Immigration in Singapore

Background paper to the World Development Report 2023: Migrants, Refugees, and Societies

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Abstract

International migration has been central to the emergence and development of modern Singapore. Throughout Singapore's history, immigration policy has been used as a deliberate tool to grow and augment the resident labor force to promote economic growth by relieving labor force constraints across all parts of the skill distribution. This paper begins with a historical overview of immigration policies in Singapore to provide the economic and sociopolitical context for the development of Singapore's approach toward immigration. It then turns to a more in-depth discussion of the mechanics and rationale behind the unique set of current immigration policies to (1) manage the flow and numbers of foreign workers—most of whom are temporary low-skilled migrants, alongside smaller numbers of medium-and high-skilled migrants; (2) attract foreign students; and (3) enable permanent residence and naturalization. Finally, the paper discusses the economic and social impacts of Singapore's foreign worker policy and outlines several challenges that could emerge in the near future. These challenges relate to the impact of skill-based immigration on the economic insecurity of residents in the context of rapid technological change, the continued high reliance of many sectors on low-skilled foreign manpower, and the difficulty of adapting and reinventing assimilation policies in a multiethnic society.

Keywords: Immigration, migrant workers, Singapore, immigration policy, temporary foreign workers

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Introduction

The story of modern Singapore is the story of migration. And the story of Singapore's immigration policy is, like much else about the city-state, fundamentally characterized by pragmatism (Tan 2012; Tan and Bhaskaran 2015). Immigration has mainly been a policy tool to solve economic and social problems. Even the absence of immigration policy—which was the case during the first hundred years of modern Singapore under British rule—was instrumental to expanding the migrant labor force, which fueled a nascent and rapidly growing colony.

This paper begins by sketching a brief history of immigration from the founding of modern Singapore through the present day, focusing on the economic, social, and political motivations that shaped changes in immigration policy. Immigration policy is primarily focused on relieving labor force constraints, at the medium- and high-skilled end, where migrants are valued for bringing capabilities relatively scarce in the resident population, ¹ and at the low-skilled end, where migrants are sought for their willingness to accept work Singapore citizens prefer to avoid. Migrant workers, across all ends of the spectrum, act as a buffer against macroeconomic cycles, allowing for rapid expansion of the labor force while taming inflation during booms, and moderating the impact of busts on resident employment through selective attrition of the foreign workforce.

Next, it discusses the policy mechanisms behind immigration policy, segmented into immigration favoring high-skilled migrants, which targets the long-term selective assimilation of migrants in the upper tier of the skills and earnings distribution and who have the potential to readily integrate socially into Singapore, and low-skilled or low-wage immigration, characterized by transience and the absence of pathways to assimilation. The economic consequences of immigration, including impacts on the employment, labor supply, skills, and sectoral allocation of Singapore residents (citizens and permanent residents), and on industrial structure and productivity, are noted. It also discusses the experience of Singapore citizens with circular migration for study and work, and policies that facilitate such flows.

Finally, it concludes by examining three serious limitations to Singapore's immigration policy in the near future, centering on the structural economic insecurity faced by the Singapore citizen labor force in the presence of technological change and open high-skilled immigration policy; the inability of the economy to wean itself off low-wage, low-skilled migrant labor; and the challenges Singapore faces in reinventing itself when long-term migrant assimilation has thus far simply replicated the colonial-era societal status quo.

Overview of immigration policies

Historical developments before independence

Soon after assuming control over the island at the tip of the Malay peninsula, the British began encouraging large-scale immigration to provide labor at the trading port, for public works, and for the plantations in the hinterland. The first recorded population statistic of modern Singapore reported a population of 10,683 in 1824—"entirely as a result of migrational surplus" (Arumainathan 1973). The population grew rapidly over the next hundred years at an annual compound rate of 3.77 percent, fueled almost entirely by migration, and the 1931 Census recorded a population of 557,745 (Arumainathan 1973). The Great Depression resulted in a severe but brief shock to labor demand in the early 1930s (Choy and Sugimoto 2013), and precipitated a large-scale repatriation exercise of unemployed migrants to their sources in China and India, briefly reversing population growth with a net outflow of some 389,000 migrants from British Malaya (Arumainathan 1973). However, the economy soon rebounded, and despite the introduction of immigration regulations with the Aliens Ordinance of 1933 that imposed a quota system on male migrants, the overall population nearly doubled immediately before the second world war. A novel source of growth during this period was from female migrants from China, who were not regulated by policy, and who formed 41.3 percent of the total estimated 460,000 Chinese migrants from 1934 to 1938 (Arumainathan 1973).

Natural increase was an insignificant—and indeed negative—factor in population growth in Singapore's early years, due to gender imbalances in the population and high mortality rates. It was not until just after the second world war that natural increase became the major source of population growth, in the wake of policies that further regulated formerly unrestricted immigration (Yeoh and Lin 2012). and due to high fertility rates during the post-war baby boom. The dramatic increase in the female population, due in part to their preferential status under immigration policy starting in the 1930s, also contributed to natural growth. While in 1931, there were only 118,000 women of child-bearing age and the overall sex ratio was 1.7 males to females, by 1957 there were some 314,000 women of childbearing age and the sex ratio was just above 1.1 (Arumainathan 1973). The Singapore-born started to form the majority of the population, and immigration became restricted largely to West Malaysia. By the first post-independence Census in 1970, natural increase accounted for 94.8 percent of intercensal population growth from 1957 to 1971, and 74.4 percent of the population was born in Singapore (Arumainathan 1973). Despite initially overwhelming migrant origins, the population had largely become naturalized within two generations, from 1931 to 1970. Indeed, both the numbers and share of the foreign-born population outside of Malayan origin shrank, with only 9.2 percent of the Chineseborn and 23.4 percent of the Indian-born having immigrated to Singapore after 1956 (Arumainathan 1973).

The traumatic sociopolitical conditions causing the separation of Singapore in 1965 from the nascent Federation of Malaysia concentrated policy makers on the population problem.³ The Finance Minister Lim Kim San, in the first Budget Statement of independent Singapore, noted: "...basically our problem stems from our large and increasing population living in a small island with no natural resources. The entrepot trade on which we thrived and prospered in the past is not expanding fast enough to provide the jobs for the increasing population, nor is it capable of generating sufficient revenue to maintain the level of education, housing, medical and welfare services that a modern civilised society expects" (Singapore Parliamentary Debates, 13 December 1965, vol. 24, col. 47). The priority of the post-independence government was to promote economic development to resolve an imminent unemployment crisis, exacerbated by the substantial youthful and largely Singapore-born share of the resident population: 42.8 percent of the population in 1966 was ages 14 and below.

Migrants were now seen in part as an impediment to the government's plans to generate full employment and economic growth. At the State Opening of the first Parliament of Singapore, the President's speech outlined the government's immediate plans to control immigration, so as to "limit the responsibilities of the government to the citizens of Singapore" (Singapore Parliamentary Debates, 1965, 8 December 1965, vol. 24, col. 13). The Regulation of Employment Act was soon passed to require lower-wage non-citizens to obtain Work Permits before employment, with the policy intent of barring low-skilled migrants from Malaysia from competing with Singapore citizen workers (Singapore Parliamentary Debates, 22 December 1965, vol. 24, col. 480–482).

At the same time, government ministers also acknowledged that migration was, and would continue to be, the basis for Singapore's continued vitality and relevance as a nation. The Deputy Prime Minister, Toh Chin Chye, in the debate on the President's speech, noted that: "Singapore is an open port, an open city, to which people from all walks of life and from all races and cultures migrate, that these people must be assimilated and absorbed into a nation... I do not believe that Singapore by just becoming independent can remain isolated from our neighbour, much less from the rest of the world" (Singapore Parliamentary Debates, 20 December 1965, vol. 24, col. 369–371). Indeed, the Minister of Labor, Jek Yeun Thong, declared that: "Work permits will be freely issued to non-citizens who have special training, skills and qualifications. In fact, we will welcome them because there are ample employment opportunities for skilled workers and professional persons who can contribute substantially to our economic development" (Singapore Parliamentary Debates, 22 December 1965, vol. 24, col. 480–482).

This condensed history of Singapore up till independence captures the fundamental themes that underpin immigration policy in Singapore until the present day: the use of rapidly imported migrant labor to fill the economic needs of a rapidly growing economy; the equally swift dispensation with

migrants when economic challenges arise; and the transformation, over time, of migrants—on an increasingly selective basis—into residents.

Overview of post-independence immigration to Singapore

1970–90: "A wholly Singaporean workforce"

At independence, the non-resident migrant contribution to the workforce was best characterized as minor and highly polarized by skill level. In the 1970 Census, only 3.18 percent of the labor force were non-citizen, non-residents, and 3 in 10 were engaged in the high-skilled Professional, Managers, Executives, and Technicians (PMET) occupational categories, whereas only 1 in 10 of Singapore citizens were in such occupations. 4 At the same time, the migrant workforce was relatively underrepresented in the middle-skill occupations such as Clerical, Sales, and Service Workers, and were employed at about the same levels as Singapore citizens in the lower-skill Production, Operators, and Laborer roles. 5 Recent migrants were thus a small supplement to the overall labor force, although their job polarization, combined with the relatively small share of high-skilled jobs in the economy at the time, made them a significant contributor to the high-skilled labor force, where nearly 1 out of 10 highskilled workers were migrants. There were also early signs that the migrant contribution would come to be more important in certain occupations and industries, such as the construction sector, either due to relative skill differences, or due to relative differences in job preferences and opportunity costs. By 1980, while non-resident migrant employment had grown to 7.3 percent of the labor force, their skill distribution continued to be essentially bimodal, concentrated at both the high-skilled and low-skilled end (Pang and Lim 1982).

The overall policy intent for the first two decades after independence was focused on building a full-employment economy based on upgrading the skills and capabilities of the resident labor force, where migrants would be selectively permitted to fill skill and labor gaps, with an eye to eventual assimilation of some migrants into the Singapore citizen population. The use of migrant labor was seen as a necessary but only temporary measure, which if utilized excessively or permanently, would have undesirable consequences politically, socially, and economically.

