

2025 Annual Indices for
Expatriates and Ordinary Residents on

Cost of Living, Wages and Purchasing Power for World's Major Cities

Liang Zixuan Mukund Kishore

2025 Annual Indices for Expatriates and Ordinary Residents on Cost of Living, Wages and Purchasing Power for World's Major Cities

Liang Zixuan

Mukund Kishore

If you would like to request for an e-copy of the whole book, please drop us an email at

aci@nus.edu.sg

Published by

Asia Competitiveness Institute
Lee Kuan Yew School of Public Policy
National University of Singapore

469C Bukit Timah Road
Wing A, Level 3, Oei Tiong Ham Building
Singapore 259772

**2025 Annual Indices for Expatriates and Ordinary Residents on Cost of Living,
Wages and Purchasing Power for World's Major Cities**

Copyright © 2026 by Asia Competitiveness Institute
Lee Kuan Yew School of Public Policy
National University of Singapore

All rights reserved. This book, or parts thereof, may not be reproduced or modified in any form, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the publisher.

ISBN 978-981-17900-4-1 (PDF)

Desk Editor: DW HQ Private Limited
Email: hello@dwhq.com.sg

Typeset by Jing Zhi Lim

About ACI

The Asia Competitiveness Institute (ACI) was established in August 2006 as a research centre at the Lee Kuan Yew School of Public Policy (LKYSPP), National University of Singapore (NUS). It aims to build intellectual leadership and network for understanding and developing competitiveness and sustainable growth in Asia. ACI seeks to contribute to the enhancement of inclusive growth, living standards, and institutional governance through competitiveness research on sub-national economies in Asia. It identifies mitigating issues and challenges for potential public policy interventions through close collaboration with regional governments, business corporations, policy think tanks, and academics. ACI's three key research pillars include (i) sub-national economies level competitiveness analysis, (ii) emerging sustainable development landscape in 16 Asia economies, and (iii) Asia's long-term growth strategies and public policy analysis.

ACI's value propositions may be encapsulated in its acronym:

Analytical inputs to initiate policies for policy-makers and business leaders in Asia

Capacity building to enable others through improvement in productivity and efficiency

Intellectual leadership to create pragmatic models of competitiveness and inclusive growth

Vision and Mission

- ACI's over-arching vision is to build up its research credibility with policy impact, contributing as a professional, world-class think-tank.
- ACI's mission is to establish our niche as a leading policy think-tank by identifying development trends, opportunities, and challenges among Asian economies and business corporations.
- ACI endeavours to articulate sound recommendations, promote discussion, and shape research agenda in the arena of public policy amongst Asian governments.
- ACI undertakes evidence-based analysis of public policy issues and decisions, in order to provide assessment of their effectiveness as well as economic and societal impact

Contents

About the Authors	viii
Foreword	ix
1 Introduction to Cost of Living, Wages and Purchasing Power for Expatriates and Ordinary Residents	1
1.1 Background and Research Motivation	1
1.2 Literature Review	4
1.3 Summary of Key Findings	6
1.3.1 Geographical Distribution by Living Costs and Purchasing Power	7
1.3.2 Relationships between Cost of Living, Purchasing Power, Liveability and Economic Competitiveness	12
1.4 Contributions and Chapter Organisation	12
2 Cost of Living for Expatriates	18
2.1 Methodology on Cost of Living for Expatriates	18
2.1.1 Data Sources	19
2.1.2 Assumptions	20
2.1.3 Prices Data	20
2.1.4 Weights Data	22
2.1.5 ACI Cost of Living Index and Ranking for Expatriates	28
2.1.6 ACI Consumption Categories Indices and Rankings for Expatriates	29
2.2 Results and Findings	30
2.2.1 Top-25 and Bottom-25 Cities in the Cost of Living Ranking for Expatriates	30
2.2.2 Region-specific Analysis of the Cost of Living Ranking for Expatriates	31
2.2.3 Analysis on Cost of Living for Expatriates in Major Financial Centres	33
2.2.4 Trends of Cost of Living for Expatriates in the 103 Cities, 2005-2024	34
3 Cost of Living, Wages and Purchasing Power for Ordinary Residents	41
3.1 Methodology for Cost of Living, Wages and Purchasing Power for Ordinary Residents	41
3.1.1 Data Sources	42

3.1.2	Assumptions	43
3.1.3	ACI Cost of Living Index and Ranking for Ordinary Residents	43
3.1.4	ACI Consumption Categories Indices and Rankings for Ordinary Residents	47
3.1.5	ACI Wage Index and Ranking for Ordinary Residents	50
3.1.6	ACI Purchasing Power Index and Ranking for Ordinary Residents	52
3.2	Results and Findings	52
3.2.1	Top-25 and Bottom-25 Cities in terms of Cost of Living, Wages and Purchasing Power for Ordinary Residents	52
3.2.2	Region-specific Analysis on Cost of Living, Wages and Purchasing Power for Ordinary Residents	57
3.2.3	Trends of Cost of Living, Wages and Purchasing Power for Ordinary Residents in the 104 Cities, 2005-2023	60
4	Forecasting Cost of Living Indices Using Time-Series Approaches	76
4.1	Introduction	76
4.2	Data & Methodology	77
4.2.1	Data Sources	77
4.2.2	Data Processing	78
4.2.3	Forecasting Models	78
4.2.4	Performance Metrics	80
4.2.5	ACI Cost of Living Index	80
4.3	Main Results	81
4.3.1	Forecasting Models	81
4.3.2	Inflation Rates	82
4.3.3	Cost of Living Ranking	82
4.4	Discussion	83
4.5	Conclusion	87
	Acronyms	102
	Bibliography	103

List of Figures

- 1.1 Inflation Rate of Consumer Prices, 2024 2
- 1.2 City Population in 2025 3
- 1.3 ACI's Cost of Living Index for Ordinary Residents across 103 Major Cities in the World in 2024 by Geographical Regions 9
- 1.4 ACI's Cost of Living Index for Expatriates across 103 Major Cities in the World in 2024 by Geographical Regions 10
- 1.5 ACI's Purchasing Power Index for Ordinary Residents across 103 Major Cities in the World in 2024 by Geographical Regions 11

- 2.1 The 10 ACI Consumption Categories 19

- 3.1 The 10 ACI Consumption Categories for Ordinary Residents 42

- 4.1 Autocorrelations 97
- 4.2 Consumer Price Index of Food and Non-Alcoholic Beverages in the United States 98
- 4.3 Consumer Price Index of Alcohol and Tobacco in the United States 99
- 4.4 Consumer Price Index of Transport in the United States 100
- 4.5 Bilateral Exchange Rates Relative to US Dollar in Nominal Terms 101

