
Managed Dependency Part II: The consequences of demand-driven migration in Singapore

Part I of this case looked at the Singapore government's efforts to control immigration in the face of high demand for foreign labour among local businesses. **Part II** considers the economic and social effects of immigration in Singapore, and the policies that have been enacted to maximise gains while mitigating the downsides.

Introduction

A country's willingness to accept foreign migrants can be driven by various factors, and often a combination of motivations come into play. Immigrants may be accepted for ethnic or human rights reasons, because of treaty obligations, to fill jobs, or to reunite them with family members already living locally. Most countries have immigration systems that separate new arrivals into various streams subject to different regulations and with different end-goals in sight. So, while economic migrants may be accepted or rejected by a government based on their ability to contribute to GDP, the same government may accept refugees based purely on the conditions in their home country. Correspondingly, the success or failure of an economic migration scheme may be measured in terms of growth and employment rates, while a refugee resettlement programme is more likely to be judged based on its ability to protect and integrate new arrivals.

In the case of Singapore, immigration policy was traditionally organised around two key goals: promoting economic growth on the one hand, and keeping the nation's ethnic make-up relatively balanced on the other.¹ The latter goal sought to reduce inter-racial tensions in a multi-ethnic state by maintaining ethnic ratios at the level that prevailed at independence (roughly 75% Chinese and 15% Malay, with the remainder made up mainly of Indians and Eurasians). The former goal, by contrast, was the result of the Singapore government's linking of its continued mandate to govern with its success in economic development. The ruling People's Action Party (PAP) invited the electorate to judge it based upon its economic performance, a compact that was accepted by most voters. The result was a "performance legitimacy" paradigm shared by both the political class and ordinary citizens.²

Singapore's focus on market-driven immigration policies was likely rooted in this economic

¹ These quotas were fixed at independence in 1965 as 75% Chinese and 15% Malay, with the remainder made up of Indians and "Others" (mainly Eurasians). Over time differing birth-rates have led to imbalances. In the early 1990s, facing a significant shortfall in the Chinese population, the government increased incentives on offer to highly skilled Chinese immigrants to make up the numbers. See: Vasu, Norman. "Governance through difference in Singapore." *Asian Survey* 52, no. 4 (2012): 734-753.

² George, Cherian. "Towards a democratic society", talk given at a post-election forum organised by Maruah and The Online Citizen, 15 May 2011. Retrieved 22 February 2018:
<http://www.airconditionednation.com/2011/05/15/ge2011-aftermath/>

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frame of political legitimacy. Unlike many countries, Singapore made a policy of rejecting refugees and strictly limiting family reunion visas. Permanent residency and citizenship would only be awarded to highly qualified immigrants. While particular nationalities were occasionally offered additional incentives to encourage them to migrate to Singapore and thus keep ethnic ratios at the same level,³ the right of individuals to immigrate remained contingent on employment or (in the case of student visas) education.

Given the presence of a market-driven immigration system, it was natural that immigration policy should be judged almost entirely based upon its economic consequences. This tended to produce far more transparent evaluations of policy than prevailed in many countries. Rather than evaluating immigration policy based on a mixture of intentions and outcomes, using diverse practical and ideological criteria, judgments tended to be made simply based upon economic data. If immigration fulfilled market demand for labour and helped to fuel Singapore's continued growth, policy in the area could be considered a success.

This slowly began to change in the late 2000s, however. Following the 2001 recession, the Singapore government sharply increased the number of working visas accorded to restore economic growth. The result was that infrastructure provision in the land-scarce nation failed to keep up with population growth, and locals grew increasingly vocal about overcrowding and skyrocketing property prices, as well as the new immigrants' perceived failure to assimilate.⁴ Attempts by government to placate public opinion were, by and large, unsuccessful, and in 2011 the PAP achieved its worst ever score in a general election, a result attributed by most commentators to domestic disquiet over immigration.⁵ The government subsequently found itself trapped between a rock and a hard place, forced to choose between reducing immigration numbers and risking lower economic growth in the labour-dependent economy, or maintaining immigration-driven growth while facing the wrath of the electorate.

This case examines the economic and social effects of immigration in Singapore, and the results of the government policies adopted to deal with the challenges and opportunities offered by immigrant labour. It focuses on the main issues that confronted Singapore's policymakers in the decades since independence: the use of immigration to boost growth and development (I), the potential for competition between local and foreign workers (II), the impact of low-skilled immigration on national productivity rates (III), infrastructure pressures resulting from immigration (IV), and the social and political effects of immigration (V).

I. Immigration as a driver of growth and development

³ Chinese birthrates fell in the 1980s, for example, and the government subsequently made a particular effort to target potential immigrants from Hong Kong and China in the wake of the Tiananmen Square incident. See Chia, Siow Yue (2011). Foreign labor in Singapore: Trends, policies, impacts, and challenges. No. 2011-24. PIDS Discussion Paper Series.

⁴ Barr, Michael. "Singapore's Impotent Immigration Policy", East Asia Forum, 2 April 2014. Retrieved 23 March 2018: <http://www.eastasiaforum.org/2014/04/02/singapores-impotent-immigration-policy/>

⁵ Thompson, Eric C (2014). "Immigration, society and modalities of citizenship in Singapore." *Citizenship Studies* 18, no. 3-4: 315-331.

In the early years following independence, there was relatively little immigration to Singapore. The withdrawal of British Army bases and the separation from the Malaysian hinterland had hit the economy hard, causing official unemployment estimates to reach 10%.⁶ The government set out to tackle this through a rapid industrialisation programme, investing in medium value-added export industries such as textiles and technology. Education and training schemes focused on creating a workforce adapted to these growth industries, and high-skilled experts and managers from abroad were head-hunted to assist in the industrialisation process.