In 1982, founding Prime Minister Lee Kuan Yew announced that the government aimed to have "A wholly Singaporean workforce without any work permit holder at all by 1991... Workers we want to retain beyond 1990 should be those who will raise our level of productivity... We shall give such workers permanent residence with a view to citizenship. Then we shall have a more homogenous workforce, working together as a team, because they all feel committed to Singapore." ⁸

This view was echoed in Parliament by the Minister of State for Labour, Dr. Wong Kwei Cheong: "It is the Government's plan over the next 10 years to minimize our reliance on foreign workers and, as far as possible, to build up a wholly Singaporean workforce. Therefore, work permit holders, other than those who are likely to be absorbed into our permanent workforce, will gradually be phased out over that period." (Singapore Parliamentary Debates, 31 August 1982, vol. 42, col. 117–118) and by Mr. Lee Yock Suan, the Minister of State for National Development: "Over the longer term, as the industry upgrades, mechanizes and industrializes the resultant productivity growth will lessen the need for more manpower, especially foreign workers. It is still the aim of the Government to phase out foreign workers in the construction workforce by 1991" (Singapore Parliamentary Debates, 18 March 1983, vol. 42, col. 1144–1145).

To support the policy objective of calibrating and reducing the foreign workforce, the government introduced the Foreign Worker Levy system in 1982, where employers of prescribed categories of Work Permit holders, generally in the lower wage and skill occupations, were required to pay monthly fees to the government for each Work Permit holder employed (Singapore Parliamentary Debates, 31 August 1982, vol. 42, col. 117–118). The dependency ratio ceiling (DRC) policy was also introduced to limit the maximum permitted ratio of Work Permit holders in an employer's overall workforce.⁹

Presumably, the intent was to use such policy levers to gradually phase out Work Permit holders in the Singapore economy.

However, as figure 1 shows, throughout the 1980s, Singapore instead became increasingly more reliant on the non-resident workforce, which grew from 3.2 percent of the total workforce in 1970, to 11.09 percent in 1980, and then 16.15 percent in 1990 (Yeoh and Lin 2012). ¹⁰ Although detailed historic data on the foreign composition of the workforce are not consistently available, Parliamentary records suggest that Singapore's rapid industrialization and growth produced skills and labor shortages which government policy sought to address by granting "permission for industrial concerns to bring in skilled labor from outside Singapore" (Singapore Parliament Debates, 29 December 1969, vol. 29, col. 302).

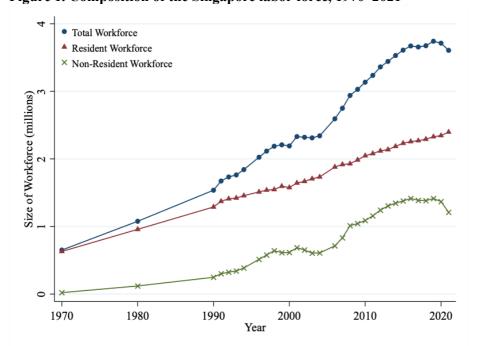


Figure 1. Composition of the Singapore labor force, 1970–2021

Sources: Yeoh and Lin 2012 for 1970, 1980, 1990, and 2000; Manpower Research & Statistics Department for 1991 to 2021 (except 2000).

Note: Residents include Singapore citizens and permanent residents. The total workforce is the sum of the resident and non-resident workforce (that is, foreign workers who are holders of Work Permits and Employment Passes). The data from 2008 onward were revised to exclude Singapore residents (citizens and permanent residents) who have been away from Singapore for a continuous period of 12 months or longer as at the reference period.

In 1985, Singapore experienced a short but sharp recession, precipitated in part by the government's policy to upgrade the wages of the resident labor force to move the economy up the value chain (Goh 2009). The advantages of foreign labor in managing macroeconomic shocks became apparent once more, as a source of highly mobile labor that could improve economic competitiveness by relieving wage pressures, skills, and labor shortages during booms, and—crucially—bear the brunt of job market restructuring in any busts. The 1985–1986 Economic Committee set up by the government to examine and restructure the economy in the wake of the recession, headed by the future Prime Minister Lee Hsien Loong, noted that Singapore "will require foreign workers to overcome temporary shortages, and to work in jobs where it has proven difficult to employ Singaporeans" (Ministry of Trade and Industry 1986). By 1990, the non-resident workforce rose to 248,200, or nearly 1 in 6 workers—suggesting that the government's original policy intent of aiming for "a wholly Singaporean workforce" by then was well and truly dead—the occasional wishful thinking from politicians aside.

Since then, the policy has been to accept non-resident workers as a permanent feature of the Singapore labor force, albeit one with acknowledged significant long-term structural, societal, and economic trade-offs. As the Finance Minister Richard Hu put it, delivering the post-recession Budget in 1988: "The key

to managing our economic growth is flexibility... We have therefore been using a pool of foreign workers as a buffer to cope with business cycles and economic fluctuations. However, we must not lose sight of the social and economic costs of an increasing dependence on foreign workers" (Singapore Parliamentary Debates, 4 March 1988, vol. 50, col. 623–624). The government's policy since then has been to rely on the control mechanisms of the foreign worker levy and the dependency ratio ceiling to price and limit foreign labor, while using industrial policy to encourage employers to moderate their demand for low-wage foreign labor.

1990–2008: "Gathering talent": Singapore as a cosmopolitan, global city?

The foreign labor policy from independence until the 1990s eventually came to accommodate the permanent, but highly restricted, presence of low-wage foreign labor. As for high-skilled labor, policy makers had long valued their contributions to the skill intensity of the labor force—and, more controversially, their supposed salutary effects on the competitiveness and dynamism of the resident population—but there was little in the way of a comprehensive high-skilled manpower strategy (Pang 2006; Pang and Lim 1982). ¹¹ This changed in the mid-1990s when the Singapore government began developing policies to attract and assimilate large numbers of high-skilled migrants.

This policy shift was precipitated by Singapore's declining comparative advantage in lower- to medium-skill industries, which drove Singapore's rapid economic development in the 1960s and 1970s, but which were rapidly being eroded by the increasing openness and competitiveness of regional economies. China, in particular, liberalized its economy to foreign investment in the early 1990s, and soon accounted for the bulk of foreign direct investment (FDI) inflows to East Asia (Ministry of Trade and Industry 1998).

To address these growing concerns, the Committee on Singapore's Competitiveness was formed in 1996 to develop Singapore's future economic strategies. The 1997 Asian Financial Crisis provided further impetus for reform. While Singapore was spared direct impact, the sharp decline in external demand drove the economy into a brief recession in 1998, and the associated rapid depreciation of many regional currencies worsened Singapore's cost competitiveness further.

It became clear to policy makers that a new competitive paradigm for Singapore was needed. The Committee's report, issued in 1998, declared: "We should be a knowledge economy where the basis for competitiveness will be the capabilities and intellectual capital to absorb, process and apply knowledge... To develop into a knowledge economy, Singapore should be an open cosmopolitan society, attractive to global talent and connected with other global knowledge nodes. There should be a critical mass of Singaporeans who are risk-taking entrepreneurs, innovators and arbitrageurs. Together with the global talent, they will move Singapore ahead in the Information Age" (Ministry of Trade and Industry 1998).

In Singapore's new knowledge-based economy, attracting and building a critical mass of "global talent" would be crucial to fill skill and capability gaps in the resident labor force; to build connections between Singapore and "global knowledge nodes"; and, to transform Singapore from being a passive recipient of foreign investment to an active exporter of capital, talent, and capabilities to the region and the globe (Olds and Yeung 2004).

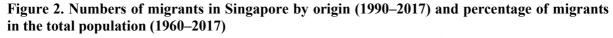
On the social front, openness to immigration was also precipitated by the belated recognition that Singapore's labor market problem had shifted from finding full employment for a rapidly growing population to finding a sufficiently large population for a rapidly growing economy. Within one generation, Singapore went from having one of the world's highest fertility rates in the 1950s to less than replacement fertility by the late 1970s. Despite significant efforts to encourage marriage and procreation, particularly among higher-educated couples, fertility remained stubbornly low thereafter (Wong and Yeoh 2003).

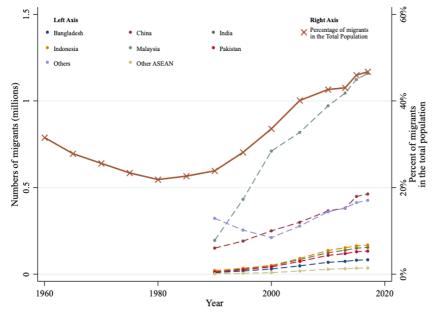
In the National Day Rally speech in 1997—traditionally, the most important political speech of the year—the Prime Minister, Goh Chok Tong, devoted one-third of his address to outlining the government's plans for "Gathering Talent," stating: "To produce for world markets, and to be a successful knowledge-based economy, we need intellectual capital. In the information age, human talent, not physical resources or financial capital, is the key factor for economic competitiveness and success. We must therefore welcome the infusion of knowledge which foreign talent will bring. Singapore must become a cosmopolitan, global city, an open society where people from many lands can feel at home" (Goh 1997). To support these plans, Singapore rebranded itself as a "Talent Capital" (Iwasaki 2015), and established a multi-ministry Singapore Talent and Recruitment (STAR) committee in 1998 to attract and recruit highly skilled workers globally (Yap 1999). Supporting these broader labor market schemes, efforts also gathered pace to attract high-potential students to Singapore, both through Singapore government-sponsored scholarship programs for study in local educational institutions, as well as through the "Global Schoolhouse" project, which aimed to make Singapore a hub for international universities.

The shift in policy to embrace high-skilled immigration and assimilation soon began to bear fruit. Before discussing the statistics, it is useful to clarify how the Singapore government typically classifies different groups of the population. The breakdown is usually provided in terms of residency (instead of country of origin), where "residents" refers to individuals who are Singapore citizens or permanent residents, while "non-residents" refers to foreigners working or studying in Singapore as well as their dependents (that is, non-citizen/non-permanent residents). The "resident" category includes naturalized citizens as well as permanent residents who do not have citizenship, whereas the "non-resident" category includes only foreigners who do not have the legal right to permanent residence in Singapore. This distinction is used because the government views the resident population as the relevant statistic for understanding many economic and social aspects of the country, where the presumption is that the vast majority of the non-resident population who work or study in Singapore are transient and expected to return eventually to their countries of origin. 12 Unfortunately, there are few official statistics on the breakdown of the foreign-born population within the resident category. An exception are the statistics provided by international organizations such as the United Nations (UN) that report the size of the foreign-born population (or migrant stock, using their terminology), which will be discussed later in the paper.

As figure 1 shows, the non-resident labor force grew from 248,200 workers in 1990 to more than one million workers in 2008, comprising more than one-third (34.41 percent) of the total workforce. While the growth of the resident workforce was relatively more stable, at approximately 38,000 workers per year, the non-resident workforce exhibited significant fluctuations, including flat or negative growth in the aftermath of economic recessions caused by the 1997 Asian Financial Crisis, the dot com crash of 2000–01, and the 2003 SARS outbreak.

