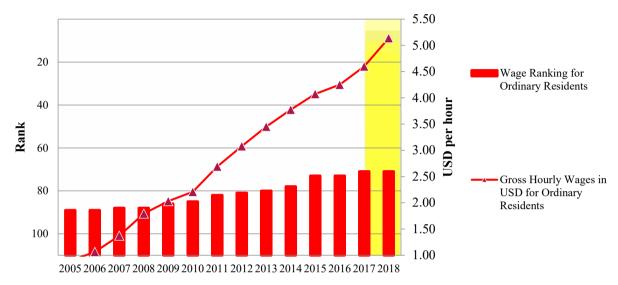
For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Education declined the most, falling by five places from the 43rd to the 48th spot, while the ranking for Alcohol & Tobacco decreased by three places from the 58th to the 61st spot. On the other hand, the ranking for Transport rose the most, climbing five places from the 86th to the 81st spot, while the rankings for Clothing and Miscellaneous Goods & Services rose by two places from the 37th to the 35th spot, and the 64th to the 62nd spot respectively.

SHANGHAI

China

Ordinary Residents: Wage

Figure 86.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Shanghai, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Shanghai, as represented by the red line in Figure 86.c, improved from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Shanghai, as denoted by the red bars, fell from 89th to 71st across 2005 and 2018.

SHANGHAI

China

Ordinary Residents: Purchasing Power

Figure 86.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Shanghai, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Shanghai. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Shanghai are represented by the grey and red line respectively in Figure 86.d. In the first sub-period, Shanghai's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Shanghai was 26.2 percent that of their counterparts in New York. This climbed to 35.83 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Shanghai increased from 6.44 to 10.96 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Shanghai, as denoted by the green line in Figure 86.d, followed a general rising trend from 24.59 to 30.6 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Shanghai climbed relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Shanghai, as denoted by the green bars in Figure 86.d, increased from the 97th to the 90th spot.

In the second sub-period, Shanghai's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Shanghai was 42.89 percent that of their counterparts in New York. This dropped to 37.99 percent in 2016. However, the Wages Index for Ordinary Residents in Shanghai rose from 13.03 to 17.46 in the same period.

The cost of living index dropped whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Shanghai followed a general upward trend from 30.39 to 45.97 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Shanghai rose from the 96th to the 91st spot.

For the third sub-period, Shanghai's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Shanghai was 44.1 percent that of their counterparts in New York. This decreased to 44.04 percent in 2018. However, the Wages Index for Ordinary Residents in Shanghai increased from 18.78 to 20.55 in the same period.

The cost of living index decreased whereas the wage index increased over this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Shanghai followed a general upward trend from 42.59 to 46.66 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Shanghai increased from the 91st to the 88th position.

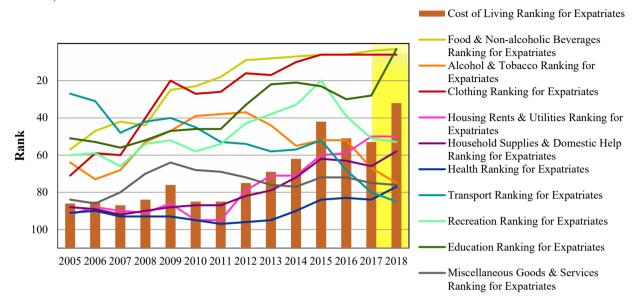
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Shanghai has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Shanghai, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

SHENZHEN

China

Expatriates: Cost of Living

Figure 87.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Shenzhen, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

A major city in the Chinese province of Guangdong, Shenzhen is dubbed by media as the next Silicon Valley. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 86th to the 32nd position between 2005 and 2018 (see Figure 87a).

The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Transport fell the most, falling by 58 places from the 27th to the 85th spot, while the ranking for Alcohol & Tobacco dropped by 11 places from the 64th to the 75th spot. On the other hand, the ranking for Clothing rose the most, climbing 65 places from the 71st to the 6th spot, while the ranking for Food & Non-alcoholic Beverages increased by 54 places from the 57th to the 3rd spot.

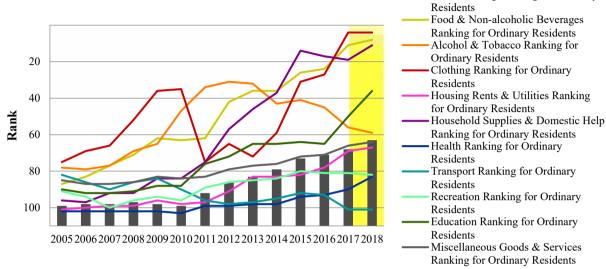
Cost of Living Ranking for Ordinary

SHENZHEN

China

Ordinary Residents: Cost of Living

Figure 87.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Shenzhen, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 99th spot to the 99th spot between 2005 and 2010. The ranking fell from the 92nd spot to the 71st between 2011 to 2016 and declined from the 68th spot to the 63rd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Transport decreased the most, falling by eight places from the 82nd to the 90th position, while the ranking for Recreation declined by five places from the 91st to the 96th position. On the other hand, the ranking for Clothing rose the most, climbing 40 places from the 75th to the 35th position, while the ranking for Alcohol & Tobacco increased by 31 places from the 78th to the 47th position.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Alcohol & Tobacco decreased the most, falling by 11 places from the 34th to the 45th spot. On the other hand, the ranking for Household Supplies & Domestic Help increased the most, climbing 58 places from the 75th to the 17th spot, while the ranking for Clothing increased by 48 places from the 75th to the 27th spot.

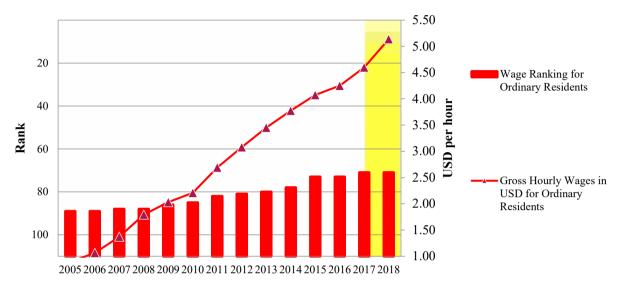
For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco fell the most, falling by three places from the 56th to the 59th position, while the ranking for Recreation dropped by one place from the 81st to the 82nd position. On the other hand, the ranking for Education increased the most, climbing 14 places from the 50th to the 36th position, while the ranking for Household Supplies & Domestic Help increased by eight places from the 19th to the 11th position. Clothing and Transport did not change overall during this period.

SHENZHEN

China

Ordinary Residents: Wage

Figure 87.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Shenzhen, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

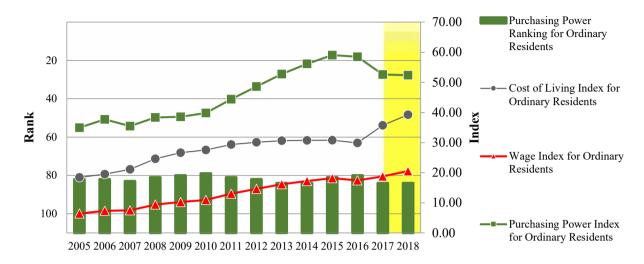
The Gross Hourly Wages in USD for Ordinary Residents in Shenzhen, as represented by the red line in Figure 87.c, improved from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Shenzhen, as denoted by the red bars, decreased from 89th to 71st across 2005 and 2018.

SHENZHEN

China

Ordinary Residents: Purchasing Power

Figure 87.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Shenzhen, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Shenzhen. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Shenzhen are represented by the grey and red line respectively in Figure 87.d. In the first sub-period, Shenzhen's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Shenzhen was 18.43 percent that of their counterparts in New York. This rose to 27.52 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Shenzhen rose from 6.44 to 10.96 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Shenzhen, as denoted by the green line in Figure 87.d, followed a general rising trend from 34.95 to 39.84 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Shenzhen increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Shenzhen, as denoted by the green bars in Figure 87.d, rose from the 82nd to the 79th spot.

In the second sub-period, Shenzhen's Cost of Living Index climbed overall. In 2011, the cost of living for ordinary residents in Shenzhen was 29.37 percent that of their counterparts in New York. This climbed to 29.86 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Shenzhen increased from 13.03 to 17.46 in the same period.

The cost of living index climbed at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Shenzhen followed a general upward trend from 44.37 to 58.49 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Shenzhen increased from the 81st to the 80th spot.

For the third sub-period, Shenzhen's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Shenzhen was 35.72 percent that of their counterparts in New York. This increased to 39.25 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Shenzhen increased from 18.78 to 20.55 in the same period.

The cost of living index increased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Shenzhen followed a general declining trend from 52.58 to 52.36 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Shenzhen remained the same at the 84th position.

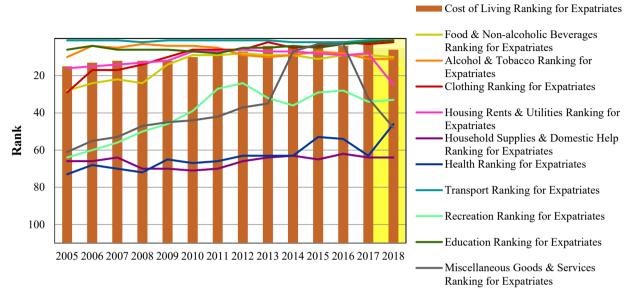
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Shenzhen has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Shenzhen, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

SINGAPORE

Singapore

Expatriates: Cost of Living

Figure 88.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Singapore, Singapore



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Classified as an Alpha+ global city, Singapore is a sovereign island city-state in Southeast Asia and a highly developed country. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 15th to the 6th position between 2005 and 2018 (see Figure 88a).

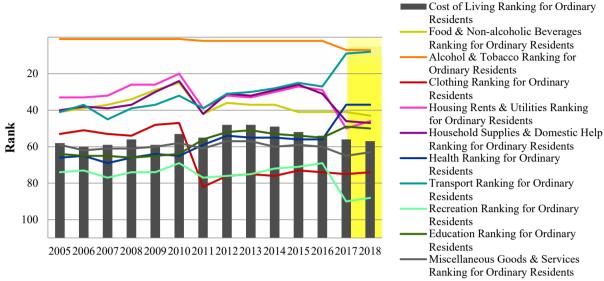
The city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities decreased the most, falling by nine places from the 16th to the 25th position, while the ranking for Alcohol & Tobacco fell by one place from the 10th to the 11th position. On the other hand, the ranking for Recreation rose the most, climbing 31 places from the 64th to the 33rd position, while the rankings for Clothing and Health increased by 27 places from the 29th to the 2nd position, and the 73rd to the 46th position respectively. Transport did not change overall during this period.

SINGAPORE

Singapore

Ordinary Residents: Cost of Living

Figure 88.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Singapore, Singapore



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 58th spot to the 53rd spot between 2005 and 2010. The ranking fell from the 55th spot to the 54th between 2011 to 2016 and increased from the 56th spot to the 57th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three subperiods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2010, the rankings for Food & Non-alcoholic Beverages and Household Supplies & Domestic Help rose by 16 places from the 41st to the 25th spot, and the 40th to the 24th spot respectively. Alcohol & Tobacco and Education did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Transport rose the most, climbing 12 places from the 39th to the 27th spot, while the ranking for Household Supplies & Domestic Help rose by 11 places from the 42nd to the 31st spot. Alcohol & Tobacco did not change overall during this period.

For the third sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages decreased the most, falling by two places from the 41st to the 43rd position,

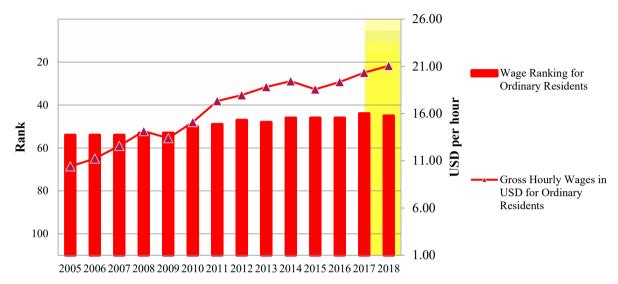
while the rankings for Education and Household Supplies & Domestic Help decreased by one place from the 49th to the 50th position, and 46th to the 47th position respectively. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing four places from the 50th to the 46th position, while the rankings for Miscellaneous Goods & Services and Recreation rose by two places from the 65th to the 63rd position, and the 90th to the 88th position respectively. Alcohol & Tobacco and Health did not change overall during this period.

SINGAPORE

Singapore

Ordinary Residents: Wage

Figure 88.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Singapore, Singapore



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

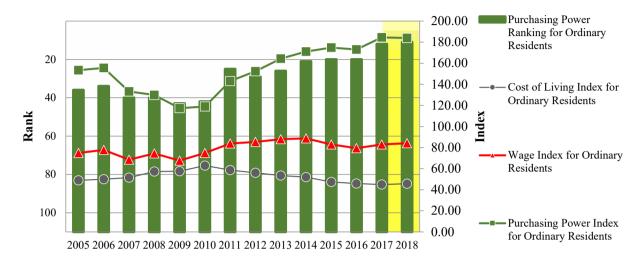
The Gross Hourly Wages in USD for Ordinary Residents in Singapore, as represented by the red line in Figure 88.c, rose from a low of 10.4 USD in 2005 to a high of 21.06 USD in 2018. The Wage Ranking for Ordinary Residents in Singapore, as denoted by the red bars, decreased from 54th to 45th across 2005 and 2018.

SINGAPORE

Singapore

Ordinary Residents: Purchasing Power

Figure 88.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Singapore, Singapore



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Singapore. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Singapore are represented by the grey and red line respectively in Figure 88.d. In the first sub-period, Singapore's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Singapore was 48.87 percent that of their counterparts in New York. This increased to 62.96 percent in 2010. However, the Wages Index for Ordinary Residents in Singapore declined from 74.9 to 74.89 in the same period.