Commonly referred to as “foreign talent” (or FT), these foreign workers were dependent upon their employers for leave to remain in Singapore, but otherwise enjoyed extensive privileges, a status that this class of immigrant workers retain today. Highly skilled foreign workers on Employment Pass (EP) visas had to earn a salary of more than a set amount per month (that is adjusted over time according to economic conditions), but were allowed to bring their families with them to Singapore; and were also permitted to apply for permanent residency or citizenship after a certain period spent living in the country. They were allowed to opt in to the Central Provident Fund (CPF), Singapore’s (otherwise) compulsory retirement savings scheme.

By the late 70’s, economic growth had taken off to the extent that the country faced a labour shortage. This was particularly true in low-wage “3D” (dirty, dangerous and degrading) jobs, which Singaporeans increasingly began to shun, and in childcare, as women entered the workforce in ever greater numbers. While historical ties allowed Malaysian citizens to work in Singapore with relative freedom, demand was such that the country soon began looking elsewhere for cheap labour, progressively expanding the pool of nationalities eligible for low-wage Work Permit (WP) visas to include “non-traditional” source countries in Southeast Asia such as Thailand, the Philippines, and Sri Lanka. To this list were added North Asian source countries such as Hong Kong, South Korea, and China.⁷

Work Permit holders were not allowed to earn more than a fixed sum per month (with the precise sum varying over time), and their residence in Singapore was far more strictly regulated than that of EP holders. They had no right to bring family members with them to the country, could not marry locals or apply for permanent residency, and had to live with their employers (in the case of domestic workers) or in assigned dormitories. In more recent years, employers were encouraged to police WP-holding employees’ behaviour by means of a \$5,000 security bond⁸ that could be forfeited should any regulations be broken. While WP holders were initially covered under the CPF, this was changed in the 1980s with the implementation of a Foreign Worker Levy (FWL) paid to the government. Employers of WP holders were later also obligated to provide health and accident insurance.

In the case of both WP and EP holders, immigrants were taking on work that Singaporeans either did not wish to do or did not have the skills to take on. This followed economic

⁶ Figures from the Ministry of Trade and Industry website. Retrieved 18 April 2018:

<https://www.mti.gov.sg/MTIInsights/Pages/1965-%E2%80%931978.aspx>

⁷ Rahman, Md Mizanur (2017). "Immigration and Integration Policy in Singapore", *Bangladeshi Migration to Singapore*, pp. 27-52. Springer, Singapore.

⁸ Note that the dollar sign as used in this case refers to Singapore dollars (SGD).

models suggesting that the way to maximise immigration's positive effects on GDP was to ensure that the skills of the immigrants were different—and ideally complementary—to those of native workers.⁹ This strategy appeared to be relatively successful in the case of Singapore. Chia (2011), for example, showed that a 1% increase in the number of Work Permit holders supported employment for 2.4% of skilled Singaporeans and 1.4% of unskilled, while a 1% increase in the number of EP holders supported employment for 1.9% of skilled Singaporeans and 0.2% of unskilled.¹⁰

As Singapore's economy grew and developed, the policy of favouring immigration to cover jobs that were not or could not be filled by locals continued. In 2004 a new category of work visa (the S Pass) was introduced to bring in more mid-level workers, particularly to deal with a shortage of nursing home staff to take care of the country's rapidly ageing population.¹¹

While the lack of published data makes it difficult to estimate the overall effect of immigration on Singapore's GDP, some estimates showed that it was positive. In 2012, for example, reports by Merrill Lynch and an assessment by local economist Chua Hak Bin suggested that recent limits on immigration numbers cut GDP growth from around 3% to 1.7%, implying a strong positive effect of immigration on the national economy.¹² As Chia's study quoted above showed, however, not everyone benefited equally from immigration. Owners of capital profited the most from the increased labour supply,¹³ as did high-skilled locals. Low-skilled locals, by contrast, tended to lose out.¹⁴ Similarly, while high-skilled immigration tended to reduce wage inequality, low-skilled immigration tended to exacerbate it.¹⁵

The result was that while the Singapore economy in general benefited from immigration, low-skilled workers appeared to suffer from the increased labour competition, obliging the government to take supplementary measures to safeguard their livelihoods.

II. Immigration as a source of competition

In contrast to many governments, the Singapore government historically argued openly for the benefits of increased competition between local and foreign workers resulting from immigration. While locals had access to education, training, and redistributive systems that were not offered to immigrants, they were expected to use these advantages to improve

⁹ Borjas, George J (1999). "The economic analysis of immigration". In *Handbook of Labor Economics*, vol. 3, pp. 1697-1760. Elsevier.

¹⁰ Chia, 2011.

¹¹ Othman, Liyana, "Nursing home staff in Singapore overworked and underpaid: Study", Channel News Asia, 6 October 2016. Retrieved 19 April 2018: <https://www.channelnewsasia.com/news/singapore/nursing-home-staff-in-singapore-overworked-and-underpaid-study-7749222>

¹² Yahya, Yasmine. "Tighter foreign labour rules led to the Government having to forgo \$1.1 billion of potential tax revenue, says Dr Chua", *Straits Times*, 28 October 2012.

¹³ Borjas, 1999.

¹⁴ Longhi, Simonetta, Peter Nijkamp, and Jacques Poot (2005). "A Meta-Analytic Assessment of the Effect of Immigration on Wages." *Journal of economic surveys* 19, no. 3: 451-477.