Although a detailed breakdown is not consistently available, a substantial portion of resident labor force growth during the late 1990s onward can be attributed to the assimilation of migrants. Figure 2 shows that from 1960 to the 1990s, the foreign-born population (or migrant stock, to use the UN terminology) gradually declined and plateaued, consistent with the lack of any explicit policy of assimilation, and policy ambivalence toward foreign workers more generally. This pattern started to reverse in the 1990s, with the proportion of the foreign-born population rapidly and continuously rising. In 2007 alone, some 63,627 persons were granted permanent resident status, while another 17,334 were granted Singapore citizenship (Department of Statistics, Population in Brief, 2008). Given that naturalization policy in Singapore supports the principles of "Gathering Talent" outlined previously, it is reasonable to assume that the majority of those granted permanent resident status are selected from the high-skilled, economically active migrant worker population. A comparison of resident labor market outcomes shows that permanent residents—who are selectively granted that status—have wages and employment rates that far exceed the Singapore citizen population (Singapore Parliamentary Debates, 26 March 2020, vol. 94). ¹³





Sources: Numbers of migrants data UNDESA (United Nations, Department of Economic and Social Affairs), various years; population data—World Bank, World Development Indicators, various years.

Note: Percentage of migrants of total population was calculated using the following formula for each year of available data: Total numbers of migrants /Total Singapore population. Numbers of migrants data refers to the country's foreign-born population. ASEAN = Association of Southeast Asian Nations.

In addition to assimilation on the basis of high skills, naturalization policy also considers the demographic characteristics of the applicant and their potential to fit into Singapore's existing multicultural society. Although detailed evidence is not available from the Singapore government, occasional reports suggest that grants of permanent residence status—and by extension, grants of eventual citizenship—are preferentially awarded to applicants whose ethnic and/or cultural origins are consistent with that of the Singapore citizen population, which is dominated by the Chinese majority, followed by the Malay and Indian minority groups. ¹⁴ Figure 2 shows that, according to UN migration data, the migrant population in Singapore is dominated by persons originating from Malaysia, followed by China, Indonesia, and India, with particularly rapid growth in the groups originating in Malaysia and China from the 1990s onward. ¹⁵

Policies to manage the lower-skill migrant labor force have also been managed on the basis of demographic fit with Singapore's society. A clear differentiation is made between "Traditional Source" workers, referring initially to workers of Malaysian origin, and "Non-Traditional Sources," referring to Asian countries further afield such as the Philippines and Bangladesh. As early as 1983, concerns were raised in Parliament about the longer-term social effects of having large numbers of "Non-Traditional Source" workers remain in Singapore for extended periods (Singapore Parliamentary Debates, 21 March 1983, vol. 42, col. 1326–1327; Singapore Parliamentary Debates, 19 March 1996, vol. 65, col. 1642–1644). In response, the government generally restricted the employment of "Non-Traditional Source" Work Permit holders to occupational sectors such as construction and marine shipyard, where labor demands were high, and where—implicitly—their presence would be less noticeable to the Singapore citizen population. Additional policy measures, such as restricting "Non-Traditional Source" Work Permit holders from living in public housing estates, further segregated migrant workers from the Singapore citizen population. (Tremewan 2006). Even as the presence of Work Permit holders became a permanent feature of the economy, the policy distinction between "Traditional" and "Non-Traditional" Source workers continued, effectively creating differentiation in Work Permit occupations

by foreign source nationality, and serving as a means of managing the social impact from a large foreign workforce (Singapore Parliamentary Debates, 7 July 1995, vol. 64, col. 1318–1320).

The result from this era was the bifurcation of foreign labor policy into a "Foreign Talent" strategy, where high-skilled workers were welcomed, actively recruited, and targeted for long-term assimilation, and a "Foreign Worker" strategy, where low-skilled workers were tolerated due to economic necessity, but carefully managed for the undesirable social and economic trade-offs. Policies were further refined in 2004 to recognize that immigration policy based on a strict bifurcation of skills did not suit the economy's need for "manpower at the diploma and post-secondary level" (Singapore Parliamentary Debates, 27 February 2004, vol. 77, col. 463–464). The skilled or "S" Pass system was thus introduced for medium-skilled foreign workers who fall short in income or qualifications of the high-skilled threshold. In practice, the S Pass scheme has fallen between the "Foreign Talent" and "Foreign Worker" paradigms; S Pass holders are managed through a levy and quota system similar to that used for low-skilled workers, but they are not subject to societal management policies, such as restrictions on source countries, and they are also seen as a potential source for long-term assimilation.

Throughout this period, the foreign worker levy and dependency ratio ceiling were continually adjusted to calibrate the flow of, and demand for, low-skilled workers, while the approval criteria for high-skilled workers' Employment Passes, consisting largely of income and qualification checks, was likewise adjusted to ensure that incoming workers, as far as possible, filled positions that required skills that were relatively rare in the resident population. In both cases, policies were generally responsive to industrial needs, moderating the criteria to accommodate sectoral challenges or opportunities.

2009–19: Population backlash and the government's response

During the late 2000s, which were characterized by rapid growth of the non-resident workforce, as well as substantial assimilation of selected migrants into the resident population, the presence of foreign workers—and assimilated migrants—became an increasing political and social concern. While Singapore citizen unemployment remained low throughout—even during macroeconomic shocks such as the 2009 global financial crisis—it was increasingly apparent that Singapore's economic growth was largely driven by the substantial expansion of the foreign workforce. In 2008 alone, the non-resident workforce grew by 21.53 percent, whereas the resident workforce grew only by 0.53 percent. Employment of foreign workers rose by 21.4 percent year on year, compared to only 2.7 percent for residents (also, see Yue 2011 for employment numbers).

At the lower-skilled end, there was increasing concern that Singapore citizen low-wage workers were experiencing wage suppression from the ready availability of Work Permit holders, who were generally willing to work for lower effective wages than citizens. Work Permit holders were also, increasingly, blamed for social ills such as crime or disorderly public behavior. At the high-skilled end, the rapid growth in migrant high-skilled workers led to keen competition for Professional, Managerial, Executive, and Technical (PMET) jobs, which were demanded by an increasingly well-educated Singapore citizen workforce. In the two years after the global financial crisis, from 2009 to 2011, the number of Employment Pass (EP) holders expanded by around 30,000 per year—a number two and a half times larger than the entire cohort each year of graduating university-educated residents. Although resident employment rates across skill groups generally remained at full employment throughout, the perception nonetheless was that competition from foreign workers was contributing to a combination of wage suppression, higher expectations from employers, discrimination against Singapore citizens in industries or roles dominated by "Foreign Talent," and underemployment for high-skilled Singapore citizens.

In 2011, the so-called "watershed" general election (Adam and Lim 2011) saw the ruling party's voter share fall from 66.6 percent in 2006 to only 60.14 percent. More Opposition MPs were elected than at any time since independence, a stunning result given the ruling party's hitherto uninterrupted dominance in the polls and Parliament. ¹⁷ Voters expressed discontent, not just toward foreign employment in general, but also toward the pressures placed on housing prices, overcrowding in public

transport, and other strains believed to be caused by rapid population growth. In 2013, the government announced a long-term population strategy under the "White Paper on Population" which outlined that a projected total population of 6.9 million could exist by 2030, supplemented by a non-resident population of 2.9 million to 3.1 million and an increase in new citizenship and permanent residents (PRs) granted (National Population and Talent Division 2013). The release of the White Paper sparked significant public debate and even a large-scale protest attended by 5,000 people in opposition to the White Paper (Goh and Mokhtar 2013). While the White Paper was subsequently accepted by Parliament (Singapore Parliamentary Debates, 8 February 2013, vol. 90), the government, perhaps chastened by popular discontent, nonetheless took steps in the years ahead to disassociate population policy from the White Paper, even publicly refuting any policy intent to establish a "population target" for Singapore. ¹⁸

Given these clear signals that the Singapore citizen population were becoming averse to an increasingly foreign workforce, and to rapid immigration-driven population growth in general, the government took measures to tighten its foreign worker policy. In 2011, an Employment Pass eligibility certificate was scrapped; it had previously allowed foreign professionals who have or had held specific university degrees or other country's skilled migrant visas to remain in Singapore to find a job for up to one year (Yeoh and Lam 2016). The Ministry of Manpower (MOM; previously the Ministry of Labour) revised its Employment Pass scheme by tightening its eligibility requirements; these took effect in 2012. The qualifying salaries of the P2 Pass rose from \$\$4,000 to \$\$4,500, while that of the Q1 Pass was revised upward from S\$2,800 to at least S\$3,000 if the applicant is "young" and from a "good quality institution," while older applicants would need to earn more than S\$3,000 to qualify for the Q1 Pass (MOM 2011b). On the other hand, from 2011 to 2013, the foreign worker levy was raised for S Pass and Work Permit holders. Employers incurred an increase of S\$190 of levies per Tier 1 S Pass holder or an increase of S\$300 per Tier 2 S Pass holder, while the levy tier for Tier 1 S Pass holders was tightened from 20 percent to 10 percent. Meanwhile, Work Permit holders' levies were raised by \$\$320, \$\$260, and \$\$160 for construction, manufacturing and services sectors, respectively. Across the board, while the dependency ratio ceiling remained constant, the levy tiers were tightened such that firms with a higher dependence on foreign workers holding S Passes or Work Permits would incur higher business costs per foreign worker hired (MOM 2011a).

As figure 1 shows, the growth of the non-resident workforce plateaued toward the mid-2010s, rising from 1.044 million workers in 2009 and levelling off around 1.415 million in 2016, while assimilation into the resident workforce slowed dramatically, with new citizen and permanent resident grants slowing to an average of about 20,000 and 30,000 a year, respectively. In tandem with measures to slow or halt foreign workforce growth, inflows of the foreign student population were also reduced, from 100,000 in 2008 to about 84,000 in 2012 (Davie 2010, in part because policies to develop Singapore as an international student hub were recalibrated to assure Singaporeans that their opportunities for places in government-subsidized higher education institutions would not be compromised (see discussion in the next section).

Immigration policies in Singapore

This section describes the immigration policies in Singapore in greater detail. Immigration policies in Singapore can be broadly classified into three main categories: (1) policies regarding the foreign labor force; (2) policies to attract foreign students; and (3) permanent residence and naturalization. Foreign workers are by far the largest source of migrant inflow into Singapore; as such, the bulk of the policy and popular discussion surrounding immigration policy in Singapore typically concerns this group of economic migrants. The section also describes the main policy parameters and provide a discussion of the key rationale behind the policies.