List of Tables

1.1	List of Cities Covered in the 2024 ACI Annual Indices on Cost of Living, Wages and Purchasing Power	13
2.1	ACI Consumption Categories, ICP Categories and Weights	22
2.2	Weight of Each Item within the Cost of Living Index for Expatriates, 2023 and 2024	23
2.3	Top-25 Cities in the Latest ACI's Cost of Living Ranking for Expatriates	31
2.4	Bottom-25 Cities in the Latest ACI's Cost of Living Ranking for Expatriates	32
2.5	Distribution of Cost of Living Ranking for Expatriates by Geographical Region	33
2.6	Cost of Living Ranking and Selected Consumption Categories Rankings for Expatriates in Six Major Financial Centres in 2024	34
2.7	Cost of Living Rankings and Indices for Expatriates in 103 Major Cities in the World	36
3.1	Top-25 Cities in the Latest ACI's Cost of Living Ranking for Ordinary Residents	53
3.2	Bottom-25 Cities in the Latest ACI's Cost of Living Ranking for Ordinary Residents	54
3.3	Top-25 Cities in the Latest ACI's Wage Ranking for Ordinary Residents	55
3.4	Bottom-25 Cities in the Latest ACI's Wage Ranking for Ordinary Residents	56
3.5	Top-25 Cities in the Latest ACI's Purchasing Power Ranking for Ordinary Residents	57
3.6	Bottom-25 Cities in the Latest ACI's Purchasing Power Ranking for Ordinary Residents	58
3.7	Distribution of Cost of Living Rankings for Ordinary Residents by Geographical Region	58
3.8	Distribution of Wage Rankings for Ordinary Residents by Geographical Region	59
3.9	Distribution of Purchasing Power Rankings for Ordinary Residents by Geographical Region	59
3.10	Cost of Living Rankings and Indices for Ordinary Residents in 103 Major Cities in the World	61
3.11	Wage Rankings and Gross Hourly Wages in USD for Ordinary Residents in 103 Major Cities in the World	66

3.12	Purchasing Power Rankings and Indices for Ordinary Residents in 103 Major Cities in the World	71
4.1	Unit Root Test	81
4.2	Performance Metrics	82
4.3	Annual Inflation Rates by Category in the United States	83
4.4	Top 10 Cities in Cost of Living Ranking for Expatriates	84
4.5	Bottom 10 Cities in Cost of Living Ranking for Expatriates	84
4.6	Top 10 Cities in Cost of Living Ranking for Ordinary Residents	85
4.7	Bottom 10 Cities in Cost of Living Ranking for Ordinary Residents	85
4.8	Cost of Living Indices and Rankings by Category	86
4.9	List of Cities Covered in the 2025 ACI Annual Cost of Living Forecast	88
4.10	2025 Annual Inflation Rates by Category	90
4.11	2025 Annual Inflation Rates by Category (continued)	91
4.12	Annual Inflation Rates For All Items	92
4.13	Cost of Living Rankings and Indices for Expatriates in 45 Major Cities	93
4.13	Cost of Living Rankings and Indices for Expatriates (continued)	94
4.14	Cost of Living Rankings and Indices for Ordinary Residents	95
4.14	Cost of Living Rankings and Indices for Ordinary Residents (continued)	96

About the Authors

Liang Zixuan is a Research Fellow at the Asia Competitiveness Institute , Lee Kuan Yew School of Public Policy, National University of Singapore . He obtained a PhD degree in Economics from National University of Singapore (NUS) in 2024. He oversees the annual cost of living indices for expatriates and ordinary residents project at ACI. His research interest lies in macroeconomics, with a particular focus on the impact of fertility, human capital, and general-purpose technologies on economic growth in advanced economies.

Mukund Kishore is a Research Analyst at the Asia Competitiveness Institute , Lee Kuan Yew School of Public Policy, National University of Singapore. He holds a Master of Science in Economics from NUS. At ACI, he works on the Institute's Cost of Living indices for expatriates and ordinary residents as well as on the Indian subnational competitiveness project. His research interests include development economics, monetary economics, and digital trade. Prior to joining ACI, he interned as an Economist Intern at Oxford Economics and worked as a research assistant on projects related to trade, development, and political economy.

Foreword

The Annual Indices for Expatriates and Ordinary Residents on Cost of Living, Wages and Purchasing Power for World’s Major Cities is one of ACI’s flagship projects. Since its inception in 2014, the institute has constructed city-level indices and rankings since 2005 to the present. This edition reports results for 2005-2024, continuing to provide consistent and comparable measures of urban living costs.

In recent years, affordability has emerged as a global concern. While the public continues to highlight a cost-of-living crisis, aggregate inflation data suggest moderation following the peaks of 2022–2023. The coexistence of relatively moderate inflation and persistent perceptions of unaffordability underscores the need for a more granular analysis. Meanwhile, ongoing urbanisation has widened disparities within countries, particularly between urban and rural areas, making city-based calculations of living costs increasingly relevant.

Against this background, this annual study analyses the cost of living, wages and purchasing power for expatriates and ordinary residents across 103 major cities in the world. In this edition, New York, Los Angeles, Zurich, Geneva, and Singapore are the top five cities in the ranking for expatriates’ living costs. However, for ordinary residents, the top five cities are New York, Los Angeles, Zurich, Reykjavik, and Geneva. These findings highlight both the concentration of high living costs in global economic hubs and the variation in affordability across different regions.

With the discontinuation of the EIU’s Cost of Living Survey from 2025 onward, this edition also incorporates time-series forecasting approaches to project future cost-of-living indices. This methodological extension supports the continuity of the annual publication in the years ahead.

This report is a useful reference for multinational corporations, human resources managers, policymakers, researchers and analysts concerned with standards of living and quality of life of urban dwellers. I am confident that the insights shared in this publication will enable each city to better its urban conditions.