¹⁵ Aydemir, Abdurrahman, and George J. Borjas 2006. A comparative analysis of the labor market impact of international migration: Canada, Mexico, and the United States. No. w12327. National Bureau of Economic Research.

their productivity and so out-compete foreign workers on the free market.¹⁶ The government's position was that competition as a spur to improved performance was necessary to maintain Singapore's international competitiveness.¹⁷ As Prime Minister Lee Hsien Loong said in 2011 in a national day speech:

*"The competition is not just the foreign worker here. You are competing with workers all over the world. Unskilled workers have felt this for a long time but increasingly our graduates and professionals are also seeing this happen... The only way to get out of the trouble is to rise above the tsunami by training ourselves, developing expertise and doing things which they cannot do yet in China but which we can do now in Singapore, so that we can make a living for ourselves in order to improve our lives."*¹⁸

This preference for free market competition did not mean, however, that the Singaporean government did not take measures to mitigate the effects of immigration on employment and wages. In the absence of a national unemployment insurance scheme, certain jobs, such as taxi-driving, were reserved for Singaporeans as a (sort of) safety net.¹⁹ Moreover, in many of the sectors in which foreign labour was most prevalent, soft quotas were introduced to limit the proportion of foreigners that could be employed per company. This Dependency Ceiling system allowed the government to reserve a certain percentage of jobs in these industries for locals, changing the precise proportion regularly in response to economic conditions. When the Dependency Ceiling system was introduced in 1987, the foreign labour quota was set at 50% across the board. Over time this was modified based on observed conditions in the various industries to which it applied, as well as national economic pressures. Thus, for example, the proportion of foreign employees permitted in the service sector was increased from 30% to 45% between 2003 and 2007 to promote growth in that area, while the quota in the marine sector remained unchanged at 75%. (For more information on the dependency ceiling system and historical rate changes, see **Part I** of this case.)

Efforts were also made to minimise the potential wage depression caused by an influx of foreign workers. The Singaporean government was traditionally opposed to minimum wage legislation, meaning that other approaches had to be invented. The first strategy adopted was the replacement of Work Permit holders' CPF contributions with the Foreign Worker Levy in 1982. This was effectively an indirect tax on low-skilled foreign workers, with employers paying some of their monthly wages to the government. Originally set at 30% of the employee's wages or \$150 per month (whichever was higher), the levy was adjusted over time and according to sector (much like the Dependency Ceilings) as the government attempted to calibrate demand for foreign labour while not overly crimping economic

¹⁶ Fong, Pang Eng (1979). "Public Policy on Population, Employment and Immigration". *Public Policy and Population Change in Singapore*. Edited by P.S.J. Chen and J.T. Fawcett New York: The Population Council.

¹⁷ Lee Hsien Loong, National Day 2011 Rally Speech, PMO Website. 14 August 2011. Retrieved 15 March 2018: <http://www.pmo.gov.sg/newsroom/prime-minister-lee-hsien-loongs-national-day-rally-2011-speech-english>

¹⁸ Lee Hsien Loong, National Day 2011 Rally Speech, PMO Website. 14 August 2011. Retrieved 15 March 2018: <http://www.pmo.gov.sg/newsroom/prime-minister-lee-hsien-loongs-national-day-rally-2011-speech-english>

¹⁹ See: <https://www.lta.gov.sg/content/ltaweb/en/public-transport/taxis%20and%20private%20hire%20cars/industry-matters-for-taxi-drivers/driving-a-taxi-in-singapore.html>

growth. The government deliberately set the levy slightly higher than the CPF contributions paid by similarly skilled local workers to prevent foreign labourers from undercutting locals. The ultimate intention was for the government to gradually increase levy rates to wean employers off foreign labour entirely. This goal was not achieved. While it was possible that the strategy might have worked had the government been willing to set levy rates at higher levels, the government grew increasingly reluctant to do this, seemingly wary of the potential economic (and electoral) costs. The goal of entirely eliminating dependence upon low-skilled foreign labour was pushed back repeatedly, before finally being abandoned without fanfare.

However, the levy itself was not abandoned, but transformed into a tool to help manage the boom-and-bust cycle to which all economies are subject. Access to foreign labour pools made the supply curve for labour more elastic and thus helped to restrain wage inflation in expansionary phases, while the foreign workers could easily be laid off and sent home to minimise local unemployment during downturns. As the government put it: “Foreign workers enable businesses to expand quickly and flexibly during economic booms. They also buffer Singaporean workers from job losses during downturns.”²⁰ The Levy was thus repurposed as a means to control the size and sectoral assignments of Singapore’s revolving pool of low skilled workers, much like the Dependency Ceiling system.

However, with the levy having been set at too low a level to make put a dent in the growth of foreign worker numbers, other (less direct) solutions had to be found to protect the wages of low-skilled Singaporeans. Various policy interventions were carried out as a result.

Progressive Wage Model (PWM)

In the cleaning, security and landscaping sectors, the PWM was introduced in 2012. It obliged employers to comply with sectoral minimum wage regulations and training requirements covering their Singaporean and Permanent Resident employees, or face losing their licence to operate.²¹ As the Ministry of Manpower explained:

“Wages in these sectors had stagnated due to widespread cheap sourcing and a limited scope for collective bargaining, as prices are locked in once contracts are signed. In turn, the low wages resulted in high turnover and labour shortages. The PWM benefits workers by mapping out a clear career pathway for their wages to rise along with training and improvements in productivity and standards.”²²

An example of the training and wage requirements imposed is shown in **Figure 1**.

²⁰ National Population and Talent Division (2013). *A sustainable population for a dynamic Singapore*.