Foreign labor force policy

In formulating labor force policy, the government continuously engages stakeholders through "tripartism," which emphasizes the cooperative, rather than adversarial, role of the government, employers, and labor unions in sustaining employment, business growth, and wage growth (Lim and Chew 1998). Tripartism operates through councils and committees that contain representatives from the tripartite stakeholders to formulate and advise on—among other things—wage policy¹⁹ and labor market reforms. ²⁰ Singapore also closely engages foreign investors and multinational enterprises through the Economic Development Board, Singapore's external economic development agency, and has prioritized being "[responsive] to changes in the international economy and the resulting requirements of [foreign enterprises]" (Huff 1995).²¹

Singapore has historically depended on foreigners to supplement its resident labor force and maintain economic competitiveness and growth (Yap 2014). With relatively low resident unemployment rates (generally around 3 percent in nonrecessionary times), foreign workers have been relied upon to fill labor shortages and to serve as a buffer to smooth employment demand during economic cycles. Moreover, demographic considerations such as the rising educational profile of Singapore citizens, low fertility, the rapidly aging population, and the entry of women into the labor force has also led to the reliance on foreign manpower to augment the size of the workforce, fill gaps in certain sectors and occupations, keep production costs low, and provide care services within the household.

The approach to managing foreign labor in Singapore differs substantially by the skill level of migrants. Low-skilled migrants are viewed as temporary guest workers and are allowed to work in the country under strict conditions and are expected to leave the country when their job contract expires. These migrants are subject to stringent social and economic controls; for example, they cannot bring their families to Singapore, are often required to reside in employer-provided housing, and are required to pass regular medical examinations to maintain their work status. There is generally no clear path to permanent residence or citizenship for this group of workers. On the other hand, Singapore has generally adopted a relatively open immigration policy for skilled foreigners who wish to work in Singapore, and generally accord them similar rights as residents. Skilled foreign workers are encouraged to bring their families, and there is generally a path to permanent residency or citizenship for those who can demonstrate that they are willing to sink their roots in Singapore and continue to contribute to the country.

Figure 3 shows the breakdown of Singapore's foreign labor force by Pass type from 2009 to 2021. Low-skilled migrants in the form of Work Permit (WP) holders comprise the majority of foreign workers, although their share in the foreign workforce has declined from more than 60 percent in 2009 to 50 percent in 2021. Foreign domestic helpers—another category of low-skilled migrants—accounted for about 15 percent to 20 percent from 2009 to 2021. Medium-skilled workers (S-Pass holders) and high-skilled workers (Employment Pass holders) each comprise about 8 percent to 15 percent of the foreign workforce over the same period. The decline in the share of low-skilled foreign workers from 2009 to 2012 was accompanied by an increase in the share of S-Pass and Employment Pass (EP) holders.

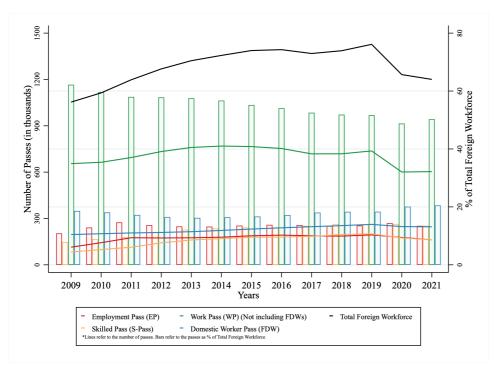


Figure 3. Singapore's foreign workforce by Pass type, 2009–21

Sources: Singapore Ministry of Manpower, "Foreign workforce numbers"

Note: FDW = foreign domestic worker.

Temporary low-skilled to medium-skilled migration

Low-skilled migration is managed through the issuance of Work Permits (WP) that allow foreign workers from approved source countries to work for a specified employer in certain sectors (construction, manufacturing, marine shipyard, process or the services sector). These permits have no minimum qualifying salary and typically apply to foreigners who command a monthly salary of less than S\$3,000. Medium-skilled migration is granted through S Passes, which are targeted at foreigners who earn a monthly salary of more than S\$3,000, but less than S\$5,000, with a degree or diploma, and who have relevant work experience.²²

Inflow of foreign workers through the WP and S Pass scheme is managed by a combination of quantity and price controls. Employer quotas are based on sector-specific dependency ratio ceilings that specify the ratio of foreign workers to the total workforce that the firm is allowed to employ. Employers also have to pay a monthly foreign-worker levy that varies by sector, source country, and skill-level of the migrant. For S Pass holders, the policy objective of the qualifying wage criteria is to "ensure that Employment Pass (EP) and S Pass holders are comparable in quality to the top one-third of our local PMET and APT workforce respectively. The qualifying salaries and levies will be raised accordingly to meet this benchmark" (Singapore Parliamentary Debates, 7 March 2022, vol. 95). Appendix A provides details on the current framework for hiring low-skilled and medium-skilled temporary foreign workers, as well as professionals.

The main rationale that policy makers cite for these mechanisms to regulate the supply of low-skilled foreign workers in Singapore is to balance the need to supplement the labor force to sustain economic growth while keeping production costs reasonable, and at the same time to avoid excessive reliance on the foreign workers. Policy makers have sought to minimize possible labor market effects on Singapore citizen workers in the form of diminished job opportunities for low-skilled Singapore citizens and the likelihood that access to low-cost foreign labor might crowd out firm incentives to invest in labor-saving, productivity-enhancing, technologies (Peri 2014). The use of the dependency ratio ceiling serves as a

control to preserve resident jobs even in sectors that are highly dependent on foreign workers by limiting outright substitution and/or promoting complementarity between resident workers and foreign workers.

In the past 30 years, the Singapore government has actively used both the foreign worker levy and the dependency ratio ceiling to achieve longer-term policy aims, as well as to manage the short-term flow of labor in response to economic cycles and other events. For example, as discussed, the 2011 general elections led to a shift in immigration policy toward greater control measures in a bid to reduce Singapore's reliance on foreign workers. Subsequently, foreign worker levies for unskilled workers were increased across the board by between 20 percent to 50 percent (depending on the class of worker and sector) and dependency ratio ceilings in selected sectors were lowered (MOM 2013). The ability to adjust prices and, hence, affect business costs quickly in response to external labor market conditions is well illustrated by the series of foreign worker levy rebates that were rolled out during the COVID-19 pandemic aimed at helping firms dependent on foreign workers manage manpower disruptions and business costs during the pandemic.

Singapore also imports a large number of female low-skilled migrants from neighboring countries to provide live-in domestic help as a means to ensure affordable child care and elder care to encourage female residents to enter the labor force. The Foreign Maid Scheme was introduced in 1978 to facilitate the hiring of domestic workers from regional countries beyond Malaysia (where there were existing immigration arrangements) (Yeoh, Huang, and Gonzalez III 1999). The strong local demand for such workers, coupled with concurrent developments in the regional labor markets that depended heavily on migrant remittances, led to a rapid rise in the number of foreign domestic workers (FDWs) in Singapore. Today, there are about 250,000 FDWs in Singapore, or roughly one for every six households.

FDWs are required to meet age, nationality, and education requirements to quality for a Work Permit. They must be female, between the ages of 23 to 50, have a minimum of 8 years of formal education, and be from an approved source country or region. Once in Singapore, FDWs must work and live at the employer's home, are not allowed to engage in other work, and cannot change employers freely. To hire an FDW, employers also must meet several requirements. Employers need to be 21 years and above and be financially solvent. They are also required to pay a monthly levy, with concessionary rates available to older employers as well as those with disabilities, as well as employers residing with young children, older parents/grandparents, and/or disabled family members.²³ Employers who wish to hire more than one FDW also need to demonstrate that they have significant care needs, such as having at least two children below 18 years old or a parent/parent-in-law over 60 years old living in the same household.

High-skilled migration

High-skilled migration in Singapore is managed through the issuance of the Employment Pass (EP) that allows foreigners with a job offer with a monthly salary of at least S\$5,000 to work in Singapore. The EP is meant for foreign professionals, managers, and executives and is granted for a period of two years in the first instance, and thereafter is subjected to renewal on a three-year basis.²⁴ The policy objective for managing the EP qualifying salary is, like the S Pass, to maintain the quality of EP holders to be comparable to the upper one-third of resident workers in the same skill category.

Singapore has established several criteria governing the issuance of the EP to protect the resident labor force. Employers must demonstrate that they posted the job offer on the official online job portal approved by the Singapore government²⁵ and have fairly considered residents for the role, before they are eligible to apply for the EP. Compared to WP holders, EP holders are afforded greater flexibility. EP (and S Pass) holders who earn at least S\$6,000 are allowed to bring their family members into Singapore under a dependent's Pass. Also, currently there is no quota on the number of EPs that can be granted, and no limit on the countries that the EP holder can come from.²⁶

Alongside the EP, there are three more specialized work passes for high-skilled migrants:²⁷ (1) the EntrePass, reserved for entrepreneurs, innovators, or investors who want to operate a business in

Singapore; (2) the Personalized Employment Pass (PEP), meant for high-earning professionals; and (3) the recently introduced Overseas Networks & Expertise Pass (ONE Pass) for high-caliber individuals in various fields. ²⁸ The ONE Pass appears to be motivated by demand for elite high-skilled migrants to boost the economy and address skill shortages during Singapore's recovery from the COVID-19 pandemic (Ministry of Manpower 2022)—when foreign employment fell dramatically due to the closure of international borders, as well as the usual policy use of foreign employment as a buffer to protect Singapore resident jobs. ²⁹

The new Pass, which will be available in 2023, is aimed at attracting global top talent to work in Singapore under considerably more relaxed employment conditions than those afforded by the Employment Pass. Applicants are generally required to earn a monthly salary of at least S\$30,000 (comparable to the top 5 percent of EP holders). Applicants who are approved will be able to secure a five-year Work Pass that is not tied to a specific employer (allowing them to operate or work for multiple companies at the same time) and includes provisions that allow their dependents to seek employment.³⁰ Individuals with "outstanding achievements" across arts and culture, sports, science and technology, and research and academia can potentially qualify for the scheme even if they do not meet the salary requirement (Tan and Tay 2022).