The cost of living index increased whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Singapore, as denoted by the green line in Figure 88.d, followed a general downward trend from 153.42 to 118.95 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Singapore fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Singapore, as denoted by the green bars in Figure 88.d, dropped from the 36th to the 42nd spot.

In the second sub-period, Singapore's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Singapore was 58.63 percent that of their counterparts in New York. This declined to 45.93 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Singapore decreased from 83.92 to 79.49 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Singapore followed a general rising trend from 143.15 to 173.08 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Singapore increased from the 25th to the 20th spot.

For the third sub-period, Singapore's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Singapore was 44.99 percent that of their counterparts in New York. This climbed to 45.77 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Singapore increased from 83.01 to 84.21 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Singapore followed a general falling trend from 184.52 to 183.97 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Singapore climbed from the 12th to the 11th position.

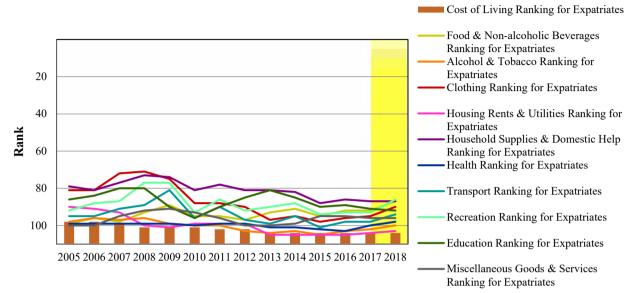
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Singapore has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Singapore, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

SOFIA

Bulgaria

Expatriates: Cost of Living

Figure 89.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Sofia, Bulgaria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

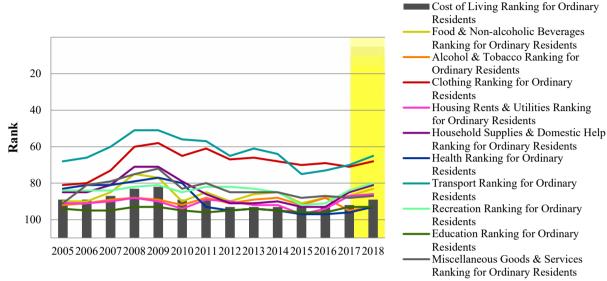
As Bulgaria's capital and is currently the largest city, Sofia is also a city known for its rich history. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 98th to the 104th spot between 2005 and 2018 (see Figure 89a).

The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities fell the most, falling by 13 places from the 90th to the 103rd spot, while the ranking for Clothing fell by nine places from the 81st to the 90th spot. On the other hand, the ranking for Food & Non-alcoholic Beverages increased the most, climbing 12 places from the 99th to the 87th spot, while the ranking for Recreation increased by six places from the 92nd to the 86th spot.

SOFIA Bulgaria

Ordinary Residents: Cost of Living

Figure 89.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Sofia, Bulgaria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, remained the same from the 89th spot to the 89th spot between 2005 and 2010. The ranking climbed from the 89th spot to the 93rd between 2011 to 2016 and fell from the 92nd spot to the 89th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Housing Rents & Utilities dropped the most, falling by three places from the 91st to the 94th spot, while the rankings for Education and Recreation fell by one place from the 94th to the 95th spot, and 84th to the 85th spot respectively. On the other hand, the ranking for Clothing increased the most, climbing 16 places from the 81st to the 65th spot, while the ranking for Transport rose by 12 places from the 68th to the 56th spot. Alcohol & Tobacco and Food & Non-alcoholic Beverages did not change overall during this period.

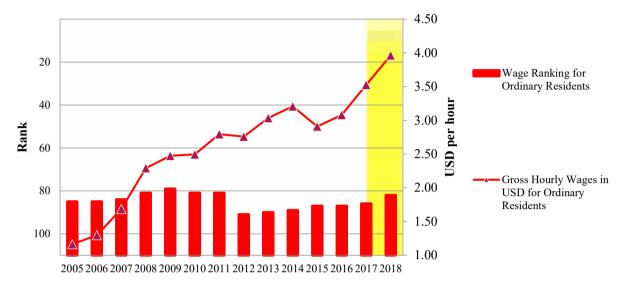
Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Transport dropped the most, falling by 16 places from the 57th to the 73rd position, while the ranking for Recreation fell by nine places from the 82nd to the 91st position. Alcohol & Tobacco and Education did not change overall during this period.

For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Transport increased the most, climbing five places from the 70th to the 65th spot, while the rankings for Food & Non-alcoholic Beverages, Household Supplies & Domestic Help, and Recreation rose by four places from the 87th to the 83rd spot, 85th to the 81st spot, and the 84th to the 80th spot respectively. Education did not change overall during this period.

SOFIA Bulgaria

Ordinary Residents: Wage

Figure 89.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Sofia, Bulgaria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Sofia, as represented by the red line in Figure 89.c, rose from a low of 1.17 USD in 2005 to a high of 3.96 USD in 2018. The Wage Ranking for Ordinary Residents in Sofia, as denoted by the red bars, dropped from 85th to 82nd across 2005 and 2018.

SOFIA Bulgaria

Ordinary Residents: Purchasing Power

Figure 89.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Sofia, Bulgaria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Sofia. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Sofia are represented by the grey and red line respectively in Figure 89.d. In the first sub-period, Sofia's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Sofia was 24.23 percent that of their counterparts in New York. This increased to 32.98 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Sofia rose from 8.39 to 12.39 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sofia, as denoted by the green line in Figure 89.d, followed a general upward trend from 34.66 to 37.57 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Sofia increased relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Sofia, as denoted by the green bars in Figure 89.d, decreased from the 83rd to the 84th position.

In the second sub-period, Sofia's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Sofia was 31.25 percent that of their counterparts in New York. This fell to 20.29 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Sofia fell from 13.53 to 12.65 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sofia followed a general upward trend from 43.29 to 62.36 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Sofia rose from the 83rd to the 78th spot.

For the third sub-period, Sofia's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Sofia was 22.24 percent that of their counterparts in New York. This increased to 23.68 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Sofia increased from 14.4 to 15.85 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sofia followed a general upward trend from 64.75 to 66.9 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Sofia remained the same at the 72nd position.

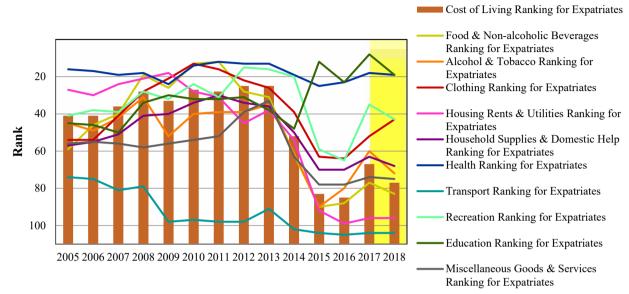
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Sofia has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Sofia, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

ST PETERSBURG

Russia

Expatriates: Cost of Living

Figure 90.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in St Petersburg, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Russia's current second-largest city, St Petersburg is also often considered Russia's cultural capital. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 41st to the 77th spot between 2005 and 2018 (see Figure 90a).

The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities decreased the most, falling by 69 places from the 27th to the 96th position, while the ranking for Transport decreased by 30 places from the 74th to the 104th position. On the other hand, the ranking for Education rose the most, climbing 26 places from the 45th to the 19th position, while the ranking for Clothing increased by 11 places from the 54th to the 43rd position.

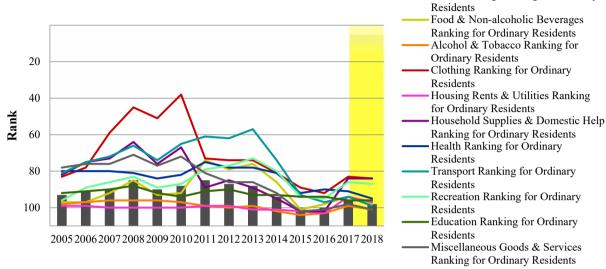
Cost of Living Ranking for Ordinary

ST PETERSBURG

Russia

Ordinary Residents: Cost of Living

Figure 90.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in St Petersburg, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 93rd spot to the 88th spot between 2005 and 2010. The ranking rose from the 85th spot to the 100th between 2011 to 2016 and rose from the 96th spot to the 98th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the rankings for Education and Health decreased by two places from the 92nd to the 94th position, and 80th to the 82nd position respectively. On the other hand, the ranking for Clothing increased the most, climbing 45 places from the 83rd to the 38th position, while the ranking for Transport increased by 16 places from the 81st to the 65th position.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Transport dropped the most, falling by 36 places from the 61st to the 97th spot, while the ranking for Food & Non-alcoholic Beverages declined by 24 places from the 74th to the 98th spot.

For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Transport fell the most, falling by five places from the 94th to the 99th position, while the rankings for Food &

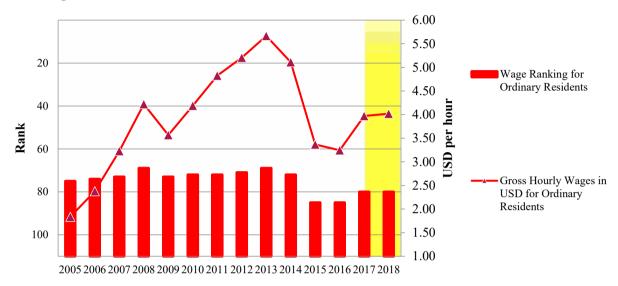
Non-alcoholic Beverages and Health declined by four places from the 94th to the 98th position, and 91st to the 95th position respectively. Education and Household Supplies & Domestic Help did not change overall during this period.

ST PETERSBURG

Russia

Ordinary Residents: Wage

Figure 90.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in St Petersburg, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in St Petersburg, as represented by the red line in Figure 90.c, rose from a low of 1.84 USD in 2005 to a high of 5.67 USD in 2013 before falling to 4.02 USD in 2018. The Wage Ranking for Ordinary Residents in St Petersburg, as denoted by the red bars, rose from 75th to 80th across 2005 and 2018.

ST PETERSBURG

Russia

Ordinary Residents: Purchasing Power

Figure 90.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in St Petersburg, Russia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in St Petersburg. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in St Petersburg are represented by the grey and red line respectively in Figure 90.d. In the first sub-period, St Petersburg's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in St Petersburg was 22.75 percent that of their counterparts in New York. This increased to 33.41 percent in 2010. Similarly, the Wages Index for Ordinary Residents in St Petersburg climbed from 13.22 to 20.79 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in St Petersburg, as denoted by the green line in Figure 90.d, followed a general upward trend from 58.17 to 62.24 between 2005 and 2010. In other words, the purchasing power of ordinary residents in St Petersburg increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in St Petersburg, as denoted by the green bars in Figure 90.d, increased from the 68th to the 66th position.

In the second sub-period, St Petersburg's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in St Petersburg was 32.43 percent that of their counterparts in New York. This fell to 16.38 percent in 2016. Similarly, the Wages Index for Ordinary Residents in St Petersburg declined from 23.37 to 13.33 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in St Petersburg followed a general rising trend from 72.07 to 81.41 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in St Petersburg declined from the 66th to the 67th position.

For the third sub-period, St Petersburg's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in St Petersburg was 20.65 percent that of their counterparts in New York. This declined to 19.12 percent in 2018. Similarly, the Wages Index for Ordinary Residents in St Petersburg dropped from 16.22 to 16.07 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in St Petersburg followed a general rising trend from 78.52 to 84.03 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in St Petersburg climbed from the 66th to the 65th position.

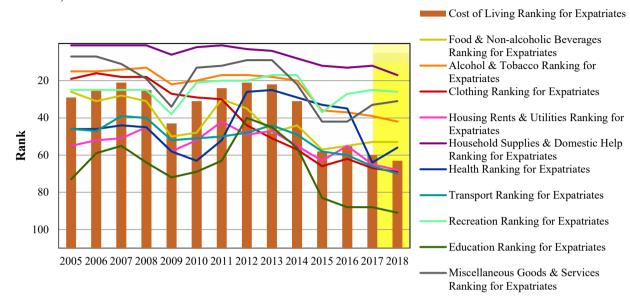
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in St Petersburg has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in St Petersburg, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

STOCKHOLM

Sweden

Expatriates: Cost of Living

Figure 91.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Stockholm, Sweden



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The cultural, media, political and economic centre of Sweden, Stockholm is also its capital and is currently the most populous urban area in the Nordic countries. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 29th to the 63rd spot between 2005 and 2018 (see Figure 91a).

All of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2018, the ranking for Clothing dropped the most, falling by 50 places from the 19th to the 69th spot, while the rankings for Alcohol & Tobacco and Food & Non-alcoholic Beverages fell by 27 places from the 15th to the 42nd spot, and 26th to the 53rd spot respectively.

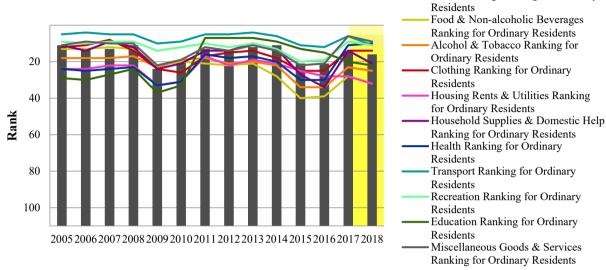
Cost of Living Ranking for Ordinary

STOCKHOLM

Sweden

Ordinary Residents: Cost of Living

Figure 91.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Stockholm, Sweden



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 11th spot to the 20th spot between 2005 and 2010. The ranking increased from the 13th spot to the 21st between 2011 to 2016 and climbed from the 14th spot to the 16th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Clothing fell the most, falling by 14 places from the 12th to the 26th position, while the ranking for Household Supplies & Domestic Help decreased by 10 places from the 11th to the 21st position.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help decreased the most, falling by 20 places from the 14th to the 34th spot, while the ranking for Food & Non-alcoholic Beverages dropped by 18 places from the 21st to the 39th spot.