²¹ See MoM website for details: <http://www.nea.gov.sg/public-health/public-cleanliness/cleaning-industry/cleaning-business-licence>

²² Ministry of Manpower: <http://www.mom.gov.sg/employment-practices/progressive-wage-model/what-is-pwm>

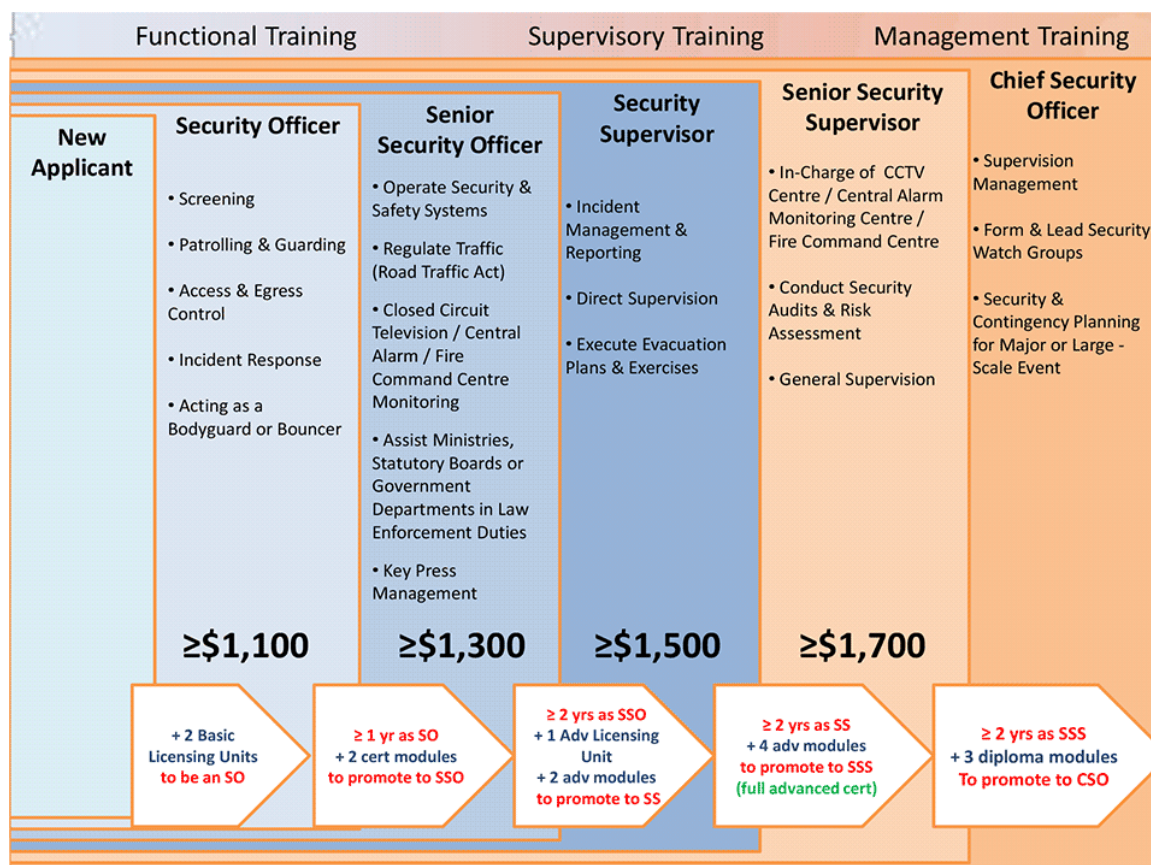


Figure 1: Training and wages schedule for security staff.

Source: MoM website: <http://www.mom.gov.sg/employment-practices/progressive-wage-model/security-sector>

Workfare Income Supplement (WIS)/Workfare Training Scheme (WTS)

First announced in 2007, the Workfare Income Supplement and Workfare Training Scheme were intended to supplement the wages of older low-paid workers and improve their skills.²³ Eligible were Singaporean citizens aged 35 or above, who earned not more than \$2,000 per month. Workers who participated in the WIS system would receive cash and CPF top-ups every month to supplement their wages. Under the WTS scheme, workers received payments in return for attending training programmes as well as bonuses for the qualifications that they obtained. Employers received a 95% course fee subsidy plus a 95% absentee payroll grant for every worker they sent for training under WTS.²⁴

Wage Credit Scheme (WCS)

Under this scheme, introduced in the 2013 budget, the state pledged to co-fund pay rises of \$50 or more accorded to Singaporean citizens earning less than \$4,000 per month (including CPF contributions). During the initial years of the scheme, the government co-funded 40% of raises, reduced to 20% in 2016-2017, and again to 15% after that.

²³ Chia, 2011.

²⁴ See the MoM website for details: <http://www.mom.gov.sg/employment-practices/schemes-for-employers-and-employees/workfare>

Fair Consideration Framework

Designed to ensure that Singaporeans received priority in applying for new job openings, the Fair Consideration regulations obliged locally-based companies to advertise new jobs on the Workforce Singapore Jobs Bank portal for two weeks before making any Employment Pass applications to the government, and banned them from specifying particular nationalities in their job advertisements. (Companies employing fewer than 25 people and jobs paying more than \$12,000 per month were exempt.)

The National Wages Council (NWC) collated and monitored wages, productivity and inflation statistics to direct wage policy. They used evidence suggesting a drop in the number of Singaporean citizens and PRs earning \$1,000 and under per month since the introduction of the various schemes mentioned above (from 10.6% in 2011 to 4.7% in 2016) to argue that these programmes were deserving of further expansion.²⁵

Nevertheless, comparative statistics appeared to show a continued downward pressure on Singaporean wages that was not present among similar economies less dependent upon foreign labour. Singapore continued to have a lower wage share of GDP than (among other countries) South Korea or Japan, a fact that studies have linked to its reliance upon foreign workers.²⁶

	Labour share (net of employer remuneration)	
	1990s	2000s
Republic of Korea	0.8810	0.8428
Japan	0.8145	0.7973
Singapore	0.6035	0.6301
Hong Kong	0.5280	0.5768
Macao	0.3690	0.4017

Table 1: Labour share comparison²⁷

The dependence upon foreign labour has also been linked to Singapore's relatively low productivity levels, as compared to regional competitors.