Professor Paul Cheung
Director, ACI

Lee Kuan Yew School of Public Policy
National University of Singapore

1 Introduction to Cost of Living, Wages and Purchasing Power for Expatriates and Ordinary Residents

1.1 Background and Research Motivation

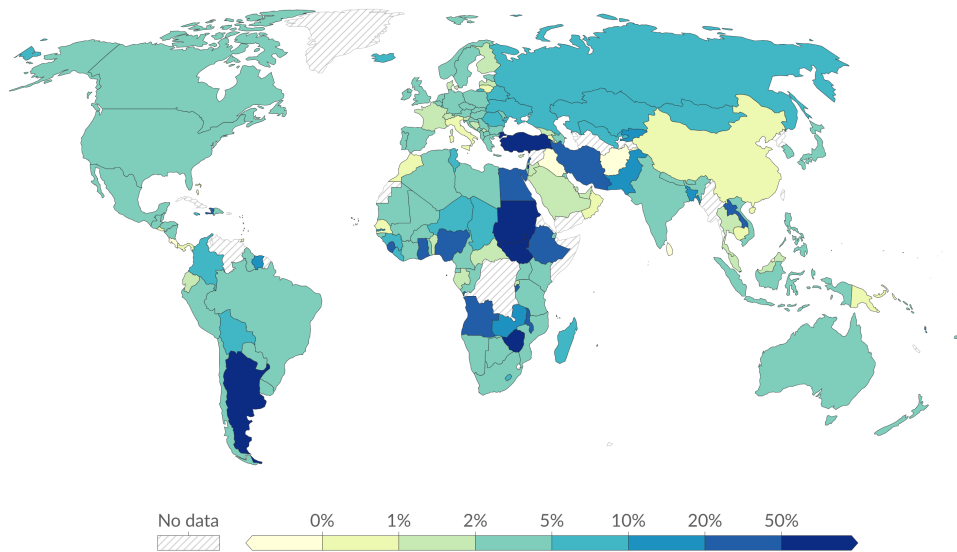
Affordability, the extent to which individuals and households can purchase essential goods and services, has become a global concern. In 2025, from Zohran Mamdani's mayoral campaign aimed at making New York more affordable to protests driven by economic frustrations in Indonesia, rising prices have emerged as a key source of voter dissatisfaction, social unrest, and political instability around the world.

Although the global affordability crisis is prominent in public discourse, it is less evident in aggregate data. As shown in Figure 1.1, the inflation rates of consumer prices in most countries fell below 5% in 2024, decreasing dramatically from their peak in 2022-2023. The coexistence of moderate inflation and persistent perceptions of unaffordability underscores the need for a more detailed cost-of-living analysis. Moreover, country-level inflation rates in Figure 1.1 masked substantial disparities within the country, particularly the large development gaps between urban and rural areas.

Urbanisation further amplifies the importance of this issue. According to UN estimates, more than half of the world's population has lived in urban areas since 2007.¹ The World Bank predicts that by 2045, the number of people living in cities will increase to six billion, which is an increase of almost two billion from today. By 2050, the proportion of people living in cities will have increased to a staggering 68% of the world's population (World Bank, 2018). At the same time, cities themselves are becoming larger and more economically dominant.

Figure 1.2 illustrates the distribution of city populations in 2025, which shows a high concentration of people in a limited number of urban centres rather than an even global distribution. In other words, more and more economic activity is now

¹In most high-income economies—including Western Europe, the Americas, Australia, Japan, and parts of the Middle East—over 80% of the population resides in urban areas. In upper-middle-income economies, such as those in Eastern Europe, East Asia, North and Southern Africa, and South America, urbanisation rates typically range between 50% and 80%.



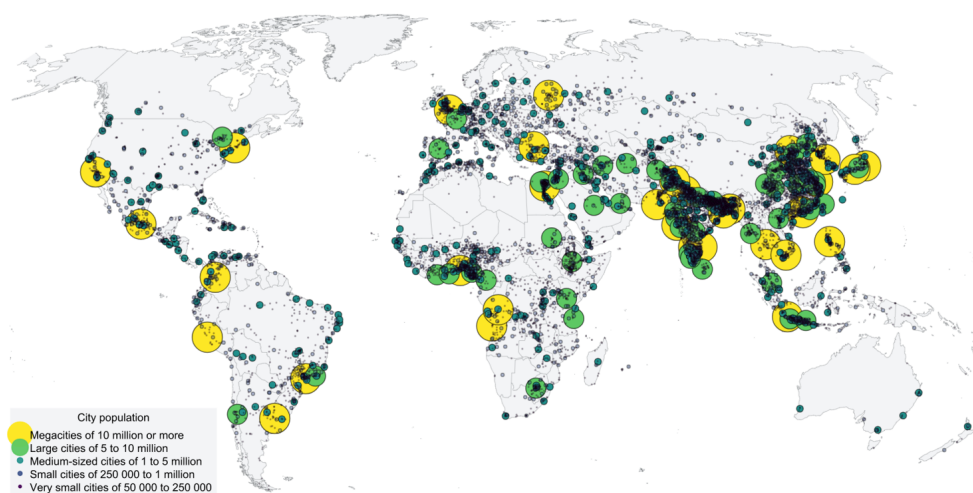
Source: International Monetary Fund (IMF)

Figure 1.1: Inflation Rate of Consumer Prices, 2024.

shifting to the cities. Some megacities now rival entire countries in economic output. In 2014, a study conducted by Oxford Economics, argued that the world's 750 biggest cities accounted for approximately 57% of global Gross Domestic Product (GDP). It predicts that by 2030, this number will increase to more than 60% of the total world GDP (Oxford Economics, 2014).

The increasing urban population translates into opportunities for Multinational Corporations (MNCs). At the same time, countries and cities that can be part of the global value chain will be able to reap the potential economic benefits it brings. In the hope of attracting and retaining these MNCs, cities, the primary driver for economic growth, will now have to compete with each other both nationally and internationally. This competition among cities is likely to intensify as MNCs seek to shorten their GVCs production length in response to the rising tide of protectionism (World Bank, 2018).

Against the backdrop of affordability and urbanisation, studies on cities, particularly the cost of living, wages and purchasing power, have garnered attention in recent years. Cost of living, which measures the level of expenses required to sustain a certain level of living, is often an important consideration for MNCs and expatriates looking to relocate. Beyond the cost of living, purchasing power, which is a combination of both the cost of living and wages, also provides a form of measurement for residents' well-being and standard of living. High cost of living and low purchasing power could bring about widespread social and economic problems, as exemplified by Hong Kong and various cities in Western Europe, where recent violent protests and social unrest can be attributed partly to their consistently high cost of living and



Source: World Urbanization Prospects: The 2025 Revision, Online Edition.

Figure 1.2: City Population in 2025.

declining purchasing power (Tan et al., 2019, 2020). Studying the cost of living, wages and purchasing power is therefore essential for policymakers, MNCs and academics around the world.

For policymakers, such studies will provide an accurate overview of the current living conditions of ordinary residents and reveal the areas for improvement going forward. Ordinary residents are often concerned whether their wages can keep pace with the rising cost of living, especially in areas such as housing, transport, education and healthcare. A study of cities will provide policymakers with an indicator whether such concerns are met.