High-skilled migrants are encouraged to settle down in Singapore, and both Employment Pass and S Pass holders are allowed to apply for permanent residency (PRs) (which is granted at the discretion of the government, and is not an entitlement). Nevertheless, beyond economic considerations, ensuring social cohesion is crucial to Singapore high-skilled migration policy as well. The Singapore government has long promoted the desire to preserve multiculturalism and racial identities, and they have acknowledged that the profiles of migrants granted PRs and citizenship generally mimic the proportion of races in Singapore. In 2013, Minister Grace Fu highlighted, "We recognise the need to maintain the racial balance in Singapore's population in order to preserve social stability. The pace and profile of our immigration intake have been calibrated to preserve this racial balance" (Singapore Parliamentary Debates, 5 February 2013, vol. 90). In 2021, more than 57 percent of permanent residents and new citizens come from neighboring Southeast Asian countries and over 90 percent come from Asian countries (Prime Minister's Office 2022).³¹ These countries share similar cultural roots to Singapore, highlighting the government's focus of maintaining social cohesion in the migration policy. To further aid the transition of migrants to Singapore citizens, the government established the National Integration Council (NIC). The NIC launched the Community Integration Fund (CIF) to fund projects aimed at providing information on Singapore and fostering the relationships between Singapore citizens and foreigners. The NIC also established the "Singapore Citizenship Journey," for potential citizens to find out more about Singapore's history, shared values, and way of life before becoming a citizen.³²

Foreign students

Singapore has a long history of welcoming foreign students to study in Singaporean educational institutions with the dual aims of attracting and retaining talent in Singapore and strengthening ties with regional economies. These schemes take the form of generous scholarships (that cover tuition fees, accommodation, and living/travel allowance) targeted at strong students from neighboring Association of Southeast Asian Nations (ASEAN) countries, as well as India and China, to study in Singapore at the high school and/or university level. To identify prospective candidates for the scholarship, the Singapore Ministry of Education (MOE), together with host schools, engage in outreach efforts that involve regular visits and partnerships with overseas high schools to disseminate information about the scholarships as well as administer selection tests.

The first of such scholarships was the ASEAN scholarship that was first offered in 1969 to ASEAN nationals to study in Singapore at the pre-university level (that is, the last two years of high school that prepare students to take the A-level examinations). The program was later extended to students entering Secondary 1 and Secondary 3 (around the ages of 13 and 15, respectively), as well as at the university level. A similar scheme was set up in the early 1990s to attract students from China through the SM1

(targeted at those who are just about to start senior middle school); SM2 (targeted at second-year senior middle school students to pursue undergraduate studies in Singapore); and SM3 schemes (targeted at first-year students at Chinese universities). The SM3 scheme was terminated in 2011. MOE also works with organizations such as the Agency for Science, Technology and Research (A*STAR) and Singapore Airlines to administer some of the scholarship schemes (or variations of the above-mentioned schemes); such scholarships target students from specific countries in the region, including other non-ASEAN countries such as India. In the past, some of these scholarships require the recipient to take up Singapore citizenship as part of their program (Singapore Parliamentary Debates, 28 February 2005, vol. 79, col. 764).

The selection process for these scholarships is aimed at selecting "bright young students" to study in Singapore. As such, these students tend to be positively selected academically and are generally expected to perform well in the Singapore education system, and subsequently, in the labor market. Potential scholars go through a rigorous screening process, which involves multiple tests and interviews (Tan 2021). Minister Heng Swee Keat explained that: "Scholars are selected based on their academic and non-academic achievements, as well as their conduct and character at the point of application. Shortlisted candidates are interviewed by a panel comprising senior management and experienced educators, including school principals" (Singapore Parliamentary Debates, 12 November 2012, vol. 89). Therefore, scholars are expected to excel on multiple fronts. There is some evidence that these scholars go on to perform well in university. Minister Heng Swee Keat highlighted that "about 68% of international students on undergraduate scholarships have graduated with second upper class honours or better. This is comparable to the performance of Singaporean scholarship holders studying at the local universities" (Singapore Parliamentary Debates, 13 July 2015, vol. 93). Further, Parliamentary Secretary Ms. Low Yen Ling remarked that these scholars "have gone on to make valuable contributions to their universities, to Singapore and the region. And in addition to that, they have also helped in a way to promote a better understanding of ASEAN countries and our region amongst our youth" (Singapore Parliamentary Debates, 15 August 2016, vol. 94).

In 2020, international students comprise less than 5 percent of the enrolment in primary schools, secondary schools, and junior colleges, and less than 10 percent in polytechnics and government-funded Singaporean universities (Singapore Parliamentary Debates,11 May 2021, vol. 95). These numbers reflect a general slowing down of the policy since 2011, in response to the widespread public concern that liberal immigration policies toward the highly skilled were also crowding out Singapore citizens from the public education system. The proportion of foreign students in government-funded Singaporean universities fell from about 18 percent in 2011 to about 10 percent today (Singapore Parliamentary Debates, 21 October 2011, vol. 88).³³

There is no contractual obligation for scholarship holders to work for the government or remain in Singapore upon completion of their studies. However, because scholarship holders who attend government-funded Singaporean universities also receive subsidized tuition fee benefits under the Tuition Grant Scheme, they are required to work in Singapore for at least three years. ³⁴ Although official statistics on the number of scholarship holders who eventually become PRs or citizens are lacking, the perception is that these students generally assimilate and integrate well socially, with many of them choosing to work and settle down in Singapore. Indeed, students studying in Singapore are allowed to apply for PR (which, again, is granted selectively and not as an entitlement), and as such, there is a path to eventual citizenship for this group of talented students, making student schemes an important source of regional talent attraction and assimilation for Singapore.

Given the foreign enrolment constraints within the public education system, another avenue that the government has tried to attract talented foreign students to Singapore is through the "Global Schoolhouse" project. Launched in 2002, this project set out to attract ten world-class universities to set up branch campuses or joint programs with the aim of recruiting up to 150,000 foreign students by 2015 (Ng and Tan 2010; Yang 2016). This initiative faced several early setbacks, including several retreats by foreign schools citing enrolment and financial challenges, the 2008 financial crisis, as well as the popular backlash against immigration (Leow 2019). Since 2009, the Global Schoolhouse

initiative has shifted its focus toward "building industry-relevant manpower capabilities" (Singapore Parliamentary Debates, 16 October 2012, vol. 89) by bringing in programs that develop specific skills with strong industry relevance (such as Sony University, and the UBS wealth management campus) and skills upgrading courses. Such programs are typically offered by industry partners or private universities and are targeted at both residents and foreigners, with the aim of developing and retaining industry-relevant talent (Singapore Parliamentary Debates, 4 April 2017, vol. 94).

Accompanying this shift in the focus of the Global Schoolhouse project has been a steady decline in foreign student numbers from 97,000 in 2008 to 84,000 in 2012; 75,000 in 2014; and about 68,000 in early 2020 (ICEF 2016; Leow 2021; Tan 2016). The decline in the more recent period likely also reflects the tightening of foreign student numbers in public educational institutions.

Permanent residence and citizenship

There are several routes for permanent residence and naturalization in Singapore. Foreigners are eligible to apply for permanent residence through family-based or skill-based channels. The family-based channel applies to the spouse, unmarried child(ren) below the age of 21, or aged parent(s) of a Singapore citizen or a Singapore PR. Those who can apply through the skill-based channel include holders of an Employment Pass or S Pass, students studying in Singapore, as well as foreign investors. The Immigration and Checkpoints Authority (ICA) maintains discretion over who to grant PR status to and the approval process is quite opaque (Singapore Parliamentary Debates, 10 October 2016, vol. 94). ICA's official stance is that they consider "factors such as the individual's family ties to Singaporeans, economic contributions, qualifications, age, family profile and length of residency, to assess the applicant's ability to contribute to Singapore and integrate into our society, as well as his or her commitment to sinking roots in Singapore." 35

The family-based immigration channel does not guarantee PR status to foreigners who are married to Singapore citizens. Economic and social factors such as the financial ability of the Singaporean spouse to support the foreign spouse, as well as the presence of children in the marriage, are key factors that determine the success of an application (Singapore Parliamentary Debates, 25 February 2013, vol. 90; Singapore Parliamentary Debates, 11 July 2016, vol. 94). This policy has come under intense public scrutiny and has been criticized for favoring wealthier transnational families. The success of the

Foreigners who have been a permanent resident for at least two years and who are ages 21 and above can apply for Singapore citizenship for themselves and their nuclear family. Additionally, students ages 15 years and above who are PRs, who have been residing in Singapore for more than three years (of which, at least one year as a PR), and who have passed at least one national exam are eligible to apply for Singapore citizenship. The official stance from the ICA on the approval criteria for naturalization is similar to that for granting PR status. Singapore does not allow dual citizenship; as such, new citizens must renounce citizenship of their origin country to take up Singapore citizenship.

Economic and social impacts

As discussed, Singapore's foreign worker policy is largely based on economic considerations. With a rapidly aging population and declining fertility rate, foreign workers are largely seen as a permanent solution to augment the resident workforce and to ensure continued economic growth. The policy narrative surrounding Singapore's immigration policy typically centers on the role of the foreign workforce in (1) complementing the skill-mix of Singapore citizens (such as low-skilled foreign workers taking on low-wage, manual jobs that Singapore citizens are unwilling to do, and foreign professionals to fill in skill gaps in high-value- added sectors); (2) providing labor market flexibility and buffering Singapore citizens from economic downturns; (3) moderating the costs of meeting social and development needs (such as construction, health care, child care); and (4) increasing the skill diversity and innovation capacity of the workforce.

Despite these clear economic objectives that should, in principle, serve to benefit Singapore citizens, Singapore's liberal foreign worker policy throughout the 1990s and 2000s, coupled with the 2009 financial crisis, appeared to trigger significant public discontent, with Singapore citizens anxious about being squeezed out of good jobs by foreigners, overcrowding and the sustainability of public infrastructure, and escalating housing prices and cost of living. This led to a shift in the policy stance in the early 2010s toward slowing the intake of foreigners, with Singapore leaders routinely reassuring the public that they are adopting a "calibrated" approach to help strengthen the complementarity between the foreign and Singapore citizen workforce (Ministry of Finance 2022; Prime Minister's Office 2018).

This section discusses the economic and social impacts of Singapore's immigration policy, focusing in particular on the potential effects of foreign workers on residents' labor market outcomes and productivity. On the social front, it discusses issues pertaining to the living and work conditions of migrant workers.

Labor market impacts

A central question in labor economics is the extent to which foreign workers substitute or complement resident workers, and the consequent impacts on residents' employment and wages. The existing international literature has generally found small employment and wage effects on average, and modest distributional effects (Longhi, Nijkamp, and Poot 2005; Peri 2014). Some negative wage and employment effects have been found at the lower end of the wage distribution and in unskilled/semi-skilled sectors (Dustmann, Frattini, and Preston 2013; Reed and Latorre 2009); however, the magnitude of these effects is modest. Most studies find that medium- and high-wage workers typically gain from immigration (Reed and Latorre 2009). Nevertheless, countries differ not only in their immigration systems (with varying emphasis placed on immigration through skill-based, family-based, and humanitarian-based routes) but also in terms of labor market flexibility and institutions; as such, it is hard to extrapolate the findings from a particular country to a different country context.