For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help declined the most, falling by seven places from the 14th to the 21st spot, while the ranking for Transport decreased by five places from the 6th to the 11th spot. On the

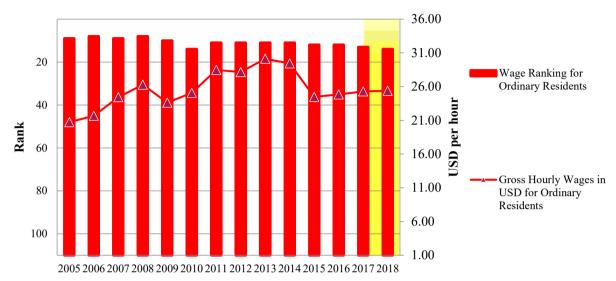
other hand, the ranking for Health increased the most, climbing one place from the 11th to the 10th spot. Clothing did not change overall during this period.

STOCKHOLM

Sweden

Ordinary Residents: Wage

Figure 91.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Stockholm, Sweden



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

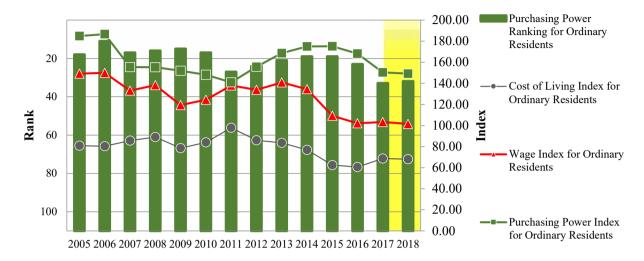
The Gross Hourly Wages in USD for Ordinary Residents in Stockholm, as represented by the red line in Figure 91.c, improved from a low of 20.73 USD in 2005 to a high of 30.12 USD in 2013 before dropping to 25.38 USD in 2018. The Wage Ranking for Ordinary Residents in Stockholm, as denoted by the red bars, rose from 9th to 14th across 2005 and 2018.

STOCKHOLM

Sweden

Ordinary Residents: Purchasing Power

Figure 91.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Stockholm, Sweden



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Stockholm. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Stockholm are represented by the grey and red line respectively in Figure 91.d. In the first sub-period, Stockholm's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Stockholm was 80.81 percent that of their counterparts in New York. This increased to 84 percent in 2010. However, the Wages Index for Ordinary Residents in Stockholm decreased from 149.14 to 124.48 in the same period.

The cost of living index increased whereas the wage index decreased over this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Stockholm, as denoted by the green line in Figure 91.d, followed a general falling trend from 184.88 to 148.19 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Stockholm declined relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Stockholm, as denoted by the green bars in Figure 91.d, rose from the 18th to the 17th position.

In the second sub-period, Stockholm's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Stockholm was 97.83 percent that of their counterparts in New York. This fell to 60.65 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Stockholm fell from 137.89 to 102.03 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Stockholm followed a general upward trend from 140.94 to 168.24 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Stockholm rose from the 27th to the 23rd spot.

For the third sub-period, Stockholm's Cost of Living Index decreased overall. In 2017, the cost of living for ordinary residents in Stockholm was 68.63 percent that of their counterparts in New York. This decreased to 68.04 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Stockholm fell from 103.26 to 101.49 in the same period.

The cost of living index decreased at a slower rate than the wage index in this subperiod. As a result, the Purchasing Power Index for Ordinary Residents in Stockholm followed a general falling trend from 150.46 to 149.18 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Stockholm climbed from the 33rd to the 32nd spot.

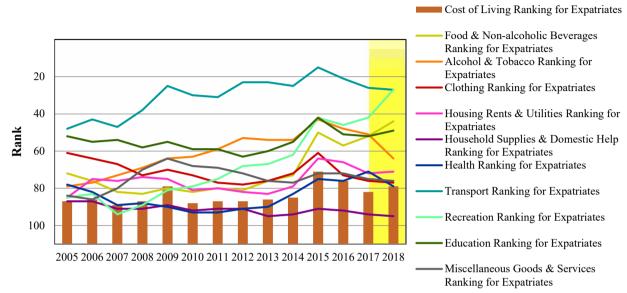
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Stockholm has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Stockholm, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

SUZHOU

China

Expatriates: Cost of Living

Figure 92.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Suzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Located about 100 km northwest of Shanghai, Suzhou is a major economic centre and a focal point for trade and commerce in China. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 87th to the 79th position between 2005 and 2018 (see Figure 92a).

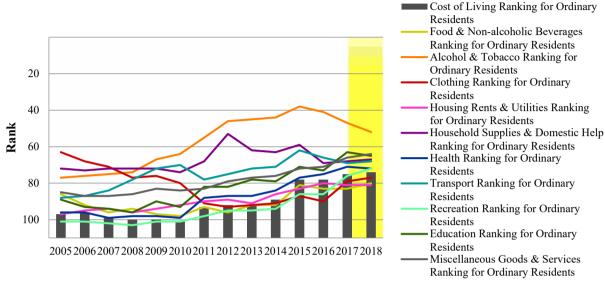
The city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing fell the most, falling by 16 places from the 61st to the 77th position, while the ranking for Household Supplies & Domestic Help decreased by eight places from the 87th to the 95th position. On the other hand, the ranking for Recreation rose the most, climbing 58 places from the 85th to the 27th position, while the ranking for Food & Non-alcoholic Beverages rose by 28 places from the 72nd to the 44th position.

SUZHOU

China

Ordinary Residents: Cost of Living

Figure 92.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Suzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, rose from the 97th spot to the 101st spot between 2005 and 2010. The ranking fell from the 93rd spot to the 78th between 2011 to 2016 and decreased from the 75th spot to the 74th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing decreased the most, falling by 17 places from the 63rd to the 80th spot, while the ranking for Food & Non-alcoholic Beverages decreased by 12 places from the 86th to the 98th spot. On the other hand, the ranking for Transport increased the most, climbing 18 places from the 88th to the 70th spot, while the ranking for Alcohol & Tobacco increased by 13 places from the 77th to the 64th spot. Recreation did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help dropped the most, falling by one place from the 68th to the 69th position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 14 places from the 55th to the 41st position, while the ranking for Health rose by 13 places from the 88th to the 75th position.

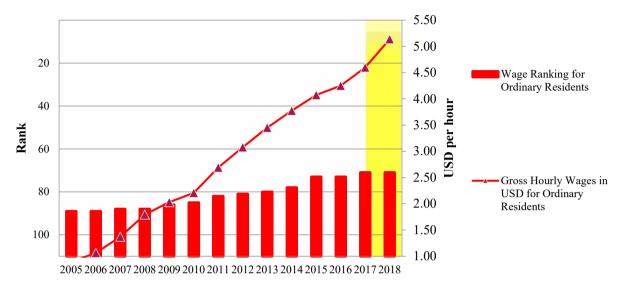
For the third sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2017 and 2018, the ranking for Alcohol & Tobacco fell the most, falling by five places from the 47th to the 52nd position, while the ranking for Education fell by two places from the 63rd to the 65th position. On the other hand, the ranking for Recreation increased the most, climbing four places from the 76th to the 72nd position, while the ranking for Food & Non-alcoholic Beverages increased by three places from the 83rd to the 80th position. Housing Rents & Utilities did not change overall during this period.

SUZHOU

China

Ordinary Residents: Wage

Figure 92.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Suzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

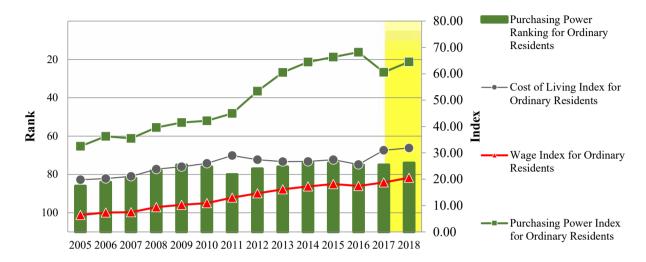
The Gross Hourly Wages in USD for Ordinary Residents in Suzhou, as represented by the red line in Figure 92.c, rose from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Suzhou, as denoted by the red bars, dropped from 89th to 71st across 2005 and 2018.

SUZHOU

China

Ordinary Residents: Purchasing Power

Figure 92.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Suzhou, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Suzhou. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Suzhou are represented by the grey and red line respectively in Figure 92.d. In the first sub-period, Suzhou's Cost of Living Index increased overall. In 2005, the cost of living for ordinary residents in Suzhou was 19.82 percent that of their counterparts in New York. This increased to 25.99 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Suzhou climbed from 6.44 to 10.96 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Suzhou, as denoted by the green line in Figure 92.d, followed a general rising trend from 32.5 to 42.19 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Suzhou rose relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Suzhou, as denoted by the green bars in Figure 92.d, rose from the 86th to the 76th spot.

In the second sub-period, Suzhou's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Suzhou was 28.98 percent that of their counterparts in New York. This dropped to 25.6 percent in 2016. However, the Wages Index for Ordinary Residents in Suzhou rose from 13.03 to 17.46 in the same period.

The cost of living index dropped whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Suzhou followed a general upward trend from 44.97 to 68.2 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Suzhou rose from the 80th to the 75th spot.

For the third sub-period, Suzhou's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Suzhou was 31 percent that of their counterparts in New York. This rose to 31.85 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Suzhou rose from 18.78 to 20.55 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Suzhou followed a general upward trend from 60.6 to 64.51 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Suzhou rose from the 75th to the 74th spot.

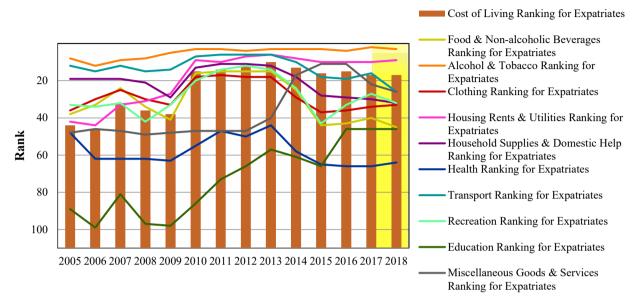
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Suzhou has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Suzhou, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

SYDNEY

Australia

Expatriates: Cost of Living

Figure 93.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Sydney, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Sydney is the state capital of New South Wales, Australia, and is currently the most populous city in Australia and Oceania. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 44th to the 17th position between 2005 and 2018 (see Figure 93a).

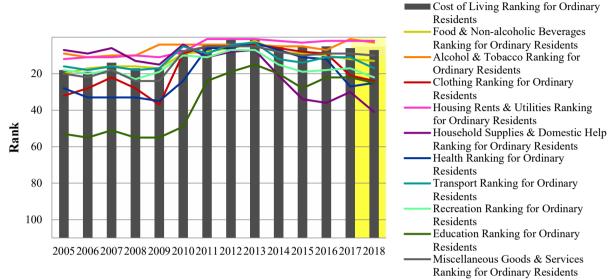
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Health fell the most, falling by 16 places from the 48th to the 64th position, while the ranking for Transport declined by 14 places from the 12th to the 26th position. On the other hand, the ranking for Education increased the most, climbing 43 places from the 89th to the 46th position, while the ranking for Housing Rents & Utilities rose by 33 places from the 42nd to the 9th position.

SYDNEY

Australia

Ordinary Residents: Cost of Living

Figure 93.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Sydney, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 18th spot to the 7th spot between 2005 and 2010. The ranking rose from the 4th spot to the 5th between 2011 to 2016 and climbed from the 6th spot to the 7th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the ranking for Clothing rose the most, climbing 23 places from the 32nd to the 9th spot, while the ranking for Miscellaneous Goods & Services increased by 12 places from the 20th to the 8th spot.

Over the second sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Household Supplies & Domestic Help decreased the most, falling by 25 places from the 11th to the 36th spot, while the ranking for Recreation decreased by seven places from the 11th to the 18th spot. On the other hand, the ranking for Education increased the most, climbing two places from the 24th to the 22nd spot.

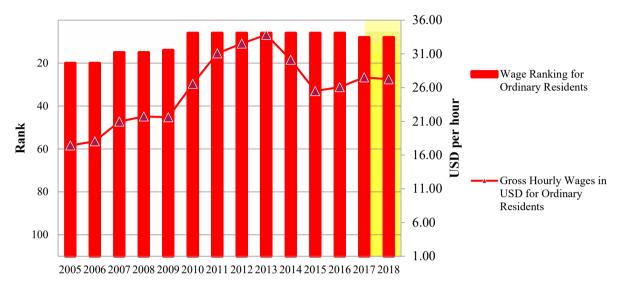
For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help decreased the most, falling by 11 places from the 30th to the 41st position,

while the ranking for Transport fell by six places from the 11th to the 17th position. On the other hand, the ranking for Health rose the most, climbing two places from the 27th to the 25th position. Housing Rents & Utilities did not change overall during this period.

SYDNEY Australia

Ordinary Residents: Wage

Figure 93.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Sydney, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

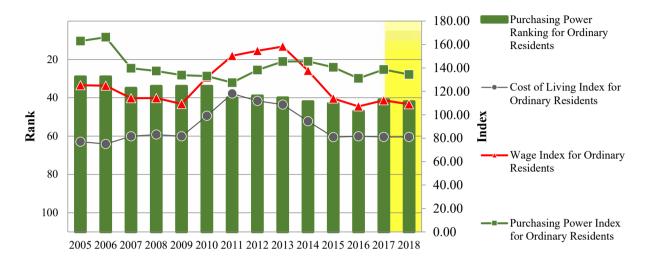
The Gross Hourly Wages in USD for Ordinary Residents in Sydney, as represented by the red line in Figure 93.c, increased from a low of 17.42 USD in 2005 to a high of 33.84 USD in 2013 before decreasing to 27.24 USD in 2018. The Wage Ranking for Ordinary Residents in Sydney, as denoted by the red bars, decreased from 20th to 8th across 2005 and 2018.