MNCs will benefit as such studies help them optimise their profits by forecasting the potential costs required to set up an operation in a particular city. In addition, the study of the cost of living for expatriates, together with the study on the cost of living, wages and purchasing power for ordinary residents in a particular city, will provide MNCs with the information required to decide how best to deploy their human resources around the world. Meanwhile, policymakers will also be able to observe their city's competitiveness relative to other cities and tailor their policies accordingly.

For academics, a separate and comprehensive study for both expatriates and ordinary residents will open up more options for their research. Among the many studies on the cost of living for expatriates, this study aims to provide a more rigorous approach. The commercial cost of living surveys such as those published by Economist Intelligence Unit (EIU), Mercer and the Union Bank of Switzerland (UBS) are useful only as references to calculate compensation packages for expatriates and are, therefore, inadequate for guiding policy analysis. On the other hand, this study aims to conduct a comprehensive study for the cost of living, wages and purchasing power of

ordinary residents, the first of its kind.

Consumption patterns of expatriates are likely to differ from those of ordinary residents. Therefore, a policy analysis with regard to the general cost of living, using findings and data solely for expatriates, will not be appropriate or accurate. Similarly, while the consumer price index (CPI) may serve as a measure of the cost of living at the national level, there is no reliable index tracking the cost of living at the city level. This will be discussed in more detail in our literature review in Section 1.2.

1.2 Literature Review

The theoretical basis of the cost of living index goes back as far as Konus (1939). Polak (1989); Diewert and Nakamura (1993) and Triplett (2001) also provide useful reviews of the methodological issues surrounding cost of living indices. As defined by Triplett (2001), the cost of living index is a price index that measures the change in consumption costs required to maintain a constant standard of living. The index may include the costs of all variables that affect the standard of living, or it may be conditional on some variables that are kept constant for the construction of the index. Economists may substitute “standard of living” in the above definition for other terms such as “constant utility”, or as in Blackorby and Russell (1978), the same “indifference surface”.

At the national level, national statistical agencies may construct the CPI as a cost of living index although interestingly, this is not always the case. Triplett (2001) tells us that while certain countries such as the United States conceptualised the CPI as an indicator reflecting households’ cost of living, others draw a sharp distinction between the two. The second position follows from Hill (1998) who argues that the CPI, as an index for measuring inflation, is only designed to capture changes in the value of a fixed basket of goods and services of fixed weightage over time.

Hill (1998) distinguishes this from a cost of living index, which measures differences in value between baskets of goods and services necessary for the consumer to maintain constant utility over time. These baskets might be different from one another, with different weights for the items in the baskets. However, despite the conceptual debate among segments of academia, the public, the media, and politicians and even academics have long taken to using CPI as a summary measure for the cost of living at the national level.

Meanwhile, internationally comparable indices on the cost of living and purchasing power at the city level are often published by commercial research houses. These surveys receive much public attention and often generate emotional reactions, especially in cities ranked among the most expensive. Major commercial studies include the following:

- The UBS Prices and Earnings report, which is published once every three years by the Wealth Management Department of UBS. The report offers indices on

the price level for expatriates. Gross hourly wages data and purchasing power index and ranking are also available. The basket of goods and services used to calculate the price indices reflects the consumption patterns of a European family of three and the basket is assumed to be shared across all cities.

- The EIU Worldwide Cost of Living study, which is updated annually. It provides cost of living indices and rankings for expatriates, based on a single set of international weights for goods and services typically used by international businessmen. New York is the base city in this study, and the cost of living in other cities is benchmarked against it.
- The Mercer annual Cost of Living Survey, which is now in its 28th edition. Mercer publishes only the ranking of cities according to the cost of living for expatriates and does not provide any index value.

These commercial reports are designed to aid human resources managers at MNCs in formulating appropriate compensation policies for expatriate employees on international assignments. Thus, they cannot be used for policy analysis of ordinary urban dwellers. This is because expatriates tend to have Western consumption patterns geared towards high-end and lifestyle products and it is unlikely that ordinary residents would have the same consumption preferences.

Furthermore, in the case of expatriates, it is sensible to assume, as do all the commercial reports reviewed above, a common consumption pattern due to the social settings associated with the nature of expatriates' work as foreign white-collar experts. However, this assumption does not hold for ordinary residents, whose consumption patterns vary according to their geographical location, social values and cultural affiliations. As a result, drawing a conclusion about a "general" cost of living level based on commercial research risks significantly overstating the actual cost of living for ordinary residents.

Commercial studies may also suffer from serious methodological weaknesses and data inaccuracies. For instance, as pointed out by Tan and Luu (2016), there were considerable discrepancies in the data used in the 2009 UBS *Prices and Earnings* report, which overstated the cost of living in Singapore, even for expatriates. In that report, the prices for home electronics and household appliances in Singapore were above that in Mumbai, which was counterintuitive, as Indian visitors tend to spend twice as much on electronics as the average tourist in Singapore (Singapore Tourism Board, 2013). With regard to dining out, the 2009 UBS report put Singapore's price level slightly above that of many Western European cities, including Paris, even though the latter are known for their expensive restaurant meals.

More importantly, the same study made some simplistic assumptions in calculating its reported indices and rankings. These assumptions can be problematic. UBS, for instance, used a common occupation profile, based on global averages, to derive the average wage in each city.

This occupation profile severely understated the percentage of Professionals, Managers, Executives and Technicians (PMETs) and overstated the share of Productions, Transportation Operators and General Labours (PTOGLs) and Clericals, Sales and Service Workers (CSRWs) in Singapore. The percentage of PMETs assumed by UBS in the 2009 report, which was made available upon request, was 9%. This was much lower than Singapore's actual percentage of 52% as reported by Singapore's Ministry of Manpower. Meanwhile, Singapore residents' share of PTOGLs and CSRWs in 2009 were both 24%, lower than UBS' assumed figures of 58% and 33% respectively. Due to these mismatches, the 2009 UBS report understated the average wage levels in Singapore.² The net result is that, When divided by the UBS' cost of living index, which overstated the true cost of living in Singapore, purchasing power in the city-state was severely understated.³

The UBS research is not the only commercial study fraught with methodological problems. We also suspect that the cost of living ranking reported in the annual EIU Worldwide Cost of Living survey is sensitive to the choice of the base city. This means that the ranking results would change if EIU used Tokyo or London instead of New York as the benchmark city to compute their cost of living index. The dependence of the ranking results on the choice of the base city means that the research results are not consistent. This fact calls into question the rigour of the research.

The discussion above serves to highlight that it is not advisable to use commercial research reports for purposes other than their intended role as references to design expatriates' compensation packages. In fact, given the prevalence of methodological and data problems in these studies, one should exercise caution, even when using them to make inferences about the cost of living of expatriates. Meanwhile, the existing academic literature has not adequately addressed the issue of measuring the cost of living at city level. This is a gap that Asia Competitiveness Institute (ACI) aims to fill with our research.