From a theoretical perspective, negative wage and employment effects of immigration are most likely to be observed when residents and migrants have similar skills and perform similar jobs. On the other hand, if migrant and resident workers have different skills and characteristics, one might expect immigration to have a limited or positive effect on residents' labor market outcomes. In the case of Singapore, the fact that policy makers are able to actively manage the skill mix of foreign workers using various policy levers (such as levies and quantity controls) suggests a potentially greater scope for managing foreign worker inflow to minimize direct competition between foreigners and residents and generate complementarities between the resident and foreign workforce relative to other countries.

Indeed, there is general agreement that as Singapore citizens become increasingly educated, some reliance on foreign workers is necessary to perform low-wage, manual jobs that are unattractive to Singapore citizens, and to keep costs of construction and services low. Much of the concern centers on whether the sheer number of low-skilled foreign workers in some sectors has depressed wages at the lower end of the wage distribution and whether the growth in foreign professionals have adversely affected the employment and career opportunities of Singapore citizens in better-paying jobs.

Unfortunately, the empirical evidence on these questions remains scarce, in large part due to limited data availability in the public domain. A study by Chia, Thangavelu, and Toh (2004) finds some evidence that foreign workers complement Singapore citizen workers: from 1992 to 1997, they estimate that a 1 percent increase in Work Pass holders increased the employment of skilled and unskilled Singapore citizens by 2.6 percent and 1.4 percent, respectively. They also find that a 1 percent increase in Employment Pass holders increased the employment of skilled and unskilled Singapore citizens by 1.9 percent and 0.2 percent, respectively. Meanwhile the decline in real median wages at the lower end of the wage distribution in the late 1990s to early 2010s has raised concerns about the link between the availability of low-skilled foreign labor and the labor market outcomes of low-skilled residents (Hui

2013). This might explain more recent attempts by the government to reduce reliance on low-skilled foreign labor and complementary measures to raise the productivity and wages of workers in the low-wage sector (such as the Progressive Wage Model).³⁸

Foreign workers as a cyclical buffer in the labor market

Singapore's active management of foreign worker inflows into the labor market allows the foreign workforce to function as a cyclical buffer in the labor market. When the economy is doing well, an inflow of foreign workers allows the workforce to expand quickly to take advantage of growth opportunities, while keeping wage increases moderate. In a recession, foreign workers can be the first to be let go, thus dampening the effects of lower labor demand on the resident workforce. As observed in figure 4, foreign workers do appear to function as a buffer workforce in the Singapore labor market with declines (increases) in foreign worker employment generally coinciding with periods of declining (increasing) GDP growth both overall and by sector. Overall, the foreign workforce has experienced considerably stronger employment dynamics relative to the resident workforce. Nevertheless, the extent to which the foreign workforce effectively serves this buffering function, and their overall effects on resident workers depend crucially on careful calibration of foreign worker inflows, both in the short term as well as over the longer term.

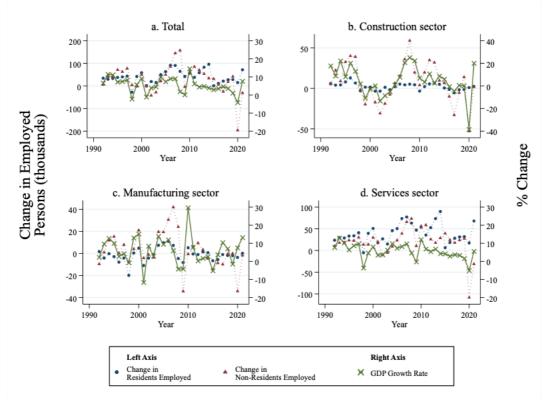


Figure 4. Change in resident and foreign employment levels, 1992-2021

Sources: GDP growth rates are from the Singapore Department of Statistics. Employment numbers are from the Manpower Research & Statistics Department of the Ministry of Manpower (MOM).

Note: Residents include both Singapore citizens and permanent residents. Non-residents refer to the foreign workforce (those on Work Permits and Employment Passes). The left-hand y-axis plots the year-on-year change in resident and foreign employment in the overall labor force (total), and for the construction, manufacturing, and services sector. The right-hand y-axis plots the overall GDP growth rate (year-on-year percentage changes) for the "Total" panel and the sector-specific GDP growth rate for each of the three sectors.

Foreign domestic workers and resident female labor supply

Another aspect of the labor market where Singapore's foreign immigration policy is likely to have had an impact is female labor force participation. Since the 1980s, Singapore has brought in large numbers of foreign domestic workers (FDWs) from neighboring countries in the region such as the Philippines, Indonesia, and Myanmar to help with families' household, child care, and elder care needs. Singapore's FDW population has grown by about 40 percent over the past decade, and today, there are nearly 250,000 FDWs in Singapore, amounting to about one foreign maid per six households. The economic implications of the temporary migration of private household workers differs substantially from that of conventional low-skilled migration. Because these temporary domestic helpers generally substitute for time spent in the household, they are likely to influence the labor supply and fertility decisions of women, particularly middle-skilled and highly skilled women (Kremer and Watt 2007).

A growing literature focusing on the United States and European countries finds that the influx of low-skilled migrant women, many of whom work in private household occupations, lowers the cost of household services and increases the labor supply of highly skilled resident women (Cortes and Tessada 2011; Farré, González, and Ortega 2011; Forlani, Lodigiani, and Mendolicchio 2015). More closely relevant to Singapore's experience, Cortes and Pan (2013) examines how the FDW program in Hong Kong SAR, China affected the labor supply and welfare of resident women. Hong Kong SAR, China, like Singapore, has a large foreign domestic worker population, with 11 percent of households hiring a FDW in 2017 (Legislative Council Secretariat 2017). Using data from the late 1970s to 2006, the authors find that FDWs increased the participation of mothers with a young child (relative to older children) by 10 percentage points to 14 percentage points and generated a monthly consumer surplus of US\$130 to US\$200.

Given the broad similarity in the scope of the FDW program and the labor market structure of Singapore and Hong Kong SAR, China, there is good reason to believe that similar effects were observed in Singapore as well. Using a similar difference-in-difference approach and aggregate data from the Singapore's Yearbook of Manpower Statistics from 1976 to 1985, Freire (2016) estimates that the 1978 policy to allow the importation of FDWs to Singapore was associated with an increase in the labor supply of women affected by the policy (that is, high-skilled and younger women) by between 4 percent and 6 percent.

One aspect of the FDW policy that has come under less scrutiny is the extent to which the reliance on private household workers may have crowded out the development of the public child care sector. For example, in Singapore, the formal infant care sector is quite small and fragmented, and relative to other economically advanced nations, receives considerably less public funding (Lim 2022).

Impacts on productivity

Immigration can also directly and indirectly affect aggregate and firm productivity. Although Singapore has maintained a high GDP growth rate, total factor productivity (TFP)—the portion of economic output that cannot be explained by capital or labor—is unusually low (Young 1992). Foreign worker churn has been suggested as a potential explanation. Wu and Thia (2002) find that excluding temporary foreign workers in construction and FDWs would have raised Singapore's TFP growth rate from 1992 to 2002 by 70 percent. The argument is that while additional foreign workers contribute to economic growth by increasing the productive capacity of the economy, the same workers slow TFP growth because they tend to be less productive. The authors argue that the practice of "labor churning," where foreign workers are replaced when their Work Permits expire, may contribute to their lower productivity because they are less likely to benefit from training, accumulated work experience, and skills upgrading.

At a more micro level, firms may respond to the supply of migrants by adjusting their capital investments to use the available skills efficiently (Peri 2014). Studies based on the US experience find that manufacturing firms in cities with a larger increase in the supply of low-skilled migrants adopted

advanced technology at a slower rate and experienced a decline in capital intensity (Lewis 2011) and, at the state level, promoted the adoption of technology that favors unskilled workers (Peri 2012). Such demand-side adjustments potentially insulate low-skilled residents from the downward wage pressure resulting from the supply shift induced by immigration. Gomez and Tan (2013) examine the relationship between low-skilled immigration and technology choice among manufacturing firms in Singapore from 2003 to 2008. Using an instrumental variables strategy that exploits the dependency ratio ceiling of individual firms before 2003 as an instrument, the authors find that the liberalization of the foreign worker policy from 2003 to 2008 led to a modest decrease in the machinery intensity of manufacturing firms of 0.75 percent for all firms and 1.2 percent for smaller firms. More recent attempts to moderate the flow of low-skilled temporary migrants may thus complement government efforts to incentivize firms to invest in more capital-intensive, labor-saving, and productivity-enhancing technologies.

Social impacts: Work and living conditions of migrant workers

Over the years, the Singapore government has put in place regulations and mechanisms to protect migrant workers. Significant progress has also been made in workplace safety, with employers required to purchase medical insurance for workers. There are clear channels for foreign workers to seek assistance from the Ministry of Manpower (MOM) and/or other governmental agencies on issues related to dispute settlement and employer grievances. All first-time migrant workers (except those in the services sector) to Singapore are also required to participate in a Settling-in Programme run by approved training centers where migrant workers are informed about their employment rights and obligations, Singapore laws, and where and how to seek assistance.³⁹

Nevertheless, advocacy groups point out that employment regulations typically do not favor low-skilled foreign workers, especially migrant domestic workers who are excluded from Singapore's main labor law (the Employment Act) and where enforcement of the terms of the employment contract can be an issue. Moreover, the employment status of a foreign worker in Singapore is also, fundamentally, an administrative privilege and not a right. Since the passage of the Regulation of Employment Act 1965, the authorities have been given significant discretion to decide on the issuance and cancellation of Work Permits and Passes. The administrative cancellation of a Work Permit/Pass is, by law, excluded from trade union collective action or negotiation. Such administrative decisions are also excluded from judicial review except for procedural complaints. There is no recourse, except appealing to the Minister for Manpower, for administrative decisions to deny issuance of, or cancel, Work Permits. Thus, while foreign workers may otherwise enjoy similar rights to Singaporeans in employment disputes under common law and employment law—if they can avail themselves of the resources to contest such disputes—their employment itself is fundamentally subject to administrative discretion.