SYDNEY

Australia

Ordinary Residents: Purchasing Power

Figure 93.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Sydney, Australia



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Sydney. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Sydney are represented by the grey and red line respectively in Figure 93.d. In the first sub-period, Sydney's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Sydney was 76.99 percent that of their counterparts in New York. This climbed to 99.14 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Sydney climbed from 125.3 to 131.91 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sydney, as denoted by the green line in Figure 93.d, followed a general falling trend from 163.04 to 133.05 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Sydney dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Sydney, as denoted by the green bars in Figure 93.d, decreased from the 29th to the 34th spot.

In the second sub-period, Sydney's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Sydney was 118.07 percent that of their counterparts in New York. This declined to 81.67 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Sydney fell from 150.46 to 107.13 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sydney followed a general upward trend from 127.44 to 131.17 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Sydney declined from the 40th to the 47th spot.

For the third sub-period, Sydney's Cost of Living Index fell overall. In 2017, the cost of living for ordinary residents in Sydney was 81.05 percent that of their counterparts in New York. This fell to 81.04 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Sydney decreased from 112.42 to 108.94 in the same period.

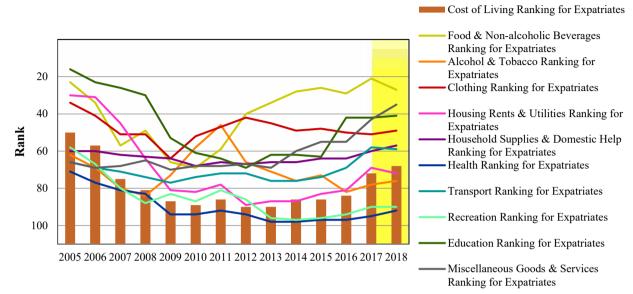
The cost of living index fell at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Sydney followed a general declining trend from 138.69 to 134.43 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Sydney fell from the 41st to the 42nd position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Sydney has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Sydney, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

TAIPEI Taiwan

Expatriates: Cost of Living

Figure 94.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Taipei, Taiwan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

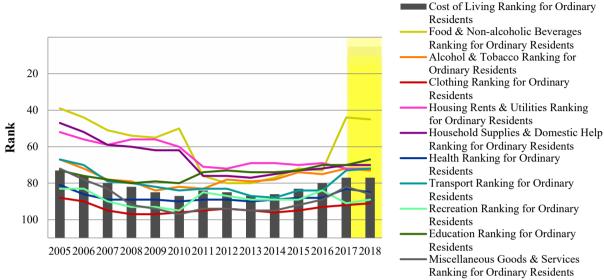
Considered to be a global city by the world, Taipei is the capital of Taiwan. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, dropped from the 50th to the 68th position between 2005 and 2018 (see Figure 94a).

The city's cost of living ranking decreased in seven consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities decreased the most, falling by 42 places from the 30th to the 72nd position, while the ranking for Recreation decreased by 32 places from the 58th to the 90th position. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 31 places from the 66th to the 35th position, while the ranking for Transport increased by seven places from the 66th to the 59th position.

TAIPEI Taiwan

Ordinary Residents: Cost of Living

Figure 94.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Taipei, Taiwan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 73rd spot to the 87th spot between 2005 and 2010. The ranking dropped from the 84th spot to the 80th between 2011 to 2016 and remained the same from the 77th spot to the 77th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2010, the ranking for Miscellaneous Goods & Services dropped the most, falling by 25 places from the 72nd to the 97th position, while the ranking for Transport fell by 17 places from the 67th to the 84th position.

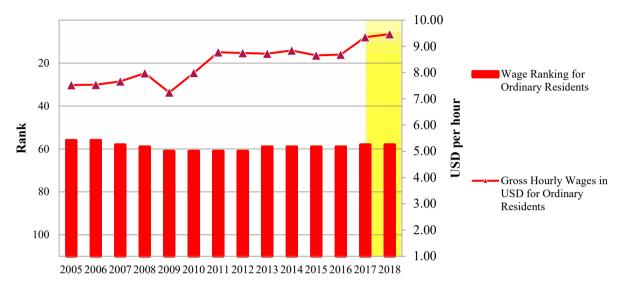
Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Transport declined the most, falling by one place from the 83rd to the 84th position. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing eight places from the 83rd to the 75th position, while the ranking for Miscellaneous Goods & Services rose by five places from the 94th to the 89th position.

For the third sub-period, the city's cost of living ranking decreased in four consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous Goods & Services dropped the most, falling by four places from the 82nd to the 86th spot, while

the ranking for Health dropped by two places from the 83rd to the 85th spot. On the other hand, the ranking for Education increased the most, climbing three places from the 70th to the 67th spot, while the ranking for Recreation rose by two places from the 91st to the 89th spot. Household Supplies & Domestic Help and Housing Rents & Utilities did not change overall during this period.

TAIPEI Taiwan Ordinary Residents: Wage

Figure 94.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Taipei, Taiwan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Taipei, as represented by the red line in Figure 94.c, dropped from 7.53 USD USD in 2005 to a low of 7.24 USD in 2009 before increasing to a high of 9.47 USD in 2018. The Wage Ranking for Ordinary Residents in Taipei, as denoted by the red bars, rose from 56th to 58th across 2005 and 2018.

TAIPEI Taiwan

Ordinary Residents: Purchasing Power

Figure 94.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Taipei, Taiwan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Taipei. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Taipei are represented by the grey and red line respectively in Figure 94.d. In the first sub-period, Taipei's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Taipei was 34.81 percent that of their counterparts in New York. This climbed to 35.03 percent in 2010. However, the Wages Index for Ordinary Residents in Taipei fell from 54.21 to 39.66 in the same period.

The cost of living index climbed whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Taipei, as denoted by the green line in Figure 94.d, followed a general downward trend from 155.87 to 113.23 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Taipei declined relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Taipei, as denoted by the green bars in Figure 94.d, dropped from the 34th to the 45th spot.

In the second sub-period, Taipei's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Taipei was 32.75 percent that of their counterparts in New York. This declined to 25.22 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Taipei declined from 42.51 to 35.69 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Taipei followed a general rising trend from 129.81 to 141.48 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Taipei dropped from the 36th to the 42nd position.

For the third sub-period, Taipei's Cost of Living Index climbed overall. In 2017, the cost of living for ordinary residents in Taipei was 29.8 percent that of their counterparts in New York. This climbed to 30.14 percent in 2018. However, the Wages Index for Ordinary Residents in Taipei declined from 38.18 to 37.86 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Taipei followed a general downward trend from 128.09 to 125.63 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Taipei remained the same at the 47th spot.

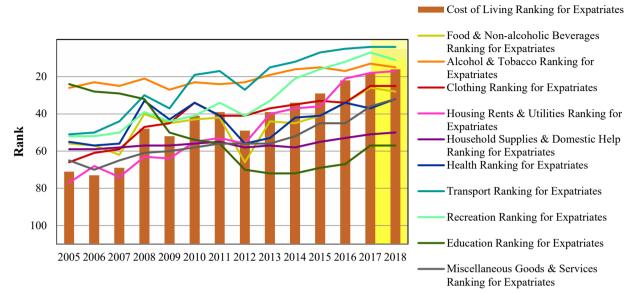
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Taipei has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Taipei, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

TEL AVIV

Israel

Expatriates: Cost of Living

Figure 95.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Tel Aviv, Israel



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Israel's economic and technological centre, Tel Aviv is also currently the most populous city in the largest metropolitan area in Israel. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, rose from the 71st to the 16th spot between 2005 and 2018 (see Figure 95a).

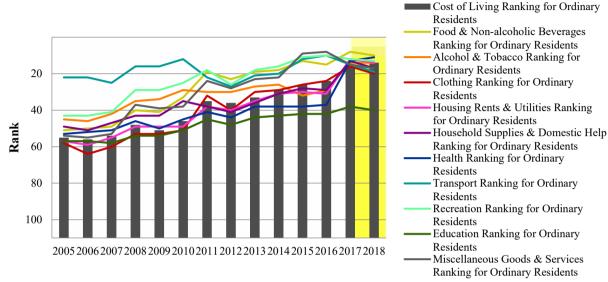
The city's cost of living ranking increased in nine consumption categories across the study period. Between 2005 and 2018, the ranking for Education dropped the most, falling by 33 places from the 24th to the 57th spot. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 60 places from the 77th to the 17th spot, while the ranking for Transport increased by 47 places from the 51st to the 4th spot.

TEL AVIV

Israel

Ordinary Residents: Cost of Living

Figure 95.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Tel Aviv, Israel



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, dropped from the 55th position to the 46th position between 2005 and 2010. The ranking declined from the 35th position to the 24th between 2011 to 2016 and declined from the 15th position to the 14th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2005 and 2010, the rankings for Food & Non-alcoholic Beverages and Recreation rose by 18 places from the 51st to the 33rd position, and the 43rd to the 25th position respectively.

Over the second sub-period, all of the city's consumption categories experienced an increase in ranking throughout the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services rose the most, climbing 16 places from the 24th to the 8th position, while the ranking for Transport rose by 12 places from the 22nd to the 10th position.

For the third sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2017 and 2018, the rankings for Clothing, Household Supplies & Domestic Help, and Transport fell by four places from the 16th to the 20th spot, 13th to the 17th spot, and 15th to the 19th spot respectively. On the other hand, the

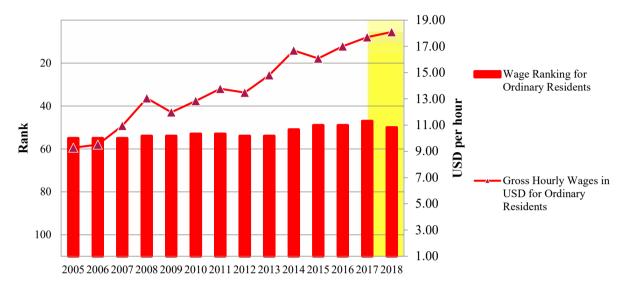
ranking for Health increased the most, climbing two places from the 13th to the 11th spot. Alcohol & Tobacco did not change overall during this period.

TEL AVIV

Israel

Ordinary Residents: Wage

Figure 95.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Tel Aviv, Israel



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

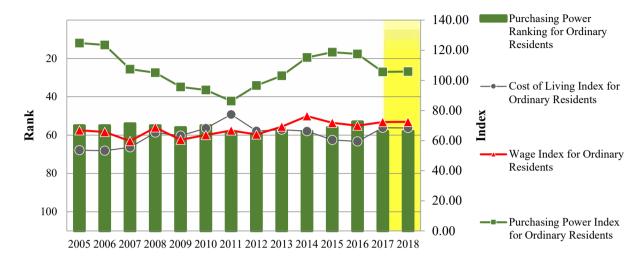
The Gross Hourly Wages in USD for Ordinary Residents in Tel Aviv, as represented by the red line in Figure 95.c, improved from a low of 9.28 USD in 2005 to a high of 18.1 USD in 2018. The Wage Ranking for Ordinary Residents in Tel Aviv, as denoted by the red bars, fell from 55th to 50th across 2005 and 2018.

TEL AVIV

Israel

Ordinary Residents: Purchasing Power

Figure 95.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Tel Aviv, Israel



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Tel Aviv. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Tel Aviv are represented by the grey and red line respectively in Figure 95.d. In the first sub-period, Tel Aviv's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Tel Aviv was 53.58 percent that of their counterparts in New York. This rose to 68.12 percent in 2010. However, the Wages Index for Ordinary Residents in Tel Aviv fell from 66.79 to 63.74 in the same period.

The cost of living index rose whereas the wage index fell over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tel Aviv, as denoted by the green line in Figure 95.d, followed a general declining trend from 124.78 to 93.58 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Tel Aviv decreased relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Tel Aviv, as denoted by the green bars in Figure 95.d, remained the same at the 55th position.

In the second sub-period, Tel Aviv's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Tel Aviv was 77.33 percent that of their counterparts in New York. This decreased to 59.45 percent in 2016. However, the Wages Index for Ordinary Residents in Tel Aviv climbed from 66.67 to 69.88 in the same period.

The cost of living index decreased whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tel Aviv followed a general rising trend from 86.21 to 117.53 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Tel Aviv climbed from the 59th to the 53rd position.

For the third sub-period, Tel Aviv's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in Tel Aviv was 68.47 percent that of their counterparts in New York. This declined to 68.4 percent in 2018. However, the Wages Index for Ordinary Residents in Tel Aviv climbed from 72.28 to 72.37 in the same period.

The cost of living index declined whereas the wage index climbed over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tel Aviv followed a general upward trend from 105.56 to 105.8 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Tel Aviv remained the same at the 58th spot.

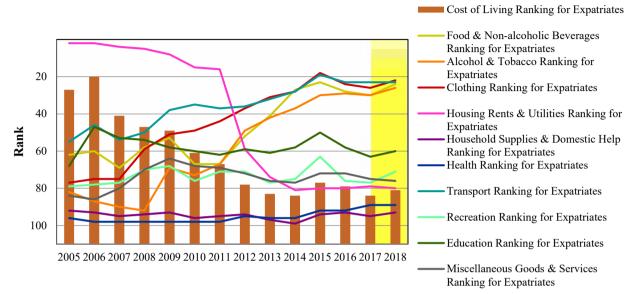
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Tel Aviv has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Tel Aviv, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

TIANJIN

China

Expatriates: Cost of Living

Figure 96.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Tianjin, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Tianjin is one of China's nine National Central Cities and currently has the fourth-largest urban population in China. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, fell from the 27th to the 81st spot between 2005 and 2018 (see Figure 96a).