1.3 Summary of Key Findings

Obtaining reliable international benchmarks on the cost of living, wages and purchasing power is necessary as they facilitate meaningful analysis into issues affecting expatriates and ordinary urban dwellers. With this objective, the ACI at the Lee Kuan Yew School of Public Policy (LKYSPP), National University of Singapore (NUS) has developed comprehensive indices which systematically track cost of living for expatriates as well as cost of living, wages and purchasing power for ordinary residents across

²The UBS also appeared to have excluded contributions to the Central Provident Fund (CPF)– Singapore's defined contribution social security system – from their calculation of wages. This exacerbated the understatement of wages in Singapore because CPF contributions are also used extensively for housing, medical and educational expenses prior to retirement. Hence, they should be treated as part of wages. See Tan and Luu (2016) for a detailed discussion.

³Tan and Vu (2011) revised the 2009 UBS estimates for Singapore using appropriate methodologies and data. They found significant differences from the original results.

the world's major cities since 2005. Previous editions of the study published in 2014 and 2016 covered 103 global cities (see Tan et al. (2016) and Tan et al. (2017)). From the 2017 edition onwards, the sample was extended to include two Vietnamese cities, namely Hanoi and Ho Chi Minh City, bringing the total cities studied to 105 (Tan et al., 2018). We estimated the ranking results for Hanoi and Ho Chi Minh City from 2013 onwards. However, we have dropped Caracas from our annual analysis since 2019, due to its ongoing hyperinflation. In this edition, we have also dropped Kiev from our annual analysis due to data limitations caused by the recent Ukrainian-Russian war.

This section summarises some important insights which can be gained from examining our indices. These include the geographical distribution of cities according to their cost of living for expatriates and ordinary residents, and the relationship between the cost of living, purchasing power and liveability of cities.

1.3.1 Geographical Distribution by Living Costs and Purchasing Power

From our research, we observed that cities in developed regions tend to have a higher cost of living for ordinary residents than cities in developing regions. On the other hand, there is no consistent pattern in the geographical distribution of the cities according to their cost of living for expatriates. This means that ordinary residents of an Asian city like Seoul are likely to face a lower cost of living than their counterparts in a Western European city like Paris. However, it is not possible to make any *a priori* conjecture about how the cost of living for expatriates in the former may compare with that in the latter.

Figures 1.3 and 1.4 illustrate the geographical distribution of the 103 cities we have studied according to their cost of living for ordinary residents and expatriates, respectively. The figures reflect the latest index results, which are based on 2024 data. In both figures, the longer the bar, the higher the cost of living index value and hence the more expensive the city for ordinary residents and expatriates, respectively.

We found that cities in Western Europe, Australasia and North America were relatively expensive for ordinary residents in 2024. In contrast, African, Asian, Eastern European and South American cities were cheaper for ordinary residents (see Figure 1.3). However, there are exceptions: Tel Aviv's cost of living is more expensive than London; Doha is more expensive than Madrid and Hong Kong had a higher cost of living than Berlin.

In contrast, Figure 1.4 shows no discernible pattern in the distribution of cities according to the cost of living for expatriates.

Cities in developed regions are more expensive for ordinary residents than cities in the developing region due to differences in the cost structure of non-traded goods and services among these cities. In particular, locally provided services which are non-traded either form an integral part of ordinary residents' consumption baskets

or go into the local production and provision of other goods consumed by ordinary residents. These services, by nature, are labour-intensive and labour cost in Western Europe, Australasia and North America is significantly higher than in Africa, Asia, Eastern Europe and South America.

For instance, the average gross hourly wage in all Western European cities in our study in 2024 was 42.50 USD as compared to 8.20 USD for Asian cities. Such wage differentials lead to higher prices for products and services, which in turn result in a higher overall cost of living for ordinary residents in developed cities. It should be noted, however, that owing to higher wages, ordinary residents' purchasing power in the developed region is also generally higher than their counterparts elsewhere in the world.

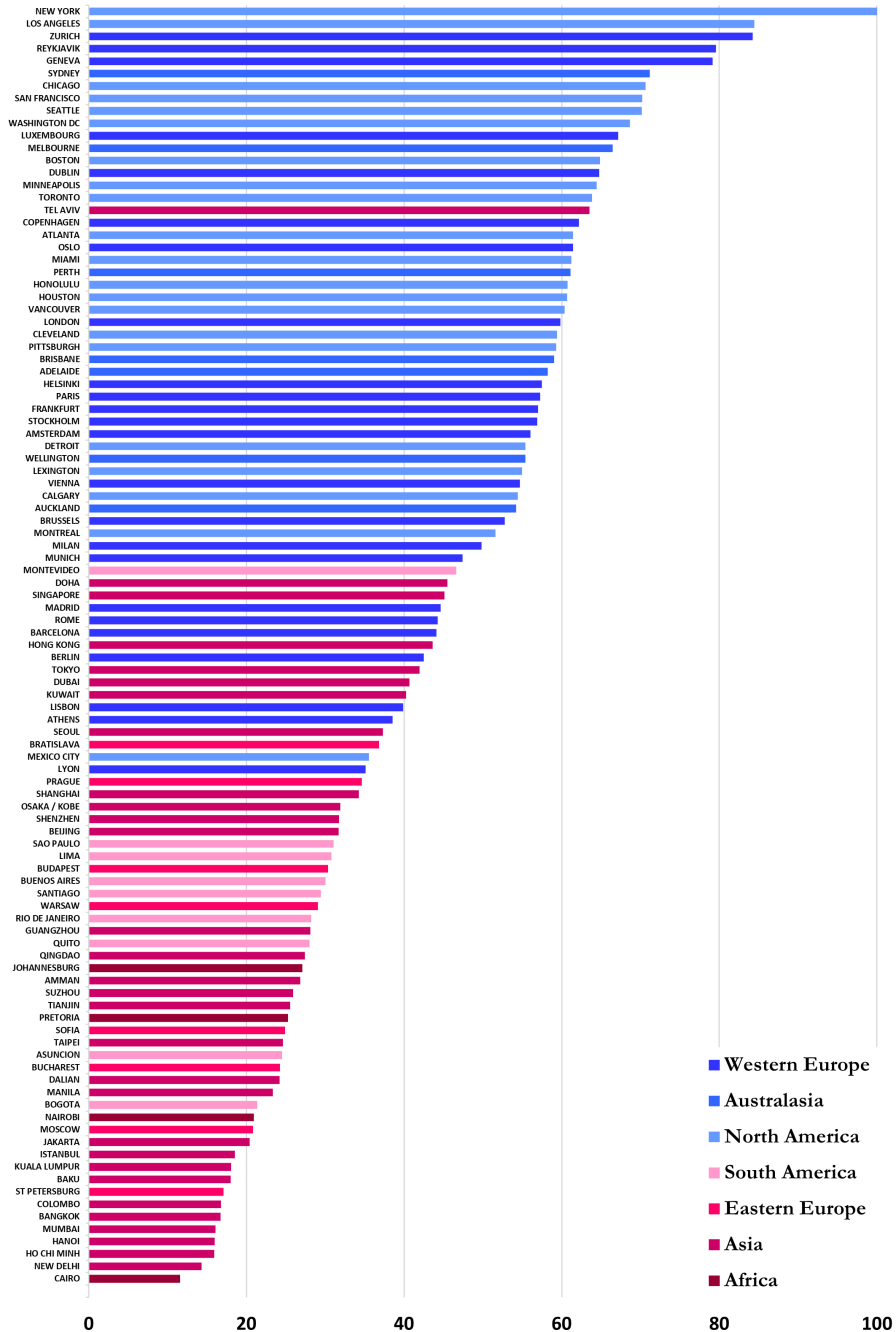
However, as can be seen from Figure 1.3, Tel Aviv, Doha, Singapore, Hong Kong, and Tokyo are outliers in their respective regions, as their labour costs are more reflective of cities in more developed regions. The reason is that these cities are at a similar development stage as the developed cities and therefore have similar levels of labour productivity.