More recently, the COVID-19 pandemic has also cast a spotlight on the living conditions and rights of migrant workers in Singapore. The spread of the virus within migrant worker dormitories resulted in the government imposing strict movement restrictions on migrant workers, effectively placing them under "lockdown" in cramped dormitories for long stretches of time. Moreover, the rampant spread of COVID-19 within foreign worker dormitories early in the pandemic raised concerns that the crammed and sometimes unsanitary living conditions were likely to have fueled the spread of the virus, and more generally, whether such living conditions (with up to 20 people sharing a room and communal facilities)—experienced by few other groups in Singapore—are appropriate, even in normal times. This led to numerous calls for the government to review the housing standards for worker dormitories (Ng and Ong 2020; Tan 2020).

Despite the initial reluctance by the government to address this issue head on citing cost considerations, in 2021, the government announced that that all dormitories in Singapore would be regulated under the Foreign Employee Dormitories Act (FEDA). This Act, which was first implemented in 2016, imposes additional requirements on dorms such as public health and safety, security, and public order, and provision of social and commercial facilities and services. Previously, it only applied to larger dormitories with 1,000 or more workers. This is a first step to allowing MOM to "implement a

consistent framework of housing standards" across all dormitories with regard to cleanliness, space, and ventilation. MOM is also announced that it is developing a set of new standards for foreign worker dormitories, and is looking into "how to progressively improve standards so that price fluctuations will not be steep" for existing dorms (Sin 2021).

This episode illustrates the important role of public opinion and advocacy groups in improving the living and work conditions of migrant workers in Singapore. Indeed, the impetus to improve these conditions ultimately lies with society's preferences for redistribution, the value placed on migrant worker rights, and the public's willingness to accept the associated costs of providing these social goods.

Overseas Singaporeans and return migration

As a small open economy, it is not surprising that temporary and permanent emigration is common among Singapore citizens. Temporary emigration of high-skilled Singapore citizens for education, training, and career opportunities has been highly encouraged by the Singapore government to enhance the global orientation and international competitiveness of the workforce (Yeoh and Lin 2012). A large proportion of civil servants, and political and business leaders, have received their education in top overseas universities. Overseas exposure is valued highly in the Singapore labor market, especially in firms with a strong presence in regional/international markets. There were an estimated 352,236 Singapore citizens living overseas in 2019 (United Nations, n.d.). ⁴⁰ As observed in figure 5, the numbers of overseas Singapore citizens have increased substantially over the past three decades, with Malaysia, Australia, the United Kingdom, and the United States among the top destinations.

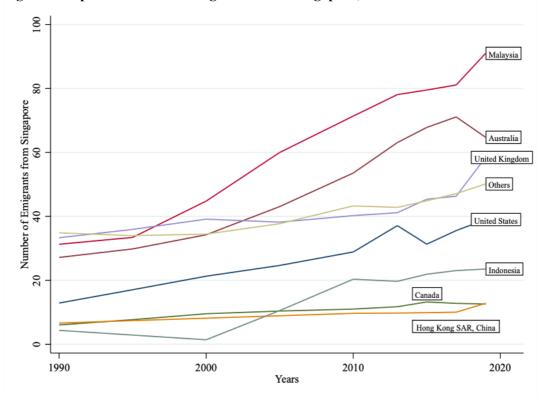


Figure 5. Top destinations for migration from Singapore, 1990–2019

Source: United Nations, Department of Economic and Social Affairs (UNDESA).

Note: The figure depicts the top seven destination countries for Singapore citizens based on the latest (2019) data.

While a large proportion of overseas Singapore citizens are students pursuing their undergraduate or postgraduate education, many of whom intend to return to Singapore to work, there is a growing trend of Singapore citizens choosing to emigrate permanently. Annually, about 1,200 Singapore citizens renounce their citizenship (Channel News Asia 2022). The reasons for permanent emigration vary.

Some push factors include restrictive government policies and the high cost of living (Chew and Chew 1995), while some pull factors include the increased career opportunities, social status, and socioeconomic stability from emigration (Institute of Policy Studies 2018). In a survey by the Institute of Policy Studies in 2016, around 29.2 percent of respondents actively considered emigration, and individuals with high educational attainment are more likely to emigrate (Institute of Policy Studies 2018). Such trends could signal a loss of skilled talent in Singapore.

In response, the government continues to place a strong emphasis on retaining Singapore citizen talent and attracting overseas Singapore citizens to return. The Singapore government has multiple platforms to connect with overseas Singapore citizens to foster their national identity and facilitate their return. For example, the Singapore government created the Singapore Global Network (SGN). ⁴¹. The website provides news on Singapore, disseminates information and funding on relevant events, and connects overseas Singapore citizens. The website also highlights the multiple benefits of living in Singapore. Further, the Singapore government launched online communities on social media to connect overseas Singapore citizens, to link them with Singapore-based employers, and provide important resources to ease their migration back (Agency for Science, Technology and Research 2019).

Recognizing that there are economic benefits of Singapore citizens working overseas, to balance the benefits of an overseas experience and retain its citizens, the government has launched multiple programs to provide Singapore citizens with short-term overseas opportunities to gain knowledge and exposure to bring back to Singapore. These include the Global Innovation Alliance (GIA), 42 which connects Singapore companies with overseas partners to have access to their markets, and the Global Ready Talent Program, 43 which provides funding for Singapore citizens to gain work experience overseas.

Discussion and conclusion

Singapore's immigration policy is, by many measures, one of the most important factors behind Singapore's economic and societal growth and success. Almost the entire resident population is of migrant origin, with even the oldest resident families often marking their origin only from the prewar era. The dynamism and size of the economy has depended not only on immigration, but also on the continual exchange and circulation of Singapore citizens globally through study and work. Yet it seems increasingly clear that Singapore's immigration policy will face serious challenges in the next few decades, with critics and promoters alike questioning whether the current policy is still fit for purpose.

First, if predictions on the increasingly rapid and skill-biased nature of technological change in "jobs of the future" hold true, then it will likely continue to be compelling for Singapore to meet specialized labor demands, particularly in high-growth sectors and jobs, by importing migrant workers with the appropriate skills and experiences, rather than by engaging in lengthy investment and training of residents. While social and industrial policy provides highly subsidized education and jobs training for residents, and encourages skills transfer from foreign workers to the resident workforce, it is possible that at least some portion of the resident labor force will be at a persistent disadvantage when facing technological change, compared with a migrant labor force that can be readily upgraded simply through replacement. It is unclear how politically and socially Singapore can manage a skilled but perpetually economically insecure Singapore citizen workforce. Alternatives used elsewhere such as reserving state-supported jobs for the Singapore citizen workforce seem fundamentally incompatible with the competitive, meritocratic market ethos of Singapore.

Second, the continuing use of large numbers of low-wage migrant workers has survived the COVID-19 pandemic, and concerns about the societal, health, and economic impacts of reliance on such workers appears today to be secondary to the task of growing the economy rapidly to recover from the pandemic. Although the depressive effects on resident wages have largely been dealt with through increasingly aggressive wage calibrations and sectoral minimum wage policies for residents, the concern remains that the business model of employers in labor-intensive, low-skill sectors is fundamentally tied to low-

wage migrant labor. Structurally, incentives and programs to improve productivity and reduce labor reliance have often proven ineffective in the face of the fact that "quantity is quality." It is also unclear whether the large wage differentials between migrant-sending countries and Singapore that makes such activities possible will remain for much longer, given rapid economic development in many source countries for migrant labor. Singapore has already become much less attractive for low-wage migrant labor from China, given the rapid development of major Chinese cities, where wages for some roles are already starting to converge with those in Singapore.

Third, although assimilation into the resident population is the basis for Singapore's population growth and a significant source of talent, it is clear that policy makers, and perhaps the Singapore citizen population, strongly favor patterns of assimilation that replicate the initial ethnic and cultural conditions of Singapore at independence. Despite nearly three decades of policy aimed at actively recruiting and assimilating "Foreign Talent," the ethnic mix of the resident population —in the proportions of the Chinese majority, and Malay and Indian ethnic minorities—remains similar today to that of more than 50 years ago. While this is endogenous, because applicants comfortable with the existing cultural conditions in Singapore are most likely to apply for permanent residence and citizenship, the role of policy in selecting applicants who replicate the status quo seems clear. However, questions remain about the extent to which assimilation is truly facilitated by simply selecting migrants of the "right" ethnicity, with divisions arising between residents born in Singapore whose families have long been settled there and migrants of the same ethnicity, based on differences in daily life practices, socioeconomic status, and lingering concerns about the true allegiance of new migrants, who are accused of treating Singapore as a stepping stone to ultimate destinations in highly developed Western countries. More importantly, the seeming inability of Singapore society to deviate from the settled multicultural status quo suggests that reinventing Singapore more radically, as has been the case in the distant past, and may yet be important for the diverse cities of tomorrow, may no longer be possible.

Notes

¹ Throughout the paper, the term "Singapore citizen" refers to the citizen population and/or citizen labor force, while "resident" refers to all persons with the right of permanent residence in Singapore, which includes Singapore citizens as well as foreign nationals with permanent resident status. The term "resident" is used by Singapore government statistical agencies the same way as here—to comprise both Singapore citizens and foreign nationals with permanent resident status. The distinction between Singapore citizens and residents is made on topics of political and social relevance because only Singapore citizens are allowed to vote and engage in politics. For more general labor market topics, the term "resident" is more appropriate.

² It is unclear how many of these repatriated migrants were previously resident in Singapore itself, as opposed to British Malaya, which also includes the peninsular Malay states under British administration. Nonetheless, the outflow would have been substantial from Singapore.

³ Singapore gained independence from British rule through merger with the Federation of Malaya in 1963, becoming a constituent state of the newly renamed country of Malaysia. However, Singapore left—or was expelled—from Malaysia in 1965, over tensions arising from the significant ethnic, political, and economic differences between Singapore, which was majority-Chinese, urbanized, and relatively economically developed, and the rest of Malaysia, which was majority-Malay, and largely rural and agrarian. The ethnic tensions around separation and independence continue to color policy views on how immigration should maintain the ethnic mix of the resident population to this day.

⁴ These correspond to the occupational categories of "0/1: Professional, Technical, and Related Workers and 2: Administrative and Managerial Workers" used in the 1970 Census. Some 21.1 percent and 9.1 percent of the non-resident, non-citizen workforce was engaged in occupational categories 0/1 and 2 respectively, compared with 8.4 percent and 1.4 percent of Singaporean citizens. The practice of segmenting the labor force by broad skill/administrative responsibility groups continues to the present day where the respective occupational categories are "1: Legislators, Senior Officials and Managers; 2: Professionals; 3: Associate Professionals and Technicians."