III. The fight for productivity

Dependence upon low-skilled foreign labour tended to reduce overall productivity in several ways. Firstly, low-skilled workers generally had lower average productivity rates than high-

²⁵ Security Tripartite Cluster. "Recommendations of the Security Tripartite Cluster on the Progressive Wage Model and Overtime Exemption for the Security Industry", November 2017. Retrieved 4 May 2018: <https://www.ntuc.org.sg/wps/wcm/connect/060bd327-7a9f-419d-9978-2ba9b1f7c373/STC+Recommendations+on+PWM+and+OTE+%282017%29.pdf?MOD=AJPERES>

²⁶ Chia, 2011.

²⁷ Adapted from Guerriero, Marta (2012). "The Labour Share of Income Around the World, Evidence from a Panel Dataset", Paper prepared for the 4th Economic Development International Conference of GREThA/GRES.

skilled ones,²⁸ and benefitted less from capital investment. In fact, Singaporean data seemed to indicate that low-skilled workers tended to be *more* productive when there was less capital available.²⁹ At the same time, the presence of a pool of cheap, low-skilled workers actively dissuaded businesses from making capital investments to mechanise their processes,³⁰ and helped to ensure the survival of low-productivity businesses that would otherwise have failed.³¹

Training schemes and mechanisation funds were introduced in the 1970s and 80s in an attempt to improve local workers' productivity while assisting businesses to replace low-skilled labour with capital. By the 1990s, however, the productivity deficit remained a problem, and the government turned to a new strategy to attempt to deal with it.³² The new "regionalisation" policy involved a series of partnerships with neighbouring countries, but also with more distant partners such as India and China. Singapore-inspired industrial centres were constructed abroad, allowing low-skilled manufacturing work to be done by foreign workers in their home countries without having to travel to Singapore. This effectively exported much of the manufacturing sector's low productivity to foreign countries, while retaining executive control.³³

However, while this succeeded in off-shoring much of Singapore's low value-added manufacturing activities, it did not entirely eliminate the domestic productivity shortfall. Despite the regionalisation policy, the contribution of labour productivity to GDP growth fell from 64% to 24% between 1997 and 2002 despite an increase in the number of foreign workers.³⁴

The effects of Singapore's immigration policy on productivity are particularly apparent when the country is compared with other, similar economies in countries with more restrictive immigration policies. In 2016, construction industry productivity in Singapore was only a third of that in Japan (a country that replaced low-skilled labour with capital at a relatively early stage),³⁵ with manufacturing and services performing little better.³⁶ Similarly, evidence has shown that increased total factor productivity has been a factor in Hong Kong's growth but not in Singapore's, implying that while Hong Kong was improving its efficiency,

²⁸ Lull, Joan (2008). *The impact of immigration on productivity*. Centro de Estudios Monetarios y Financieros (CEMFI) Working Paper 802.

²⁹ Thangavelu, Shandre Mugan (2012). "Economic Growth, Welfare and Foreign Workers: Case of Singapore." International Conference on Trade, Investment and Production Networks in Asia Leverhulme Centre for Research on Globalisation and Economic Policy (GEP), University of Nottingham 15th and 16th February.

³⁰ Lewis, Ethan (2011). "Immigration, skill mix, and capital skill complementarity." *The Quarterly Journal of Economics*, 126, no. 2: 1029-1069.

³¹ Hui, Weng-Tat. "Regionalization, economic restructuring and labour migration in Singapore." *International Migration* 35, no. 1 (1997): 109-130.

³² Auyong, Hawyee. *Singapore's Productivity Challenge: A Historical Perspective*, Lee Kuan Yew School of Public Policy, 2016.

³³ Hui, 1997.

³⁴ Thangavelu, 2012.

³⁵ Lim, Linette. "Raising construction sector productivity", Channel News Asia, 27 July 2016. Retrieved 6 March 2018: <https://www.channelnewsasia.com/news/singapore/raising-construction-sector-productivity-with-an-app-7910010>

³⁶ Tan, Wendy. "The ultimate killer of productivity in Singapore", *Singapore Business Review*, 6 March 2013. Retrieved 27 July 2016.

Singapore's GDP was growing as a result of the steady increase in the quantity of the factors of production used.³⁷ Hong Kong also had a better return on capital than Singapore, and improving the capital-to-labour ratio had a greater effect on productivity in Hong Kong than in Singapore.³⁸

Productivity remained a significant issue for the Singapore economy, but by the 2000's, it had been joined by an additional concern. The impact of immigration was being felt not just in the economic sphere, but also in the nation's social politics.

IV. Immigration and infrastructure

Immigrants' access to Singaporean public services has always been strictly limited: while they could get treatment in local hospitals and health centres, they (or their insurers) were obliged to pay for the service, and access to local schools was restricted to a degree that obliged many foreign talent to educate their children in private schools.³⁹ Access to public housing was limited to the rental and secondary markets, and strictly regulated (80% of all housing was government built, and unavailable for purchase by foreigners not possessing permanent residency).⁴⁰

Nevertheless, in a land-scarce country such as Singapore, infrastructure management was a delicate balancing act, and relatively small miscalculations had the power to make themselves felt in ways that would not necessarily be apparent in larger states.