At the same time, expatriates everywhere are geared towards high-end imports and lifestyle products. As such, their cost of living is mainly affected by exchange rate fluctuations and other factors driving the costs of trade, rather than local factors. This explains the lack of pattern in the geographical distribution of cities, according to the cost of living of expatriates.

These findings again underscore the importance of distinguishing the analysis on expatriates and ordinary residents; conflating the latter with the former risks overstating ordinary residents' cost of living in developing countries, especially in Asia. In addition, the findings imply that Western expatriates posted to Asia and other regions outside the Western world will benefit, if they adopt the consumption patterns of ordinary residents in the cities.

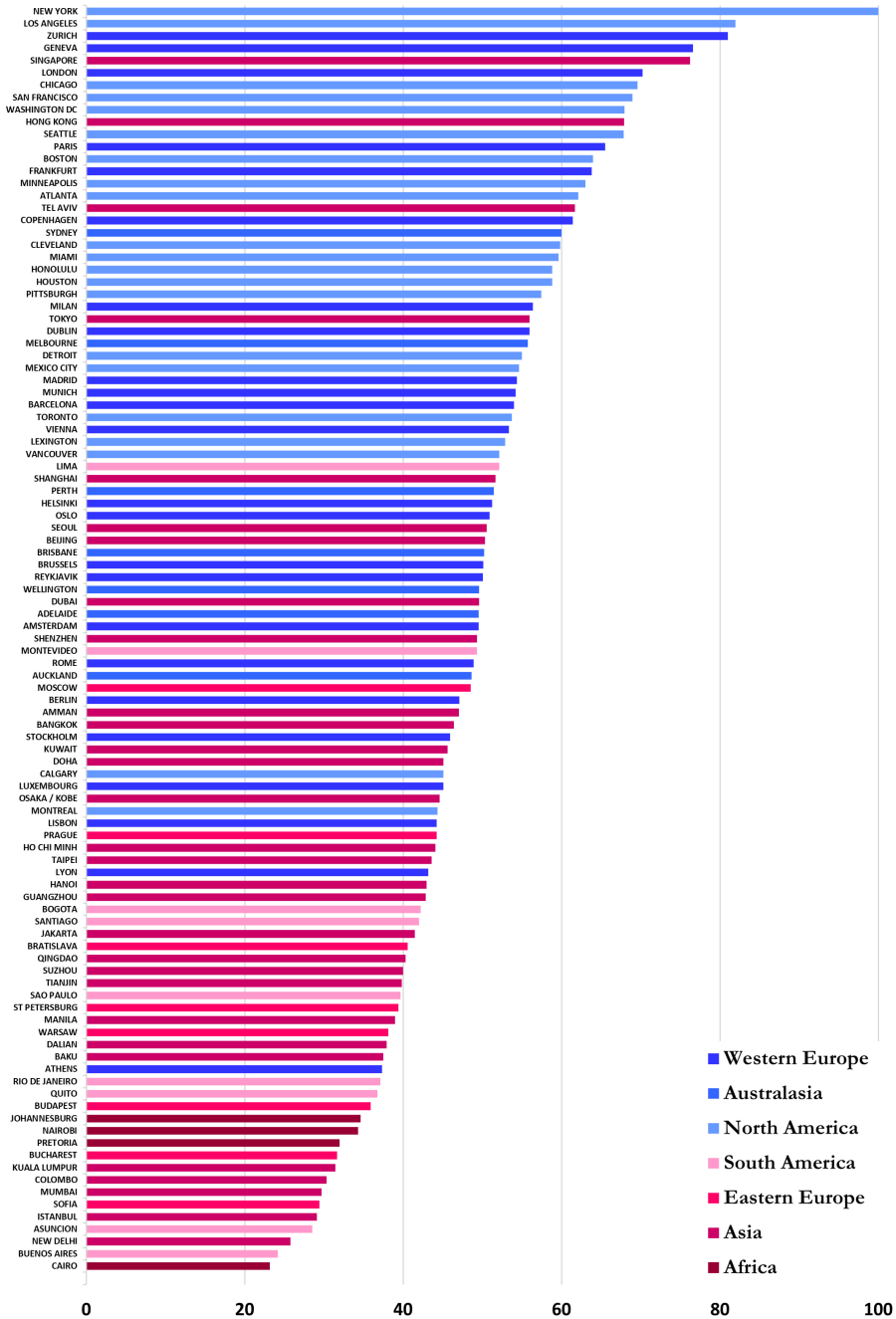
From our research, we have also observed that cities in developed regions tend to have higher purchasing power than cities in developing regions, despite a higher cost of living for ordinary residents as higher wages more than compensate.

Figure 1.5 illustrates the geographical distribution of the 103 cities we have studied, according to their purchasing power for ordinary residents: the longer a city's bar, the higher its purchasing power index value and the more goods and services their ordinary residents can afford. As observed, Mexico City is the only city from the developed regions ranked in the bottom-25, while Singapore and Seoul are the only two cities from the developing regions ranked in the top-25. The relatively lower wages in Mexico City and the relatively higher wages in Singapore and Seoul help to account for these exceptions.