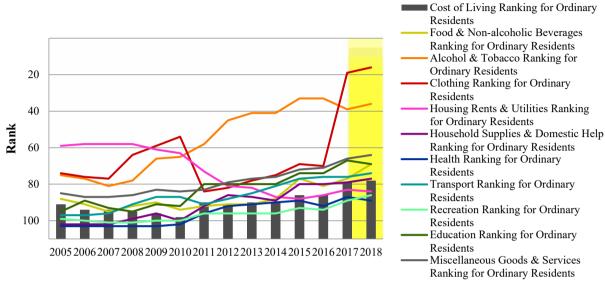
The city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Housing Rents & Utilities fell the most, falling by 78 places from the 2nd to the 80th position, while the ranking for Household Supplies & Domestic Help declined by one place from the 92nd to the 93rd position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing 56 places from the 82nd to the 26th position, while the ranking for Clothing rose by 55 places from the 77th to the 22nd position.

TIANJIN

China

Ordinary Residents: Cost of Living

Figure 96.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Tianjin, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 91st spot to the 98th spot between 2005 and 2010. The ranking decreased from the 90th spot to the 86th between 2011 to 2016 and declined from the 79th spot to the 78th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages decreased the most, falling by six places from the 88th to the 94th position, while the ranking for Housing Rents & Utilities declined by four places from the 59th to the 63rd position. On the other hand, the ranking for Clothing rose the most, climbing 20 places from the 74th to the 54th position, while the rankings for Alcohol & Tobacco and Transport increased by 10 places from the 75th to the 65th position, and the 97th to the 87th position respectively.

Over the second sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2011 and 2016, the ranking for Housing Rents & Utilities declined the most, falling by 13 places from the 73rd to the 86th position. On the other hand, the ranking for Alcohol & Tobacco increased the most, climbing

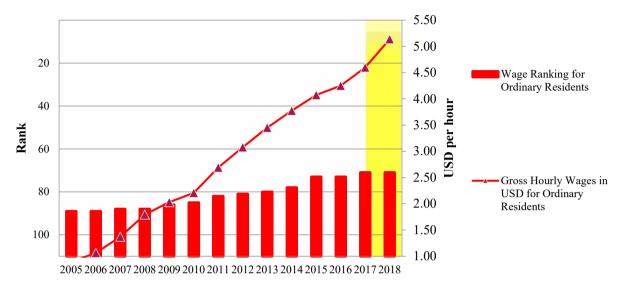
25 places from the 58th to the 33rd position, while the ranking for Transport increased by 15 places from the 91st to the 76th position.

For the third sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2017 and 2018, the rankings for Education and Health declined by two places from the 67th to the 69th position, and 87th to the 89th position respectively. On the other hand, the ranking for Food & Non-alcoholic Beverages rose the most, climbing eight places from the 77th to the 69th position, while the rankings for Alcohol & Tobacco, Clothing, and Recreation rose by three places from the 39th to the 36th position, 19th to the 16th position, and the 89th to the 86th position respectively.

TIANJIN China

Ordinary Residents: Wage

Figure 96.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Tianjin, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Tianjin, as represented by the red line in Figure 96.c, rose from a low of 0.89 USD in 2005 to a high of 5.14 USD in 2018. The Wage Ranking for Ordinary Residents in Tianjin, as denoted by the red bars, fell from 89th to 71st across 2005 and 2018.

TIANJIN

China

Ordinary Residents: Purchasing Power

Figure 96.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Tianjin, China



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Tianjin. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Tianjin are represented by the grey and red line respectively in Figure 96.d. In the first sub-period, Tianjin's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Tianjin was 23.41 percent that of their counterparts in New York. This rose to 28.2 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Tianjin increased from 6.44 to 10.96 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tianjin, as denoted by the green line in Figure 96.d, followed a general rising trend from 27.51 to 38.88 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Tianjin increased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Tianjin, as denoted by the green bars in Figure 96.d, increased from the 95th to the 81st position.

In the second sub-period, Tianjin's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Tianjin was 30.33 percent that of their counterparts in New York. This fell to 24.08 percent in 2016. However, the Wages Index for Ordinary Residents in Tianjin rose from 13.03 to 17.46 in the same period.

The cost of living index fell whereas the wage index rose over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tianjin followed a general rising trend from 42.97 to 72.53 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Tianjin increased from the 84th to the 72nd position.

For the third sub-period, Tianjin's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Tianjin was 28.78 percent that of their counterparts in New York. This rose to 30 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Tianjin climbed from 18.78 to 20.55 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tianjin followed a general rising trend from 65.27 to 68.48 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Tianjin remained the same at the 71st spot.

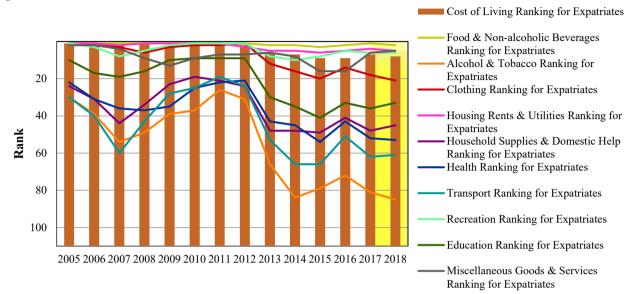
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Tianjin has been consistently lower than 100 - the base index value. This suggests that the ordinary residents in Tianjin, given the same number of working hours, rarely have been able to afford more goods and services than their counterparts in New York.

TOKYO

Japan

Expatriates: Cost of Living

Figure 97.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Tokyo, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

An alpha+ city, Tokyo has also served as Japan's capital since 1869. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 1st to the 8th position between 2005 and 2018 (see Figure 97a).

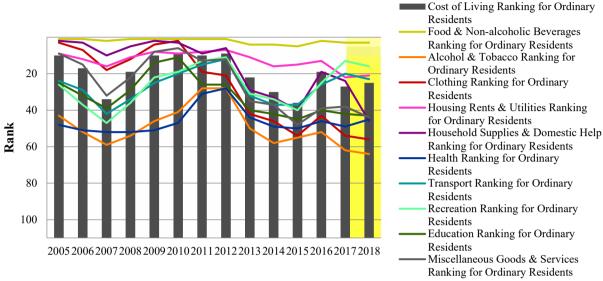
All of the city's consumption categories experienced a decrease in ranking across the study period. Between 2005 and 2018, the ranking for Alcohol & Tobacco fell the most, falling by 55 places from the 30th to the 85th spot, while the rankings for Health and Transport dropped by 31 places from the 22nd to the 53rd spot, and 30th to the 61st spot respectively.

TOKYO

Japan

Ordinary Residents: Cost of Living

Figure 97.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Tokyo, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, declined from the 10th position to the 9th position between 2005 and 2010. The ranking rose from the 10th position to the 19th between 2011 to 2016 and decreased from the 27th position to the 25th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in seven consumption categories across the study period. Between 2005 and 2010, the ranking for Household Supplies & Domestic Help decreased the most, falling by one place from the 2nd to the 3rd spot. On the other hand, the ranking for Education rose the most, climbing 14 places from the 25th to the 11th spot, while the ranking for Recreation rose by seven places from the 26th to the 19th spot. Food & Non-alcoholic Beverages and Housing Rents & Utilities did not change overall during this period.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services declined the most, falling by 26 places from the 13th to the 39th position, while the rankings for Alcohol & Tobacco and Clothing fell by 24 places from the 28th to the 52nd position, and 19th to the 43rd position respectively.

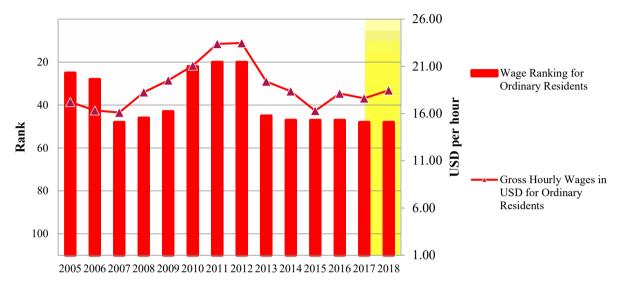
For the third sub-period, the city's cost of living ranking decreased in seven consumption categories across the study period. Between 2017 and 2018, the ranking for Household Supplies & Domestic Help fell the most, falling by 22 places from the 24th to the 46th spot, while the ranking for Miscellaneous Goods & Services declined by six places from the 38th to the 44th spot. On the other hand, the ranking for Health rose the most, climbing four places from the 49th to the 45th spot, while the ranking for Housing Rents & Utilities rose by one place from the 22nd to the 21st spot. Food & Non-alcoholic Beverages did not change overall during this period.

TOKYO

Japan

Ordinary Residents: Wage

Figure 97.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Tokyo, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Tokyo, as represented by the red line in Figure 97.c, dropped from 17.24 USD in 2005 to a low of 16.11 USD in 2007. It then increased to a high of 23.47 USD in 2012. Subsequently, it fell again to 16.29 USD in 2015 before, finally rising to 18.47 USD in 2018. The Wage Ranking for Ordinary Residents in Tokyo, as denoted by the red bars, improved from 25th to 48th across 2005 and 2018.

TOKYO

Japan

Ordinary Residents: Purchasing Power

Figure 97.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Tokyo, Japan



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Tokyo. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Tokyo are represented by the grey and red line respectively in Figure 97.d. In the first sub-period, Tokyo's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Tokyo was 82.59 percent that of their counterparts in New York. This climbed to 97.25 percent in 2010. However, the Wages Index for Ordinary Residents in Tokyo decreased from 124.1 to 104.65 in the same period.

The cost of living index climbed whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tokyo, as denoted by the green line in Figure 97.d, followed a general falling trend from 150.41 to 107.6 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Tokyo decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Tokyo, as denoted by the green bars in Figure 97.d, declined from the 37th to the 46th spot.

In the second sub-period, Tokyo's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Tokyo was 102.01 percent that of their counterparts in New York. This dropped to 62.19 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Tokyo fell from 113.2 to 74.5 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tokyo followed a general upward trend from 110.98 to 119.79 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Tokyo dropped from the 49th to the 51st spot.

For the third sub-period, Tokyo's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Tokyo was 61.93 percent that of their counterparts in New York. This increased to 62.85 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Tokyo climbed from 71.92 to 73.84 in the same period.

The cost of living index increased at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Tokyo followed a general upward trend from 116.14 to 117.49 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Tokyo climbed from the 54th to the 52nd position.

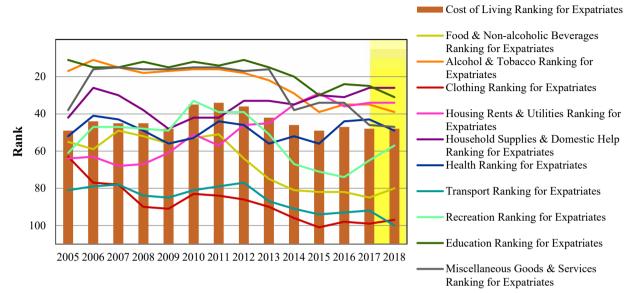
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Tokyo has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Tokyo, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

TORONTO

Canada

Expatriates: Cost of Living

Figure 98.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Toronto, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The current most populous city in Canada, Toronto is an international centre for business, finance, arts and culture. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, increased from the 49th to the 48th position between 2005 and 2018 (see Figure 98a).

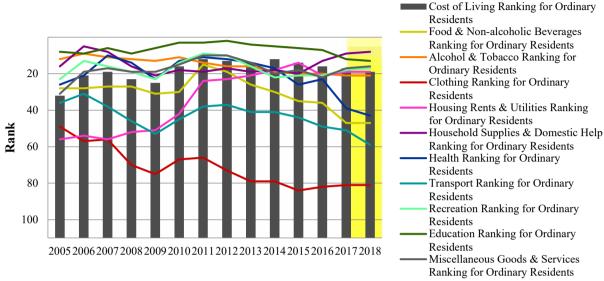
The city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing fell the most, falling by 34 places from the 63rd to the 97th spot, while the ranking for Food & Non-alcoholic Beverages declined by 25 places from the 55th to the 80th spot. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 30 places from the 64th to the 34th spot, while the ranking for Household Supplies & Domestic Help rose by 16 places from the 42nd to the 26th spot.

TORONTO

Canada

Ordinary Residents: Cost of Living

Figure 98.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Toronto, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 32nd spot to the 16th spot between 2005 and 2010. The ranking rose from the 12th spot to the 16th between 2011 to 2016 and increased from the 17th spot to the 19th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing decreased the most, falling by 18 places from the 49th to the 67th position, while the ranking for Transport fell by nine places from the 36th to the 45th position. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 16 places from the 31st to the 15th position, while the ranking for Housing Rents & Utilities increased by 14 places from the 56th to the 42nd position.

Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Food & Non-alcoholic Beverages dropped the most, falling by 21 places from the 15th to the 36th spot, while the ranking for Clothing decreased by 16 places from the 66th to the 82nd spot. On the other hand, the ranking for Household Supplies & Domestic Help increased the most,

climbing six places from the 19th to the 13th spot, while the ranking for Housing Rents & Utilities rose by three places from the 24th to the 21st spot.

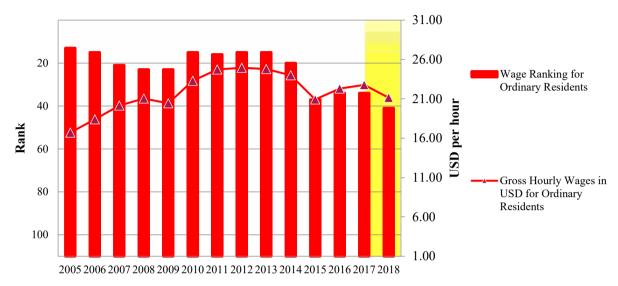
For the third sub-period, the city's cost of living ranking decreased in three consumption categories across the study period. Between 2017 and 2018, the ranking for Transport declined the most, falling by eight places from the 51st to the 59th position, while the ranking for Health decreased by four places from the 39th to the 43rd position. On the other hand, the rankings for Household Supplies & Domestic Help, Miscellaneous Goods & Services, and Recreation rose by one place from the 9th to the 8th position, 17th to the 16th position, and the 18th to the 17th position respectively. Alcohol & Tobacco, Clothing, Food & Non-alcoholic Beverages and Housing Rents & Utilities did not change overall during this period.