Following the 2001 recession, the government made a deliberate decision to increase immigration, increasing dependency ceilings across the board to take advantage of renewed growth following the recovery. The result was that the number of foreign workers in Singapore jumped from around 797,900 in 2005 to 1,305,000 in 2010.⁴¹ (For reference, the total population – including foreign workers – was 4,265,800 in 2005 and 5,076,700 in 2010.⁴²) Investments in infrastructure during this period failed to keep up with population growth. This was particularly true in housing; Singapore's public housing plans had been based on a projected population of only four million in 2010—over a million less than was actually the case.⁴³ This had a corresponding inflationary effect on housing prices.

³⁷ Young, Alwyn. "A tale of two cities: factor accumulation and technical change in Hong Kong and Singapore." *NBER Macroeconomics Annual* 7 (1992): 13-54.

³⁸ Ibid.

³⁹ Teng, Amelia. "More expats find it tough to get kids into local schools", *Straits Times*, 13

⁴⁰ *The Economist*. "Why 80% of Singaporeans live in government-built flats", 6 July 2017.

⁴¹ Yap Mui Teng and Christopher Gee (2016). *Singapore Chronicles: Demography*, Straits Times Press.

⁴² Ibid.

⁴³ Barr, 2014.

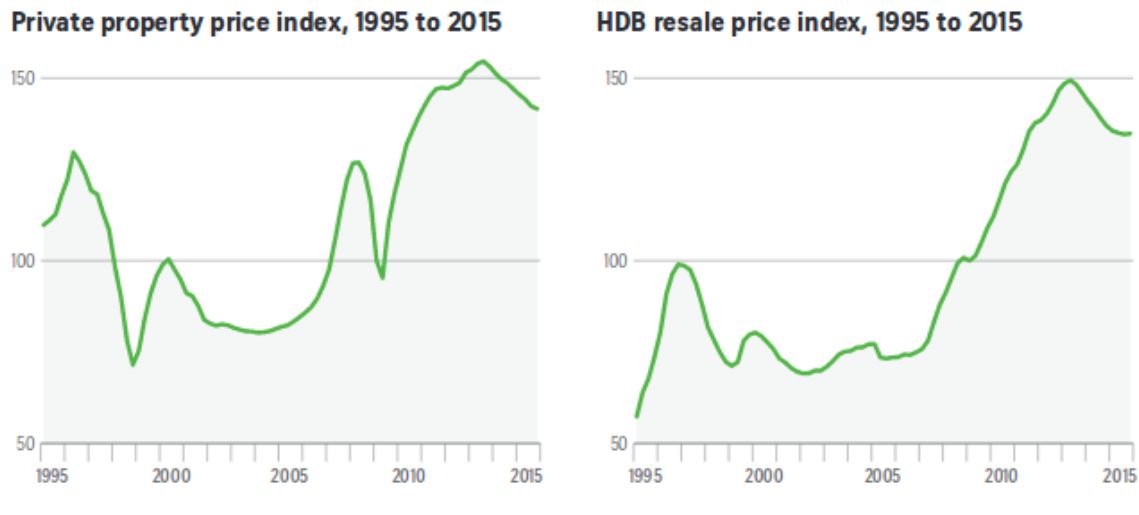


Figure 2: Private and public (resale) housing price index, Source: Straits Times⁴⁴

The housing pressure created a growing feeling of overcrowding, and spurred worries about quality of life on the part of Singapore residents. Similarly, the visible infrastructure issues made citizens less inclined to give government the benefit of the doubt concerning its statements on immigration, as well as helping to stoke anti-immigrant sentiments. The government responded to these concerns by setting out its long-term population and infrastructure projections in a Population White Paper released in 2013.

The White Paper argued that immigration was necessary as a result of Singapore's low birth-rate (just 1.15 children per woman in 2010) and ageing population (by 2030 nearly one third of the citizen population is expected to be over 65).⁴⁵ The paper set out a series of strategies for dealing with this problem. Efforts to encourage marriage and parenthood among Singaporean citizens were underlined (though similar efforts have not encountered noteworthy success in the past⁴⁶), but the paper also planned for between 15,000 and 25,000 naturalisations per year in an effort to maintain the citizen population.⁴⁷ The population of permanent residents (foreigners with long-term leave to remain, who enjoy many of the same rights as citizens) was projected to remain at a between 500,000 and 600,000, with 30,000 new permanent residents being accepted each year to replace those who left the country or were naturalised. While the growth in the population of foreign workers was projected to slow, a non-resident population of 1.8 million was nevertheless predicted by 2020, with Singapore's total population reaching between 6.5 and 6.9 million by 2030. To cope with this population increase, the White Paper also promised large-scale infrastructure expansion, particularly in the public transport, health and housing sectors, as well as better-designed urban spaces and more parks.⁴⁸

⁴⁴ Wang, Rennie and Janice Heng, "The state of Singapore's property market", Straits Times, 23 January 2016. Retrieved 4 May 2018:

https://www.straitstimes.com/sites/default/files/attachments/2016/01/23/st_20160123_new3_2012605.pdf

⁴⁵ National Population and Talent Division, 2013.

⁴⁶ Wong, Theresa, and Brenda SA Yeoh (2003). *Fertility and the family: An overview of pro-natalist population policies in Singapore*. Singapore: Asian MetaCentre for Population and Sustainable Development Analysis.

⁴⁷ National Population and Talent Division, 2013.