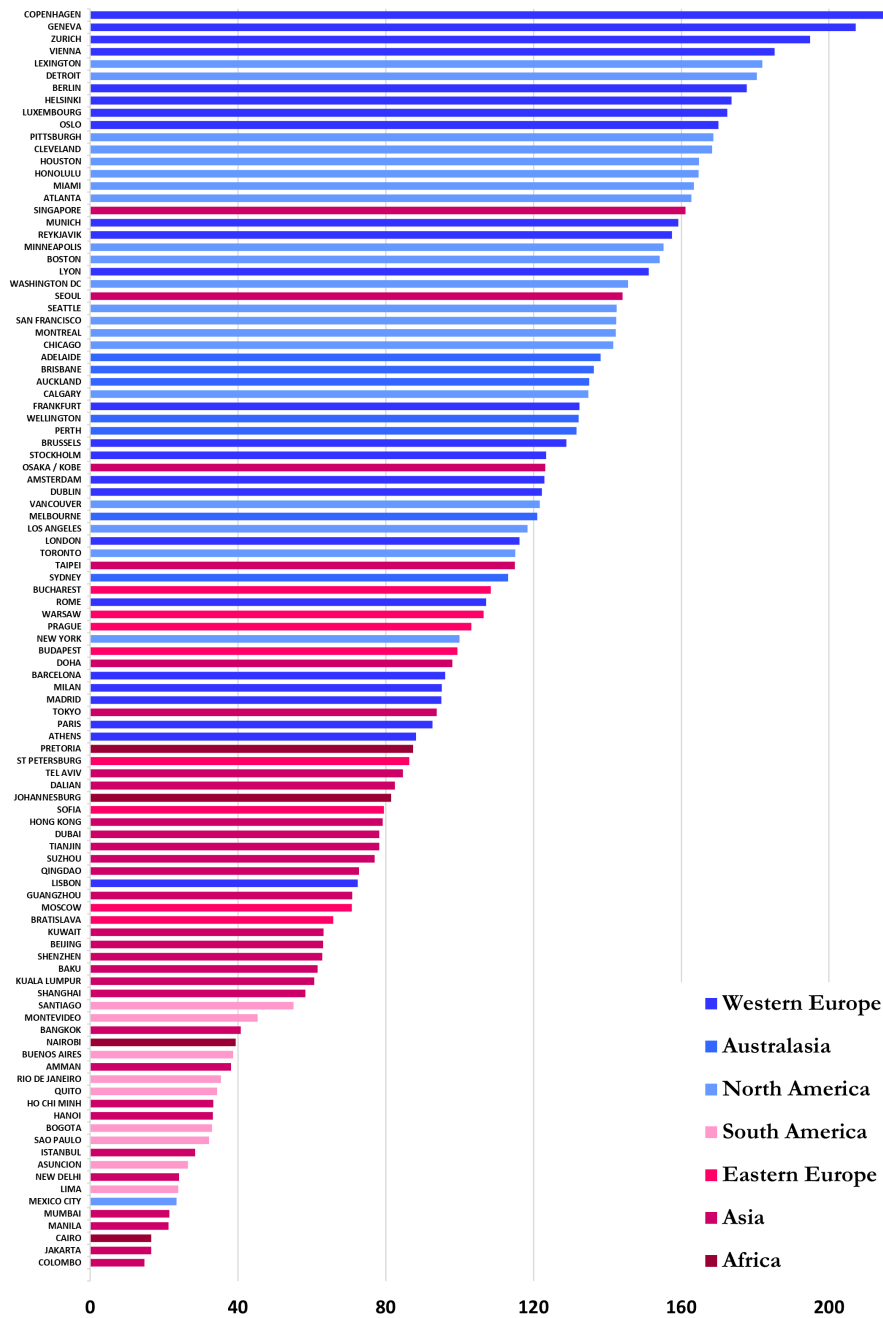
Source: Asia Competitiveness Institute

Figure 1.3: ACI's Cost of Living Index for Ordinary Residents across 103 Major Cities in the World in 2024 by Geographical Regions.



Source: Asia Competitiveness Institute

Figure 1.4: ACI's Cost of Living Index for Expatriates across 103 Major Cities in the World in 2024 by Geographical Regions.



Source: Asia Competitiveness Institute

Figure 1.5: ACI's Purchasing Power Index for Ordinary Residents across 103 Major Cities in the World in 2024 by Geographical Regions.

1.3.2 Relationships between Cost of Living, Purchasing Power, Liveability and Economic Competitiveness

Reliable indices also allow us to examine the relationships between the cost of living, purchasing power, liveability and economic competitiveness, which are interrelated dimensions that contribute to urban dwellers' quality of life. Following the influential contributions of Florida (2005), a strand of urbanisation literature has emerged that recognises the role of cities as hubs for creativity and innovation, which drive economic growth for the entire country. ACI has similarly explored the relationship between affordability and economic competitiveness in Tan et al. (2011).

In this context, the literature emphasises the need for cities to attract and retain human capital of high calibre, especially those who Florida (2005) referred to as the "creative class", by providing them with a good quality of life. While there is no consensus on what defines "quality of life", several studies have attempted to identify its different characteristics.⁴ Beyond conventional academic research, the idea of quality of life has also caught on among private and consulting organisations, which often produce quality of life rankings for global cities. At the same time, improving ordinary residents' quality of life has become the "rallying cry of many big-city mayors" around the globe (see Hasan (2008)).

In Tan et al. (2017), we have examined the nexus between the cost of living, purchasing power and liveability, whereby the latter is measured by the Global Liveable City Index (GLCI) as presented in Tan et al. (2017). We found that liveability does not explain the cost of living, despite a generally positive association. A city may be highly liveable, but its cost of living for ordinary residents can remain relatively low. Berlin, Singapore, Taipei and Hong Kong are examples of such cities.

1.4 Contributions and Chapter Organisation

This book provides a valuable compendium of annual indices and rankings of cost of living for expatriates and cost of living, wages and purchasing power for ordinary residents in 103 major cities in the world from 2005 to 2024. Now in its eleventh edition, ACI's study reflects salient differences in the cost of living for expatriates and ordinary urban dwellers which arise from variations in their lifestyles and consumption preferences. This is of critical significance as the cost of living for the former is usually conflated with that of the general public. We believe that ACI's pioneering attempt is the first comprehensive study of ordinary residents available today. As for expatriates, cost of living research is widely available, but as reviewed in Section 1.2, these are conducted in a much less rigorous manner than the ACI study.

The publication of this book represents a monumental undertaking combining leading-edge research with rigorous methodology and datasets, which are disclosed

⁴See Rogerson (1999) and Hasan (2008) for an overview of this literature.

openly. Weights employed for consumption baskets are justified across different continents and stated explicitly. Moreover, all assumptions are laid out transparently. It is our belief that unless assumptions, methodology and data sources are disclosed publicly for open scrutiny, non-rigorous studies will mushroom and spreading spurious and misleading results.