TORONTO

Canada

Ordinary Residents: Wage

Figure 98.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Toronto, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

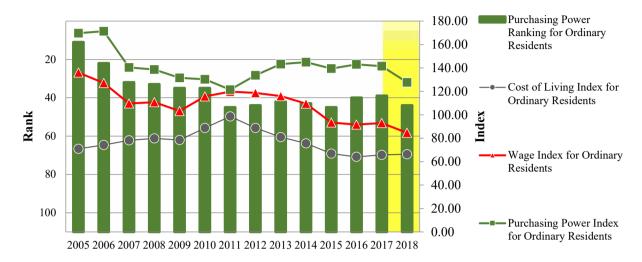
The Gross Hourly Wages in USD for Ordinary Residents in Toronto, as represented by the red line in Figure 98.c, rose from a low of 16.71 USD in 2005 to a high of 24.95 USD in 2012 before falling to 21.15 USD in 2018. The Wage Ranking for Ordinary Residents in Toronto, as denoted by the red bars, improved from 13th to 41st across 2005 and 2018.

TORONTO

Canada

Ordinary Residents: Purchasing Power

Figure 98.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Toronto, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Toronto. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Toronto are represented by the grey and red line respectively in Figure 98.d. In the first sub-period, Toronto's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Toronto was 70.98 percent that of their counterparts in New York. This climbed to 88.8 percent in 2010. However, the Wages Index for Ordinary Residents in Toronto declined from 136.02 to 115.69 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Toronto, as denoted by the green line in Figure 98.d, followed a general declining trend from 169.7 to 130.27 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Toronto dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Toronto, as denoted by the green bars in Figure 98.d, dropped from the 11th to the 35th spot.

In the second sub-period, Toronto's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Toronto was 98.62 percent that of their counterparts in New York. This decreased to 64.07 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Toronto decreased from 119.76 to 91.62 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Toronto followed a general upward trend from 121.44 to 142.99 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Toronto increased from the 45th to the 40th spot.

For the third sub-period, Toronto's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Toronto was 65.73 percent that of their counterparts in New York. This rose to 66.26 percent in 2018. However, the Wages Index for Ordinary Residents in Toronto decreased from 93.04 to 84.59 in the same period.

The cost of living index rose whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Toronto followed a general declining trend from 141.53 to 127.67 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Toronto declined from the 39th to the 44th position.

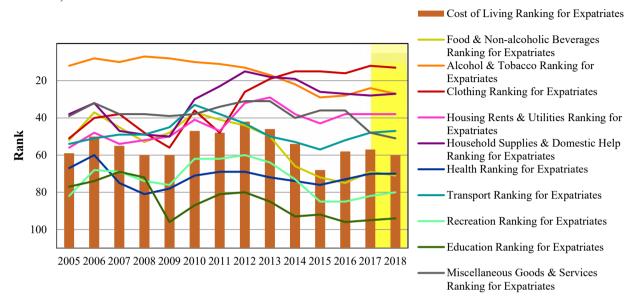
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Toronto has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Toronto, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

VANCOUVER

Canada

Expatriates: Cost of Living

Figure 99.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Vancouver, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Consistently named as one of the top five worldwide cities for livability and quality of life, Vancouver is currently the most populous city in the Canadian province of British Columbia. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, declined from the 59th to the 60th position between 2005 and 2018 (see Figure 99a).

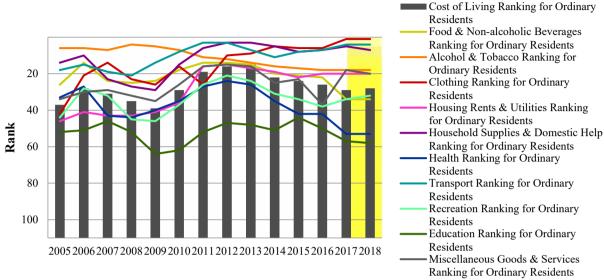
The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Food & Non-alcoholic Beverages declined the most, falling by 19 places from the 52nd to the 71st spot, while the ranking for Education decreased by 17 places from the 77th to the 94th spot. On the other hand, the ranking for Clothing rose the most, climbing 38 places from the 51st to the 13th spot, while the ranking for Housing Rents & Utilities rose by 18 places from the 56th to the 38th spot.

VANCOUVER

Canada

Ordinary Residents: Cost of Living

Figure 99.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Vancouver, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 37th spot to the 29th spot between 2005 and 2010. The ranking increased from the 19th spot to the 26th between 2011 to 2016 and decreased from the 29th spot to the 28th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Education fell the most, falling by 10 places from the 52nd to the 62nd position, while the ranking for Health declined by two places from the 33rd to the 35th position. On the other hand, the ranking for Clothing increased the most, climbing 26 places from the 42nd to the 16th position, while the rankings for Housing Rents & Utilities and Transport increased by 10 places from the 46th to the 36th position, and the 18th to the 8th position respectively.

Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services fell the most, falling by 21 places from the 16th to the 37th spot, while the ranking for Health dropped by 15 places from the 27th to the 42nd spot. On the other hand, the ranking for Clothing increased the most, climbing 20 places from the 26th to the 6th spot, while the ranking for Education rose by two places from the 52nd to the 50th spot.

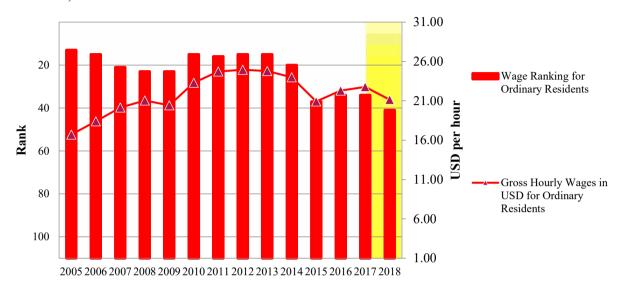
For the third sub-period, the city's cost of living ranking decreased in three consumption categories across the study period. Between 2017 and 2018, the rankings for Household Supplies & Domestic Help and Miscellaneous Goods & Services declined by two places from the 5th to the 7th spot, and 18th to the 20th spot respectively. On the other hand, the ranking for Recreation increased the most, climbing two places from the 34th to the 32nd spot. Alcohol & Tobacco, Clothing, Food & Non-alcoholic Beverages, Health, Housing Rents & Utilities and Transport did not change overall during this period.

VANCOUVER

Canada

Ordinary Residents: Wage

Figure 99.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Vancouver, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Vancouver, as represented by the red line in Figure 99.c, rose from a low of 16.71 USD in 2005 to a high of 24.95 USD in 2012 before dropping to 21.15 USD in 2018. The Wage Ranking for Ordinary Residents in Vancouver, as denoted by the red bars, increased from 13th to 41st across 2005 and 2018.

VANCOUVER

Canada

Ordinary Residents: Purchasing Power

Figure 99.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Vancouver, Canada



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Vancouver. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Vancouver are represented by the grey and red line respectively in Figure 99.d. In the first sub-period, Vancouver's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Vancouver was 68.06 percent that of their counterparts in New York. This climbed to 79.79 percent in 2010. However, the Wages Index for Ordinary Residents in Vancouver declined from 136.02 to 115.69 in the same period.

The cost of living index climbed whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Vancouver, as denoted by the green line in Figure 99.d, followed a general declining trend from 176.99 to 144.99 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Vancouver decreased relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Vancouver, as denoted by the green bars in Figure 99.d, dropped from the 8th to the 21st spot.

In the second sub-period, Vancouver's Cost of Living Index decreased overall. In 2011, the cost of living for ordinary residents in Vancouver was 89.55 percent that of their counterparts in New York. This decreased to 59.21 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Vancouver declined from 119.76 to 91.62 in the same period.

The cost of living index decreased at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Vancouver followed a general upward trend from 133.73 to 154.74 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Vancouver declined from the 31st to the 35th position.

For the third sub-period, Vancouver's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Vancouver was 60.77 percent that of their counterparts in New York. This increased to 62.5 percent in 2018. However, the Wages Index for Ordinary Residents in Vancouver dropped from 93.04 to 84.59 in the same period.

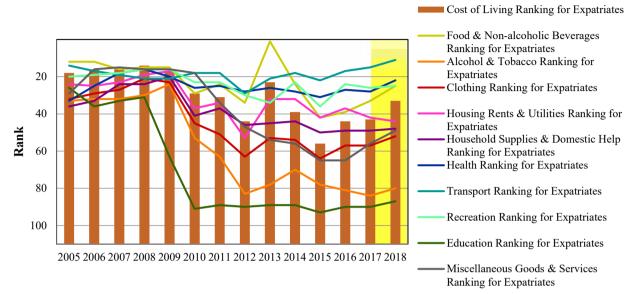
The cost of living index increased whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Vancouver followed a general downward trend from 153.09 to 135.33 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Vancouver fell from the 31st to the 41st spot.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Vancouver has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Vancouver, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

VIENNA Austria

Expatriates: Cost of Living

Figure 100.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Vienna, Austria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

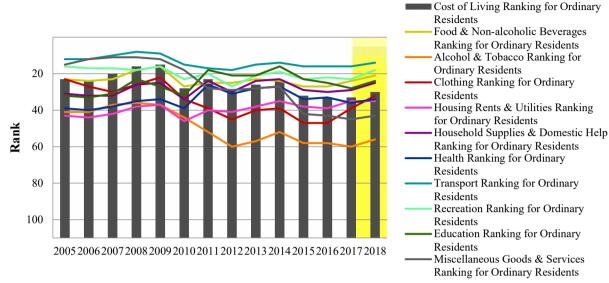
The national capital of Austria, Vienna is currently also its largest city. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 18th to the 33rd spot between 2005 and 2018 (see Figure 100a).

The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Education fell the most, falling by 61 places from the 26th to the 87th spot, while the ranking for Alcohol & Tobacco fell by 47 places from the 33rd to the 80th spot. On the other hand, the ranking for Health increased the most, climbing 11 places from the 33rd to the 22nd spot, while the ranking for Transport increased by three places from the 14th to the 11th spot.

VIENNA Austria

Ordinary Residents: Cost of Living

Figure 100.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Vienna, Austria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, climbed from the 23rd position to the 28th position between 2005 and 2010. The ranking climbed from the 23rd position to the 33rd between 2011 to 2016 and decreased from the 33rd position to the 30th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Clothing fell the most, falling by 11 places from the 23rd to the 34th position, while the ranking for Recreation declined by seven places from the 16th to the 23rd position. Education and Health did not change overall during this period.

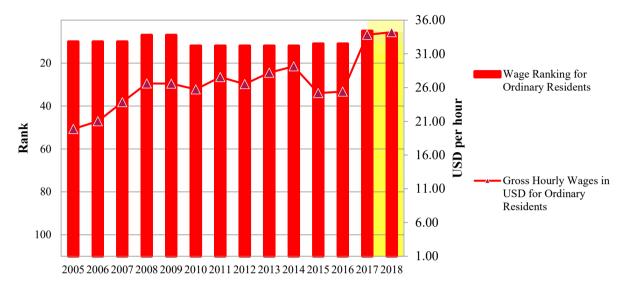
Over the second sub-period, the city's cost of living ranking decreased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Miscellaneous Goods & Services decreased the most, falling by 15 places from the 28th to the 43rd position, while the ranking for Clothing fell by eight places from the 39th to the 47th position. On the other hand, the rankings for Housing Rents & Utilities and Transport rose by one place from the 40th to the 39th position, and the 17th to the 16th position respectively.

For the third sub-period, the city's cost of living ranking increased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing rose the most, climbing seven places from the 39th to the 32nd position, while the ranking for Recreation increased by five places from the 23rd to the 18th position. Housing Rents & Utilities did not change overall during this period.

VIENNA Austria

Ordinary Residents: Wage

Figure 100.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Vienna, Austria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

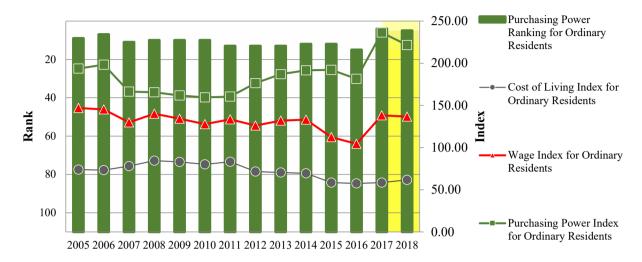
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Vienna, as represented by the red line in Figure 100.c, improved from a low of 19.87 USD in 2005 to a high of 34.21 USD in 2018. The Wage Ranking for Ordinary Residents in Vienna, as denoted by the red bars, dropped from 10th to 6th across 2005 and 2018.

VIENNA Austria

Ordinary Residents: Purchasing Power

Figure 100.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Vienna, Austria



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Vienna. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Vienna are represented by the grey and red line respectively in Figure 100.d. In the first sub-period, Vienna's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Vienna was 73.95 percent that of their counterparts in New York. This rose to 80.07 percent in 2010. However, the Wages Index for Ordinary Residents in Vienna decreased from 146.93 to 127.73 in the same period.

The cost of living index rose whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Vienna, as denoted by the green line in Figure 100.d, followed a general falling trend from 193.66 to 159.51 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Vienna fell relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Vienna, as denoted by the green bars in Figure 100.d, decreased from the 9th to the 10th position.