⁴⁸ *Ibid.*

The White Paper was produced with the aim of calming popular worries, but produced the opposite effect, leading to public outrage on a level seldom seen in Singapore. In particular, the possibility that the island would have a population of 6.9 million by 2030 was attacked online. The figure was seen as being unfeasibly high—promised infrastructure improvements notwithstanding, and led to an unprecedented series of public demonstrations.⁴⁹ In the end, the government found itself obliged to back-peddle somewhat on the paper's position, insisting that the 6.9 million population figure projected for 2030 was “not a target”, but merely a guide for use in planning spare infrastructure capacity. Lee Hsien Loong himself said, “We do not want 6.9 million as a target but I want to have infrastructure... I want to get myself ready. If unexpected things happen, I can be prepared.”⁵⁰

The growing feeling of overcrowding also had other, less tangible effects. Singaporeans, traditionally tolerant and welcoming of immigrants, grew increasingly concerned about the new arrivals' willingness to fit in, the dilution of local culture, and the potential threats to their jobs from similarly qualified foreign talent.

V. Social unease surrounding immigration

In addition to infrastructure and overcrowding worries, Singapore also saw a growing perception among citizens that that immigrants—whether low-skilled Work Permit holders or highly paid foreign talent—were frequently a civic nuisance, and threatened to water-down the young nation's fledgling sense of shared culture and common destiny.

Complaints about the public behaviour of immigrants became increasingly common,⁵¹ and Chinese foreign talent in particular were perceived as having little desire to integrate culturally and suspect national loyalties.⁵² A series of incidents involving highly-paid foreigners behaving antisocially attracted widespread anger online, particularly in light of the fact that Employment Pass holders increasingly came to be perceived as enjoying all the advantages of citizenship without its major disadvantage: the obligation for young men to enlist for 2-year-long national service. In the most famous incident, British banker Anton Casey lost his job and was forced to leave Singapore after posting insulting comments about the city on Facebook.⁵³ In other notable episodes, a Chinese scholarship holder was obliged by his university to pay a \$3,000 fine and do community service after making derogatory

⁴⁹ Goh Chin Lian and Maryam Mokhtar, “Large turnout at Speakers' Corner for protest against Population White Paper” *Straits Times*, 16 February 2013.

⁵⁰ Loh Chee Kong, “Govt 'has drawn lessons from planning inadequacy'”, *Today*, 16 January 2015. Retrieved 23 March 2018: <https://www.todayonline.com/singapore/govt-has-drawn-lessons-planning-inadequacy-pm>

⁵¹ Eng, Lai Ah (2012). *Viewing ourselves and others: Differences, disconnects and divides among locals and immigrants in Singapore*. Institute of Policy Studies.

⁵² Liu, Hong (2014). “Beyond co-ethnicity: The politics of differentiating and integrating new immigrants in Singapore.” *Ethnic and Racial Studies* 37, no. 7: 1225-1238.

⁵³ Hosking, Patrick. “Death threats for British banker Anton Casey over Singapore 'poor' jokes”, *The Australian*, 23 January 2014.

remarks about Singaporeans on a personal blog,⁵⁴ and an Australian software developer was sacked from his job for a Facebook rant about the local unavailability of Pokémon Go.⁵⁵

Paradoxically, these incidents have served, to a degree, to bring Singaporean citizens closer. Siah Chang Nee, a commentator for the Malaysian press, noted: “The impact of globalisation and the mass inflow of foreigners are helping the Chinese and the Malays achieve commonality faster than anything else. It has promoted a common bond—as well as a sense of nationalism—which would have been a lot slower without the 2,000,000 foreigners.”⁵⁶

Growing concerns over job security tended to compound this fear. While Singapore had among the lowest unemployment rate in the world, under-employment became a pervasive fear in recent years, with recent graduates in particular worried that competition for jobs would force them to accept positions for which they were over-qualified.⁵⁷

A 2011 survey by the Institute of Policy Studies found that 52.6% of young people surveyed thought the number of Employment Passes distributed should be reduced, and many respondents saw foreign talent as over-privileged and likely to threaten their own employment prospects.⁵⁸

⁵⁴ Nanayakara, Daryll, and Tong Jia Han, “NUS fines scholar for 'dogs' comment”, Asia One, 27 March 2012. Retrieved 21 April 2018: <http://www.asiaone.com/News/Latest%2BNews/Singapore/Story/A1Story20120327-335873.html>

⁵⁵ Lai, Linette. “Aussie expat fired after offensive Facebook rant”, *Straits Times*, 12 July 2016.

⁵⁶ Siah, Chiang Nee, “It's Singaporean vs. others”, *The Star*, 25 June 2011. Retrieved 5 October 2016: <http://www.thestar.com.my/opinion/columnists/insight-down-south/2011/06/25/its-singaporean-vs-others/>

⁵⁷ Tang, Louisa, and Alfred Chua. “Fresh grads forced to lower career expectations”, *Today*, 5 August 2017.

⁵⁸ Leong, Chan-Hoong, and Debbie Soon. *A Study on Emigration Attitudes of Young Singaporeans*, 2010. Institute of Policy Studies, 2011.