This book is of interest to various parties. The findings in this book allow MNC employers to review and adjust compensation packages for expatriates, based on differences between expatriates' and ordinary residents' costs of living, to make them more competitive. For academics, the ACI research provides more accurate depictions of the cost of living at the city level. The distinction made between ordinary residents and expatriates opens up more tools for social research. Finally, for policy-makers, who aim to make city life better for ordinary residents, our indices provide a reliable way to track ordinary residents' cost of living, and, more importantly, to find out whether ordinary residents' purchasing power has increased over time. Poverty statistics can also be measured differently by taking into account the cost of living of ordinary residents. Finally, the analysis presented through our case studies can yield important policy implications.

The 103 major cities in the world covered by the ACI's study are located all over the globe, including cities in Africa, Asia, Australasia, Western and Eastern Europe, North and South America. The list of cities is shown in Table 1.1 below.

Table 1.1: List of Cities Covered in the 2024 ACI Annual Indices on Cost of Living, Wages 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

Table 1.1 continued from previous page.

No.	City	Country	Region
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	Kuala Lumpur	Malaysia	Asia
45	Kuwait City	Kuwait	Asia
46	Lexington	United States	North America
47	Lima	Peru	South America
48	Lisbon	Portugal	Western Europe
49	London	Great Britain	Western Europe
50	Los Angeles	United States	North America
51	Luxembourg	Luxembourg	Western Europe
52	Lyon	France	Western Europe
53	Madrid	Spain	Western Europe
54	Manila	Philippines	Asia
55	Melbourne	Australia	Australasia
56	Mexico City	Mexico	North America
57	Miami	United States	North America
58	Milan	Italy	Western Europe
59	Minneapolis	United States	North America
60	Montevideo	Uruguay	South America

Table 1.1 continued from previous page.

No.	City	Country	Region
61	Montreal	Canada	North America
62	Moscow	Russia	Eastern Europe
63	Mumbai	India	Asia
64	Munich	Germany	Western Europe
65	Nairobi	Kenya	Africa
66	New Delhi	India	Asia
67	New York	United States	North America
68	Osaka-Kobe	Japan	Asia
69	Oslo	Norway	Western Europe
70	Paris	France	Western Europe
71	Perth	Australia	Australasia
72	Pittsburgh	United States	North America
73	Prague	Czech Republic	Eastern Europe
74	Pretoria	South Africa	Africa
75	Qingdao	China	Asia
76	Quito	Ecuador	South America
77	Reykjavik	Iceland	Western Europe
78	Rio de Janeiro	Brazil	South America
79	Rome	Italy	Western Europe
80	San Francisco	United States	North America
81	Santiago	Chile	South America
82	Sao Paulo	Brazil	South America
83	Seattle	United States	North America
84	Seoul	South Korea	Asia
85	Shanghai	China	Asia
86	Shenzhen	China	Asia
87	Singapore	Singapore	Asia
88	Sofia	Bulgaria	Eastern Europe
89	St Petersburg	Russia	Eastern Europe
90	Stockholm	Sweden	Western Europe
91	Suzhou	China	Asia
92	Sydney	Australia	Australasia
93	Taipei	Taiwan, China	Asia
94	Tel Aviv	Israel	Asia
95	Tianjin	China	Asia
96	Tokyo	Japan	Asia
97	Toronto	Canada	North America
98	Vancouver	Canada	North America
99	Vienna	Austria	Western Europe
100	Warsaw	Poland	Eastern Europe
101	Washington DC	United States	North America
102	Wellington	New Zealand	Australasia

Table 1.1 continued from previous page.

No.	City	Country	Region
103	Zurich	Switzerland	Western Europe

Source: Asia Competitiveness Institute

The rest of the book is organised as follows. Chapter 2 discusses at length the methodology on the cost of living of expatriates, presenting data sources, including prices and weights used. Assumptions are also explicitly stated. The method to construct the overall Cost of Living Index and Ranking for Expatriates and the indices for each ACI Consumption Category is spelt out in detail. The chapter will also present the results and findings pertaining to the Cost of Living Ranking for Expatriates in the 103 cities. It first highlights the latest ranking positions for the top- and bottom-25 cities, based on data for 2024. Next, it describes some notable observations regarding the rankings for expatriates for each region covered in the study before zooming in to the major global financial centres, which include New York, London, Hong Kong, Singapore, Shanghai and Tokyo. Finally, the chapter presents the results of the Cost of Living Index and Ranking for Expatriates in each of the 103 cities between 2005 and 2024.

Chapter 3 describes the methodology for cost of living, wages and purchasing power for ordinary residents where components of adjustment factors, such as inflation rates, nominal expenditure and real expenditure per capita, are highlighted. The construction of the overall Cost of Living Index and Ranking for Ordinary Residents, together with category-specific cost indices and rankings, is elaborated upon in this chapter. The computation of the Wage Index and Ranking for Ordinary Residents, involving gross average nominal monthly wages and mean weekly hours actually worked, is also illustrated step by step. The chapter then describes the methodology used to construct the Purchasing Power Index and Ranking for Ordinary Residents from the cost of living and wage indices. Following this, the chapter provides the corresponding analysis for the cost of living, wages and purchasing power indices and rankings for ordinary residents. The latest results based on 2024 data for the top- and bottom-25 cities are reported first. Region-specific observations about the rankings are followed by a discussion on the trends for the cost of living, wages and purchasing power for ordinary residents in each of the 103 cities between 2005 and 2024. When conducting the trend analysis, we split the study period into three sub-periods: from 2005 to 2010, from 2011 to 2021 and from 2022 to 2023. This is because the Cost of Living Index for Ordinary Residents, which is also used in the computation of the Purchasing Power Index for Ordinary Residents, is constructed using data from four different rounds of the World Bank's International Comparison Program (ICP) survey in 2005, 2011, 2017 and 2021 respectively.

Lastly, Chapter 4 forecasts cost of living indices using time-series approaches. Since its inception, the cost-of-living project has relied on EIU data; however, the 2024

edition is the final release, as the EIU discontinued the survey from 2025 onward. At the same time, the re-emergence of trade protectionism — most notably the broad tariffs announced by the United States in early 2025 — has reintroduced uncertainty into global price dynamics. Accurate forecasts of consumer prices and cost-of-living indices are therefore increasingly important. This chapter addresses these challenges by applying time-series approaches to forecast goods prices across 45 major cities and to support the continuation of the annual cost-of-living publication.