In the second sub-period, Vienna's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Vienna was 83.14 percent that of their counterparts in New York. This dropped to 57.51 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Vienna declined from 133.46 to 104.41 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Vienna followed a general rising trend from 160.53 to 181.55 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Vienna decreased from the 13th to the 15th spot.

For the third sub-period, Vienna's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Vienna was 58.44 percent that of their counterparts in New York. This rose to 61.74 percent in 2018. However, the Wages Index for Ordinary Residents in Vienna dropped from 138.15 to 136.81 in the same period.

The cost of living index rose whereas the wage index dropped over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Vienna followed a general downward trend from 236.4 to 221.59 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Vienna fell from the 4th to the 5th spot.

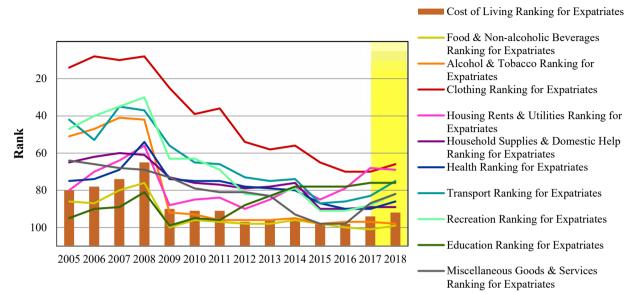
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Vienna has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Vienna, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

WARSAW

Poland

Expatriates: Cost of Living

Figure 101.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Warsaw, Poland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Warsaw is the capital of Poland and the largest city of Poland currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, decreased from the 80th to the 92nd position between 2005 and 2018 (see Figure 101a).

The city's cost of living ranking decreased in eight consumption categories across the study period. Between 2005 and 2018, the ranking for Clothing decreased the most, falling by 52 places from the 14th to the 66th spot, while the ranking for Alcohol & Tobacco declined by 47 places from the 51st to the 98th spot. On the other hand, the ranking for Education increased the most, climbing 19 places from the 95th to the 76th spot, while the ranking for Housing Rents & Utilities rose by 11 places from the 80th to the 69th spot.

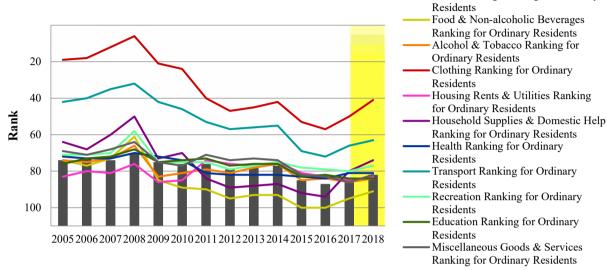
Cost of Living Ranking for Ordinary

WARSAW

Poland

Ordinary Residents: Cost of Living

Figure 101.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Warsaw, Poland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, increased from the 74th spot to the 76th spot between 2005 and 2010. The ranking rose from the 76th spot to the 87th between 2011 to 2016 and decreased from the 84th spot to the 82nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2005 and 2010, the ranking for Food & Non-alcoholic Beverages declined the most, falling by 15 places from the 74th to the 89th spot, while the ranking for Miscellaneous Goods & Services declined by eight places from the 69th to the 77th spot. On the other hand, the ranking for Education rose the most, climbing two places from the 76th to the 74th spot.

Over the second sub-period, all of the city's consumption categories experienced a decrease in ranking across the study period. Between 2011 and 2016, the ranking for Transport fell the most, falling by 19 places from the 53rd to the 72nd spot, while the ranking for Clothing fell by 17 places from the 40th to the 57th spot.

For the third sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2017 and 2018, the ranking for Clothing increased the most, climbing nine places from the 50th to the 41st spot, while the ranking for Household

Supplies & Domestic Help rose by six places from the 80th to the 74th spot. Education and Health did not change overall during this period.

WARSAW Poland

Ordinary Residents: Wage

Figure 101.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Warsaw, Poland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Warsaw, as represented by the red line in Figure 101.c, increased from a low of 4.09 USD in 2005 to a high of 7.06 USD in 2018. The Wage Ranking for Ordinary Residents in Warsaw, as denoted by the red bars, dropped from 66th to 64th across 2005 and 2018.

WARSAW

Poland

Ordinary Residents: Purchasing Power

Figure 101.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Warsaw, Poland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Warsaw. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Warsaw are represented by the grey and red line respectively in Figure 101.d. In the first sub-period, Warsaw's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Warsaw was 34.61 percent that of their counterparts in New York. This climbed to 39.69 percent in 2010. Similarly, the Wages Index for Ordinary Residents in Warsaw increased from 29.42 to 30.21 in the same period.

The cost of living index climbed at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Warsaw, as denoted by the green line in Figure 101.d, followed a general downward trend from 85.11 to 76.11 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Warsaw declined relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power Ranking for Ordinary Residents in Warsaw, as denoted by the green bars in Figure 101.d, rose from the 62nd to the 61st position.

In the second sub-period, Warsaw's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Warsaw was 38.18 percent that of their counterparts in New York. This declined to 23.8 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Warsaw decreased from 31.82 to 23.74 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Warsaw followed a general upward trend from 83.34 to 99.74 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Warsaw increased from the 62nd to the 61st position.

For the third sub-period, Warsaw's Cost of Living Index rose overall. In 2017, the cost of living for ordinary residents in Warsaw was 26.37 percent that of their counterparts in New York. This rose to 27.78 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Warsaw climbed from 26.66 to 28.25 in the same period.

The cost of living index rose at a slower rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Warsaw followed a general upward trend from 101.09 to 101.71 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Warsaw remained the same at the 60th position.

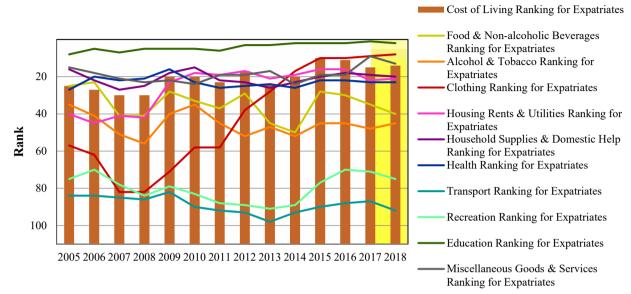
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Warsaw has been higher than 100 - the base index value some of the time. This suggests that the ordinary residents in Warsaw, given the same number of working hours, some of the time, have been able to afford more goods and services than their counterparts in New York.

WASHINGTON DC

United States

Expatriates: Cost of Living

Figure 102.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Washington DC, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Washington DC is the capital of United States and an important world political capital, being the seat of the United States federal government and several other important international organisations. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 25th to the 14th spot between 2005 and 2018 (see Figure 102a).

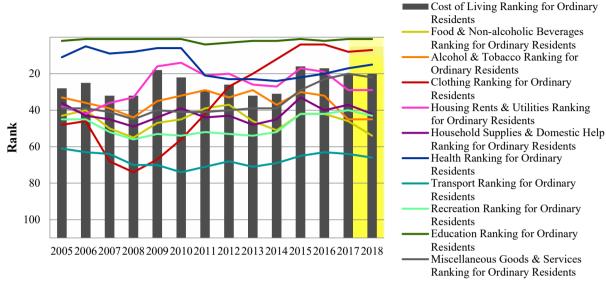
The city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Food & Non-alcoholic Beverages dropped the most, falling by 15 places from the 25th to the 40th position, while the ranking for Alcohol & Tobacco decreased by 10 places from the 35th to the 45th position. On the other hand, the ranking for Clothing increased the most, climbing 49 places from the 57th to the 8th position, while the ranking for Housing Rents & Utilities rose by 19 places from the 40th to the 21st position. Recreation did not change overall during this period.

WASHINGTON DC

United States

Ordinary Residents: Cost of Living

Figure 102.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Washington DC, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, dropped from the 28th position to the 22nd position between 2005 and 2010. The ranking declined from the 29th position to the 17th between 2011 to 2016 and remained the same from the 20th position to the 20th between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2005 and 2010, the ranking for Transport declined the most, falling by 13 places from the 61st to the 74th position, while the ranking for Recreation decreased by nine places from the 45th to the 54th position. On the other hand, the ranking for Housing Rents & Utilities rose the most, climbing 24 places from the 38th to the 14th position, while the ranking for Health increased by five places from the 11th to the 6th position.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the rankings for Alcohol & Tobacco and Food & Non-alcoholic Beverages fell by three places from the 29th to the 32nd spot, and 39th to the 42nd spot respectively. On the other hand, the ranking for Clothing increased the most, climbing 38 places from the 42nd to the 4th spot, while the ranking for Miscellaneous Goods & Services rose by 18 places from the 41st to the 23rd spot.

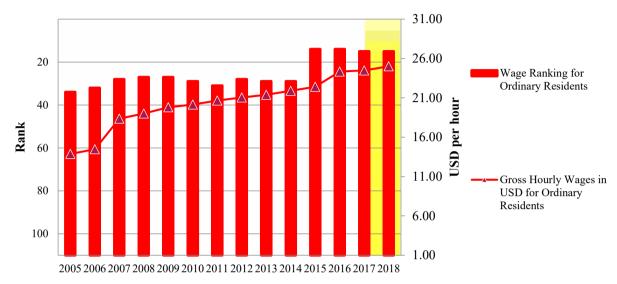
For the third sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Food & Non-alcoholic Beverages declined the most, falling by eight places from the 46th to the 54th position, while the ranking for Household Supplies & Domestic Help decreased by five places from the 37th to the 42nd position. On the other hand, the ranking for Health increased the most, climbing two places from the 17th to the 15th position, while the ranking for Clothing rose by one place from the 8th to the 7th position. Alcohol & Tobacco, Education and Housing Rents & Utilities did not change overall during this period.

WASHINGTON DC

United States

Ordinary Residents: Wage

Figure 102.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Washington DC, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

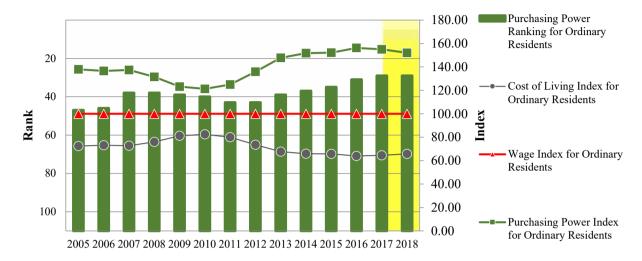
The Gross Hourly Wages in USD for Ordinary Residents in Washington DC, as represented by the red line in Figure 102.c, rose from a low of 13.87 USD in 2005 to a high of 25.01 USD in 2018. The Wage Ranking for Ordinary Residents in Washington DC, as denoted by the red bars, dropped from 34th to 15th across 2005 and 2018. It should be noted that since wage data is only available at the national level, this study assumes that all cities in the same country have the same wage. As such, Washington DC is assumed to have the same wage level and Wage Index for Ordinary Residents as the other US cities.

WASHINGTON DC

United States

Ordinary Residents: Purchasing Power

Figure 102.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Washington DC, United States



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Washington DC. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Washington DC are represented by the grey and red line respectively in Figure 102.d. As mentioned earlier, cities within the same country are assumed to have the same wage level. Since New York and Washington DC belong to the same country, its Wages Index for Ordinary Residents will remain consistently at the base level, 100.00, for the course of the study period. This also means that the Purchasing Power Index for Ordinary Residents in Washington DC will only be affected by changes in the city's Cost of Living Index.

In the first sub-period, Washington DC's Cost of Living Index climbed overall. In 2005, the cost of living for ordinary residents in Washington DC was 72.48 percent that of their counterparts in New York. This climbed to 82.44 percent in 2010. As a result, the Purchasing Power Index for Ordinary Residents in Washington DC, as denoted by the green line in Figure 102.d, followed a general downward trend from 137.97 to 121.29 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Washington DC dropped relative to that of their New York counterparts over the first sub-period. However, the Purchasing Power

Ranking for Ordinary Residents in Washington DC, as denoted by the green bars in Figure 102.d, increased from the 47th to the 40th position.

In the second sub-period, Washington DC's Cost of Living Index declined overall. In 2011, the cost of living for ordinary residents in Washington DC was 79.98 percent that of their counterparts in New York. This declined to 64.01 percent in 2016.

As a result, the Purchasing Power Index for Ordinary Residents in Washington DC followed a general upward trend from 125.03 to 156.23 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Washington DC increased from the 43rd to the 31st position.

For the third sub-period, Washington DC's Cost of Living Index increased overall. In 2017, the cost of living for ordinary residents in Washington DC was 64.51 percent that of their counterparts in New York. This increased to 65.77 percent in 2018.

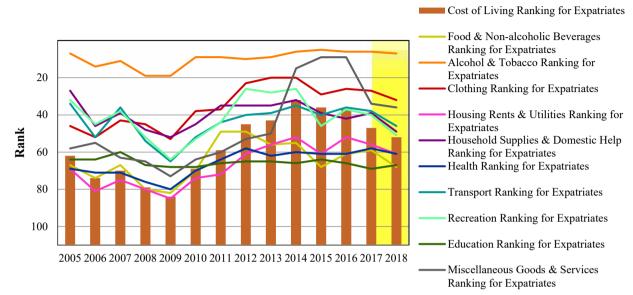
As a result, the Purchasing Power Index for Ordinary Residents in Washington DC followed a general downward trend from 155.02 to 152.05 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Washington DC remained the same at the 29th position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Washington DC has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Washington DC, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

New Zealand

Expatriates: Cost of Living

Figure 103.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Wellington, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

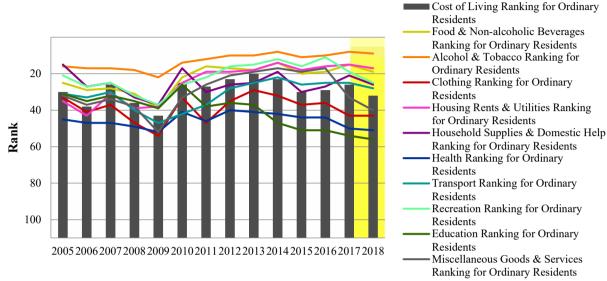
Wellington is the capital of New Zealand and the second-most populous urban area in New Zealand currently. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 62nd to the 52nd spot between 2005 and 2018 (see Figure 103a).