Statement	Disagree (%)	Neutral (%)	Agree (%)
Singaporeans want to emigrate because there are too many foreign talent here	31.2	31.7	37.0
Our job security is compromised due to the influx of foreign talent	23.9	31.2	44.8
Having too many foreign talent in Singapore dilutes the cohesiveness of our society	27.3	33.7	38.9
Foreign talent enjoys many benefits to which Singaporeans are not entitled (e.g. housing assistance, scholarships and subsidies)	29.5	36.4	34.2
Singaporeans shoulder more social responsibilities compared to foreign talent	20.9	30.8	48.1
Many foreign talent are just here for the benefits	18.7	31.6	49.7

Table 2: Young Singaporeans’ perceptions of “foreign talent”⁵⁹

These worries were present despite a generally positive view of Singapore’s economic prospects (50.5% felt that Singapore would be economically prosperous over the next 10 years, and 42.7% agreed that there would be sufficient job opportunities for all Singaporeans).⁶⁰

At the opposite end of the scale, locals also grew increasingly dissatisfied with the visible presence of low-paid Work Permit holders within the city. Residents objected when new foreign worker dormitories were planned for their neighbourhoods,⁶¹ and local newspapers received regular letters of complaint about the noise and litter in areas where foreign workers tend to gather on their days off.⁶² The presence of a substantial disenfranchised minority within the country (as of December 2017 there were 965,200 WP holders in Singapore⁶³) also led to political friction. When Chinese bus drivers went on strike to protest

⁵⁹ Adapted from Leong and Soon, 2011.

⁶⁰ Leong and Soon (2011).

⁶¹ Sim, Melissa, and Carolyn Quek. “Dorm not near but problems 'next door'”, *Straits Times*, 5 September 2008

⁶² Dodgson, Jennifer (2016). *Foreign Domestic Workers in Singapore: Social and Historical Perspective*, LKYSPP.

⁶³ Figures from the Ministry of Manpower website: <http://www.mom.gov.sg/documents-and-publications/foreign-workforce-numbers>

against unequal treatment, participants were rapidly jailed or deported,⁶⁴ and a riot among WP holders in Little India following a traffic accident led to a nationwide ban on over-the-counter sales of alcohol after 10:30pm, a move widely seen to be aimed at low-paid foreign workers (who could not afford to drink indoors).⁶⁵

Worries about an upswing in xenophobia coupled with several high-profile incidents of discrimination and abuse involving WP holders⁶⁶ eventually prompted efforts by the media to promote a more positive narrative. Online media in particular began focusing on stories that humanised foreign workers and emphasised their positive qualities, as well as praising locals who had made an effort to reach out to them.⁶⁷

Conclusion: avoiding the path dependency trap in immigration policy

In the 2011 general election, the PAP achieved a score of just 60.1%, the lowest in its history. This was directly linked by commentators mostly to popular disquiet over immigration levels.⁶⁸ While attempts to give immigrants a more positive image through media campaigns had some success, opposition to further population growth—as outlined in the 2013 White Paper—remained strong. Voters made it clear that they would accept neither reduced economic growth nor increased reliance upon foreign labour, presenting the government with a dilemma.

In any policy area, path dependency will become greater over time, as the accretion of institutions, regulations, and assumptions based upon initial policy choices grows year-on-year. In this case, the policy of importing cheap foreign labour—one that was originally intended as a temporary solution to a contingent lack of local manpower—became locked-in as businesses increasingly designed strategic plans on the assumption of the continued availability of low-cost foreign workers. In other words, the longer foreign workers remained a widely available factor of production, the greater the country's reliance upon them became. This made it increasingly difficult for the government to change policy without serious economic (and thus electoral) consequences. Nevertheless, popular discontent surrounding immigration policy demanded some sort of concrete change.

Academics have argued in the past that if Singapore wished to deal with its population issues while maintaining GDP growth, it had to encourage or oblige local companies to mechanise their processes in order to improve productivity while reducing reliance upon foreign workers.⁶⁹ It was a position to which the government, subject to increasing electoral

⁶⁴ BBC News, "Singapore jails bus drivers for inciting strikes", 23 February 2013. Retrieved 21 April 2018: <http://www.bbc.com/news/world-asia-21571053>

⁶⁵ Ong, Justin. "Measures in place to prevent a repeat of Little India riot", Channel News Asia, 6 April 2016. Retrieved 21 April 2018: <https://www.channelnewsasia.com/news/singapore/measures-in-place-to-prevent-a-repeat-of-little-india-riot-mha-8093740>

⁶⁶ Tan, Kenneth Paul (2015). "Images of the migrant worker in Singapore's mainstream news media: Prospects for integration." *Migration and integration in Singapore: Policies and practice*: 160-191.

⁶⁷ Neo, Grace. "A straining gap between Singaporeans and foreign workers", Youth.sg, 22 June 2016. Retrieved 21 April 2018: <https://www.youth.sg/Our-Voice/Opinions/2016/6/A-straining-gap-between-Singaporeans-and-foreign-workers>

⁶⁸ Barr, 2014.

⁶⁹ Hui, Weng-Tat, and Aamir Rafique Hashmi (2007). "Foreign labor and economic growth policy options for Singapore." *The Singapore Economic Review* 52, no. 01: 53-72.

pressure, came to adopt.⁷⁰ Attempts to encourage mechanisation were a recurring theme in Singapore immigration policy: originally the money received from the payment of the Foreign Workers Levy was paid into a mechanisation fund, and various grants were available to businesses looking to improve their capital.⁷¹ This process gained a new urgency in recent years.

In April 2018, a *TODAY* interview with Finance Minister Heng Swee Keat quoted him as saying that while businesses should not worry about losing their access to cheap foreign labour in the short term, the government would be looking to “calibrate” the number and type of foreign workers welcomed to Singapore in the future in order to oblige companies to improve their productivity: “If you can get a cheap worker, why will I bother to automate? Therefore, you never learn to automate, and you never need to operate in a different way.”⁷²

⁷⁰ Auyong, 2016.

⁷¹ See, for example, the website of the Building and Construction Authority:
<https://www.bca.gov.sg/MechC/mechc.html>

⁷² Ng, Kelly. “S’pore needs to relook foreign labour while maintaining productivity thrust: Heng Swee Keat”, *Today*, 18 April 2018.

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