The city's cost of living ranking decreased in five consumption categories across the study period. Between 2005 and 2018, the ranking for Household Supplies & Domestic Help decreased the most, falling by 22 places from the 27th to the 49th spot, while the ranking for Recreation fell by 19 places from the 32nd to the 51st spot. On the other hand, the ranking for Miscellaneous Goods & Services rose the most, climbing 22 places from the 58th to the 36th spot, while the ranking for Clothing rose by 14 places from the 46th to the 32nd spot. Alcohol & Tobacco did not change overall during this period.

New Zealand

Ordinary Residents: Cost of Living

Figure 103.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Wellington, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, fell from the 30th position to the 25th position between 2005 and 2010. The ranking rose from the 27th position to the 29th between 2011 to 2016 and climbed from the 26th position to the 32nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in five consumption categories across the study period. Between 2005 and 2010, the ranking for Transport fell the most, falling by 11 places from the 31st to the 42nd spot, while the ranking for Recreation declined by five places from the 21st to the 26th spot. On the other hand, the ranking for Housing Rents & Utilities increased the most, climbing 10 places from the 35th to the 25th spot, while the ranking for Education rose by five places from the 31st to the 26th spot. Clothing did not change overall during this period.

Over the second sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2011 and 2016, the ranking for Education dropped the most, falling by 13 places from the 38th to the 51st spot, while the ranking for Food & Non-alcoholic Beverages fell by three places from the 16th to the 19th spot. On the other hand, the ranking for Transport rose the most, climbing 12 places from the 37th to

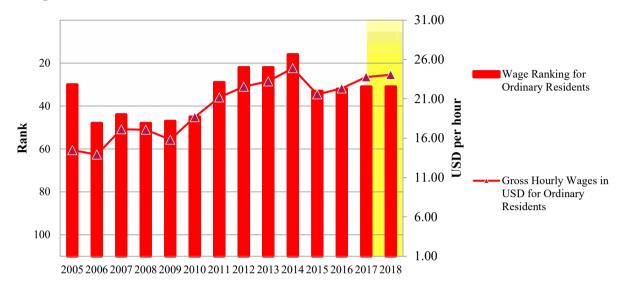
the 25th spot, while the rankings for Clothing and Recreation increased by 11 places from the 47th to the 36th spot, and the 22nd to the 11th spot respectively.

For the third sub-period, the city's cost of living ranking decreased in nine consumption categories across the study period. Between 2017 and 2018, the ranking for Miscellaneous Goods & Services dropped the most, falling by seven places from the 33rd to the 40th position, while the ranking for Recreation fell by six places from the 19th to the 25th position. Clothing did not change overall during this period.

New Zealand

Ordinary Residents: Wage

Figure 103.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Wellington, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

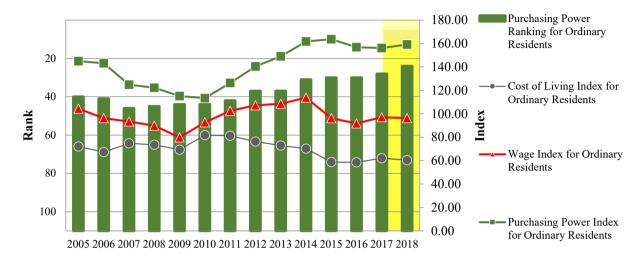
Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Wellington, as represented by the red line in Figure 103.c, decreased from 14.49 USD in 2005 to a low of 13.91 USD in 2006. It then improved to a high of 24.9 USD in 2014 before, finally, dropping to 24.06 USD in 2018. The Wage Ranking for Ordinary Residents in Wellington, as denoted by the red bars, increased from 30th to 31st across 2005 and 2018.

New Zealand

Ordinary Residents: Purchasing Power

Figure 103.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Wellington, New Zealand



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Wellington. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Wellington are represented by the grey and red line respectively in Figure 103.d. In the first sub-period, Wellington's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Wellington was 72.02 percent that of their counterparts in New York. This rose to 81.81 percent in 2010. However, the Wages Index for Ordinary Residents in Wellington declined from 104.31 to 92.75 in the same period.

The cost of living index rose whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Wellington, as denoted by the green line in Figure 103.d, followed a general declining trend from 144.98 to 113.38 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Wellington dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Wellington, as denoted by the green bars in Figure 103.d, declined from the 40th to the 44th spot.

In the second sub-period, Wellington's Cost of Living Index fell overall. In 2011, the cost of living for ordinary residents in Wellington was 81.21 percent that of their counterparts in New York. This fell to 58.53 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Wellington declined from 102.57 to 91.77 in the same period.

The cost of living index fell at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Wellington followed a general rising trend from 126.3 to 156.79 between 2011 and 2016. Similarly, the Purchasing Power Ranking for Ordinary Residents in Wellington climbed from the 42nd to the 30th spot.

For the third sub-period, Wellington's Cost of Living Index declined overall. In 2017, the cost of living for ordinary residents in Wellington was 62.14 percent that of their counterparts in New York. This declined to 60.45 percent in 2018. Similarly, the Wages Index for Ordinary Residents in Wellington decreased from 97.07 to 96.2 in the same period.

The cost of living index declined at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Wellington followed a general upward trend from 156.21 to 159.14 between 2017 and 2018. Similarly, the Purchasing Power Ranking for Ordinary Residents in Wellington rose from the 28th to the 24th spot.

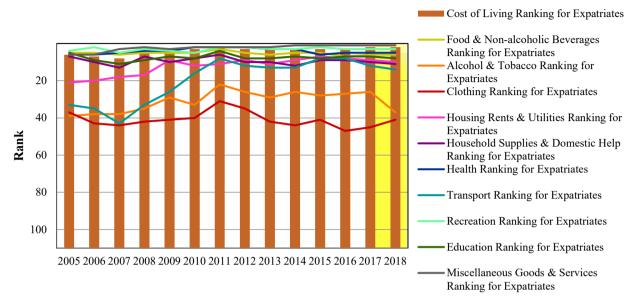
Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Wellington has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Wellington, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.

ZURICH

Switzerland

Expatriates: Cost of Living

Figure 104.a: Cost of Living and 10 Consumption Categories Rankings for Expatriates in Zurich, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Zurich is currently the largest city in Switzerland and is often named the city with the best quality of life in the world. The city's Cost of Living Ranking for Expatriates, as represented by the orange bars, climbed from the 6th to the 2nd spot between 2005 and 2018 (see Figure 104a).

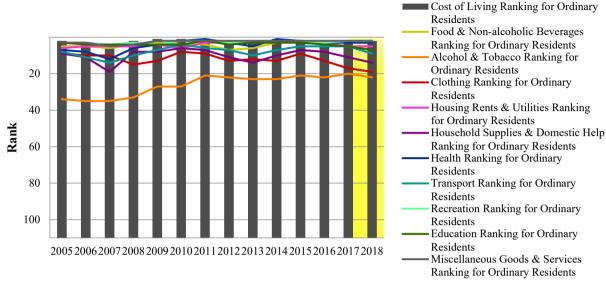
The city's cost of living ranking increased in six consumption categories across the study period. Between 2005 and 2018, the rankings for Clothing and Household Supplies & Domestic Help decreased by four places from the 37th to the 41st spot, and 7th to the 11th spot respectively. On the other hand, the ranking for Transport rose the most, climbing 19 places from the 33rd to the 14th spot, while the ranking for Housing Rents & Utilities increased by 11 places from the 21st to the 10th spot.

ZURICH

Switzerland

Ordinary Residents: Cost of Living

Figure 104.b: Cost of Living and 10 Consumption Categories Rankings for Ordinary Residents in Zurich, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The city's Cost of Living Ranking for Ordinary Residents, as represented by the grey bars, decreased from the 2nd position to the 1st position between 2005 and 2010. The ranking rose from the 1st position to the 3rd between 2011 to 2016 and remained the same from the 2nd position to the 2nd between 2017 to 2018. For a more rigorous comparison of the rankings, we have split the analysis into three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

In the first sub-period, the city's cost of living ranking increased in eight consumption categories across the study period. Between 2005 and 2010, the ranking for Education fell the most, falling by one place from the 3rd to the 4th spot. On the other hand, the ranking for Alcohol & Tobacco rose the most, climbing seven places from the 34th to the 27th spot, while the ranking for Health increased by five places from the 7th to the 2nd spot. Housing Rents & Utilities did not change overall during this period.

Over the second sub-period, the city's cost of living ranking decreased in six consumption categories across the study period. Between 2011 and 2016, the ranking for Clothing fell the most, falling by four places from the 9th to the 13th position, while the rankings for Education and Health dropped by two places from the 2nd to the 4th position, and 1st to the 3rd position respectively. On the other hand, the rankings for Food & Non-alcoholic Beverages and Transport increased by one place from the 4th to the 3rd position, and the 6th to the 5th

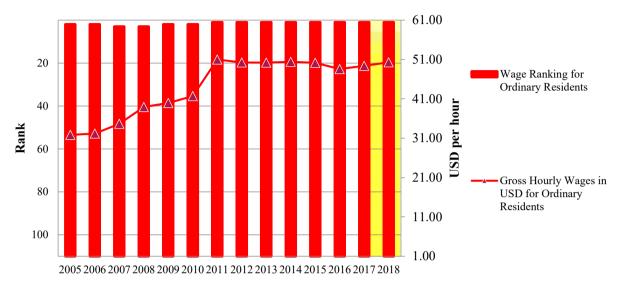
position respectively. Housing Rents & Utilities and Miscellaneous Goods & Services did not change overall during this period.

For the third sub-period, the city's cost of living ranking decreased in five consumption categories across the study period. Between 2017 and 2018, the ranking for Transport decreased the most, falling by four places from the 5th to the 9th position, while the ranking for Household Supplies & Domestic Help declined by three places from the 11th to the 14th position. Food & Non-alcoholic Beverages, Health, Housing Rents & Utilities, Miscellaneous Goods & Services and Recreation did not change overall during this period.

ZURICH Switzerland

Ordinary Residents: Wage

Figure 104.c: Gross Hourly Wages in USD and Wage Rankings for Ordinary Residents in Zurich, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

The Gross Hourly Wages in USD for Ordinary Residents in Zurich, as represented by the red line in Figure 104.c, increased from a low of 31.85 USD in 2005 to a high of 50.98 USD in 2011 before dropping to 50.3 USD in 2018. The Wage Ranking for Ordinary Residents in Zurich, as denoted by the red bars, decreased from 2nd to 1st across 2005 and 2018.

ZURICH

Switzerland

Ordinary Residents: Purchasing Power

Figure 104.d: Cost of Living, Wage and Purchasing Power Indices and Purchasing Power Ranking for Ordinary Residents in Zurich, Switzerland



Note: The analysis covers 103 cities for the 2005-2012 period, 105 cities for the 2013-2016 period and 104 cities for the 2017 to 2018 period.

Source: Asia Competitiveness Institute

Let us now analyse the cost of living and wage indices more closely to draw conclusions about the purchasing power of ordinary residents in Zurich. For a more precise and rigorous analysis, we discuss the results in three sub-periods: from 2005 to 2010, 2011 to 2016, and from 2017 to 2018.

The Cost of Living Index and the Wages Index for Ordinary Residents in Zurich are represented by the grey and red line respectively in Figure 104.d. In the first sub-period, Zurich's Cost of Living Index rose overall. In 2005, the cost of living for ordinary residents in Zurich was 101.44 percent that of their counterparts in New York. This rose to 115.53 percent in 2010. However, the Wages Index for Ordinary Residents in Zurich declined from 229.25 to 206.91 in the same period.

The cost of living index rose whereas the wage index declined over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Zurich, as denoted by the green line in Figure 104.d, followed a general downward trend from 226.29 to 179.09 between 2005 and 2010. In other words, the purchasing power of ordinary residents in Zurich dropped relative to that of their New York counterparts over the first sub-period. Similarly, the Purchasing Power Ranking for Ordinary Residents in Zurich, as denoted by the green bars in Figure 104.d, dropped from the 4th to the 5th spot.

In the second sub-period, Zurich's Cost of Living Index dropped overall. In 2011, the cost of living for ordinary residents in Zurich was 128.37 percent that of their counterparts in New York. This dropped to 91.32 percent in 2016. Similarly, the Wages Index for Ordinary Residents in Zurich declined from 246.85 to 199.61 in the same period.

The cost of living index dropped at a faster rate than the wage index in this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Zurich followed a general rising trend from 192.3 to 218.58 between 2011 and 2016. However, the Purchasing Power Ranking for Ordinary Residents in Zurich decreased from the 3rd to the 4th position.

For the third sub-period, Zurich's Cost of Living Index remained the same overall. In 2017, the cost of living for ordinary residents in Zurich was 90.64 percent that of their counterparts in New York. This remained the same at 90.64 percent in 2018. However, the Wages Index for Ordinary Residents in Zurich decreased from 201.66 to 201.14 in the same period.

The cost of living index remained the same whereas the wage index decreased over this sub-period. As a result, the Purchasing Power Index for Ordinary Residents in Zurich followed a general falling trend from 222.49 to 221.9 between 2017 and 2018. However, the Purchasing Power Ranking for Ordinary Residents in Zurich rose from the 5th to the 4th position.

Finally, we note that over the course of the study period (2005 to 2018), the Purchasing Power Index for Ordinary Residents in Zurich has been consistently higher than 100 - the base index value. This suggests that the ordinary residents in Zurich, given the same number of working hours, most of the time, have been able to afford more goods and services than their counterparts in New York.