⁵ In the 1970 Census, in "3: Clerical and Related Workers," 4.3 percent of the non-citizen, non-resident workforce was employed, compared with 13.8 percent of Singapore citizens. In "4: Sales Workers," 11.8 percent of non-citizen non-residents were employed, compared with 15.9 percent of Singapore citizens. In "5: Service Workers," 8.9 percent of non-citizen non-residents were employed, compared with 13.6 percent of Singapore citizens. In "7/8/9: Production and Related Workers, Transport Equipment Operators and Labourers," 38.5 percent of non-citizen non-residents were employed, compared with 38.9 percent of Singapore citizens.

⁶ There were 6292 non-citizen, non-resident workers out of 67243 total workers in occupational categories "0/1: Professional, Technical, and Related Workers and 2: Administrative and Managerial Workers" in the 1970 Census.

- 11 Singapore leaders, including founding Prime Minister Lee Kuan Yew and his successors, have repeatedly spoken on their (controversial) belief that migrants will "spur" the resident labor force to work harder. This belief seems to be premised not only on the argument that positive selection predicts migrants will be higher skilled and more motivated than the resident population, but also that such immigration provides some competitive benchmark or social impetus that pushes residents, who have become accustomed to developed country standards of living, to keep pace. See Pang and Lim (1982).
- ¹² For additional details on Singapore's official population statistics, see https://www.gov.sg/article/why-are-sporean-popstats-different-from-those-released-by-intl-orgs.
- 13 Official Singapore government statistics do not directly report on the labor market outcomes of permanent residents as a group. Indeed, there are no regular labor market outcome statistics, such as wages and unemployment rates, reported for any non-citizen worker group in Singapore. Instead, labor market statistics are regularly reported for the resident labor force (which comprises both Singapore citizens and permanent residents), and occasional statistical extracts are provided for the Singapore citizen labor force specifically. Hence, labor market statistics for permanent residents have to be extrapolated from comparisons of the resident labor force and Singapore citizen labor force data.
- ¹⁴ In a written reply on 26 July 2021 to a Parliamentary Question filed on the region of origin of the permanent resident population, the Minister for Home Affairs stated that 59.2 percent are from Southeast Asian Countries; 33.2 percent from Other Asian Countries, and 7.6 percent from Other Countries. While these data are from 2021, there is no reason to believe that the pattern has changed dramatically over the last two decades, at least.
- ¹⁵ The ethnic population distribution of Malaysia, like Singapore, consists of significant numbers of Chinese, Malays, and Indians. Anecdotal evidence suggests that immigration from Malaysia to Singapore is concentrated among Malaysians of Chinese ethnicity, although data are not available on this.
- ¹⁶ In 2010 and 2011, there were 12,451 and 13,325 graduates of the Autonomous Universities (these refer to undergraduate degree programs at government-subsidized Universities). There are no administrative data on private university graduates. Source: Ministry of Education, Education Statistics Digest, various years.
- ¹⁷ The first Parliament of independent Singapore, which was elected before independence as the 3rd Legislative Assembly of Singapore (as a State under the Federation of Malaysia), had 13 Opposition MPs out of 51. No Opposition MPs won election in the 2nd Parliament of Singapore, starting a trend of extremely low Opposition representation that lasted until 2011.
- ¹⁸ "Does the Government Have a Population Target, e.g. 10 million?" gov.sg, July 1, 2020. https://www.gov.sg/article/doesthe-government-have-a-population-target.
- ¹⁹ Two areas of wage policy where Tripartism plays a significant role are the Progressive Wage Model, Singapore's wage policy for low-wage workers (Ho 2022; Ng, Ng, and Lee 2018; Zainal and Pitchay 2022), and the National Wage Council (Lim and Chew 1998), which sets guidelines for general annual wage adjustments.
- ²⁰ An example of a recent Tripartite labor market reform is the joint task force formed by the National Trades Union Congress and the Singapore National Employers Federation, the two apex organizing bodies for unions and employers in Singapore, respectively, to examine labor market policy concerns for professionals, managers, and executives in Singapore. The task force engaged more than 10,000 such workers and issued nine recommendations for labor market policy reform (NTUC-SNEF 2021).
- ²¹ As an example of the close ties between immigration policy and economic development policy, as of 2022, the Economic Development Board administers the Tech@SG Programme, which will "facilitate the entry of global technology talent for eligible companies"; the Tech.Pass, which is a "visa that allows established tech entrepreneurs, leaders or technical experts from around the world to come to Singapore to perform frontier and disruptive innovations"; as well as the Global Investor Programme, which "accords Singapore Permanent Resident status (PR) to eligible global investors who intend to drive their businesses and investment growth from Singapore." See https://www.edb.gov.sg/en/how-we-help/working-with-edb.html.
- ²² The qualifying salaries for S Pass holders are subject to periodic adjustment and vary by industry and by the age of the applicant. As of September 1, 2022, S Pass holders in the financial services sector require a higher qualifying monthly salary of at least \$\$3,500. Qualifying salaries are projected to increase annually over the next few years.
- ²³ There is no explicit citizenship or permanent residency-based criteria to be approved as an employer of an FDW. In particular, qualifying Employment Pass and S Pass holders may also employ an FDW.
- ²⁴ https://www.mom.gov.sg/passes-and-permits/employment-pass/key-facts.
- 25 https://www.mycareersfuture.gov.sg.
- ²⁶ However, recent revisions to the Employment Pass framework have now created a points-based evaluation regime, called the Complementarity Assessment Framework (COMPASS), for the prospective employer of the EP holder. The evaluation framework considers whether the prospective employer has an excessive concentration of foreign EP holders from any particular nationality, or an excessive ratio of EP holders in general. There is, however, no bar on the nationality of the EP applicant, per se.

 27 This section refers to the major Employment Pass types administered by the Ministry of Manpower. As discussed, the
- Economic Development Board also directly administers special visas for technology entrepreneurs.

⁷ There were 2,944 non-citizen non-resident workers out of 43,126 in "5: Construction," or 6.8 percent of the sectoral labor force. Non-citizen non-residents were also disproportionately important in "2: Mining and Quarrying," where they formed 343 out of 2,168 workers, or 15.8 percent of the sectoral labor force.

^{8 &}quot;Target: Wholly S'pore Workforce." Straits Times, January 1, 1982.

⁹ Although references to the dependency ratio ceiling are found in Parliamentary Debates in 1989, it was difficult to find any reference to the first date the dependency ratio ceiling policy was enacted.

¹⁰ There is a discrepancy in the foreign component of the labor force statistic between the 1980 figure of 11.09 percent reported here from Yeoh and Lin (2012) and that of 7.3 percent reported by Pang and Lim (1982). Unfortunately, official statistics for this period that would resolve the discrepancy are not available.

²⁸ https://www.mom.gov.sg/passes-and-permits/overseas-networks-expertise-pass/key-facts.

²⁹ During the early part of the pandemic, the Singapore government provided financial support to employers based on their headcount of resident workers, but excluded non-resident workers from support, implicitly encouraging employers to prioritize resident employment.

³⁰ The typical Employment Pass is valid for two to three years and is tied to the specific job that the Pass holder is doing.
³¹ In general Singapore does not publish granular data on countries where new permanent residents and citizens are from. As Minister K. Shanmugan in Parliament (Singapore Parliamentary Debates, 5 July 2021, vol.95), states: "We do not publish breakdowns of our PR population by nationality. Doing so may have implications on specific groups of PRs and create bilateral sensitivities with their country of origin. A large number of the PRs come from our geographically nearest neighbours. Given our history, it has been our assessment that releasing the data of country of origin of our PRs will both create negative sensitivities with other countries; and may affect the flow of PRs from such countries."

³² https://www.mccy.gov.sg/sector/initiatives/national-integration-council.

³³ The enrolment cap for foreign enrolment in local universities have remained stable; the change in the proportion of foreign students reflect the fact that increases in enrolment in university have largely gone to Singaporeans.

³⁴ Government-funded Singaporean universities grant subsidized tuition fees to nearly all undergraduate students. For Singapore citizen and permanent resident students, this grant is provided with no obligations. For foreign students, the grant has the mentioned requirement to work in Singapore after graduation. This requirement is not specific to ASEAN or SM3 undergraduate scholarship holders and applies to all international students who receive subsidized tuition at a Government-funded Singaporean university under the Tuition Grant Scheme.

³⁵ ICA, "Becoming a Permanent Resident" (<u>https://www.ica.gov.sg/reside/PR/apply</u>).

³⁶ Persons related to Singapore residents who fail to secure permanent resident status are frequently instead offered a Long-Term Visit Pass, which allows the holder to stay and remain in Singapore for the duration of the (renewable) Pass. These Passes can also grant the holder limited rights to work in Singapore if the Pass holder is a spouse of a resident, creating a category of foreign workers who neither hold a work-related permit nor who have residency. Anecdotally, these Long-Term Visit Pass holders frequently take up low-skill, low-wage service jobs. Unfortunately, there are no consistent publicly available data on this group. See https://www.ica.gov.sg/news-and-publications/newsroom/media-release/351.

³⁷ For examples, see https://aware.org.sg/wp-content/uploads/Home-truly-respect-the-rights-of-foreign-wives.pdf; https://www.todayonline.com/singapore/govt-urged-do-more-baby-boomerstransnational-families.

³⁸ For more information on the Progressive Wage Model, see MOM, "What is the Progressive Wage Model?" (https://www.mom.gov.sg/employment-practices/progressive-wage-model/what-is-pwm).

³⁹ https://sip.mwc.org.sg.

⁴⁰ United Nations, UN Migrant Stock by Origin and Destination 2019 (dataset). https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2019_migrant_stock_origin_destination_dataset.xlsx.

⁴¹ https://singaporeglobalnetwork.gov.sg/.

⁴² https://www.enterprisesg.gov.sg/industries/hub/startup/global-innovation-alliance.

⁴³ https://www.beglobalready.gov.sg/.

Appendix A. Current framework for hiring temporary foreign workers

Table A1. Passes for professionals, skilled workers, and semi-skilled workers

Type of Pass	Criteria	Salary	Benefits
Professionals			
Employment Pass	 Have a job offer in Singapore. Work in a managerial, executive, or specialized job. Have acceptable qualifications, usually a degree from a good university, professional qualifications, or specialized skills. No limit on country of origin. 	 Fixed monthly salary of at least \$\$5,000 (older candidates need higher salaries to qualify). For the financial sector, fixed monthly salary of at least \$\$5,500 (older candidates need higher salaries to qualify). 	 Pass duration of 2 years for first-time candidates. Renewals are up to 3 years. No foreign worker levy or quota. Allowed to bring family members if earning at least \$\$6,000 per month.
EntrePass	Have started, or intend to start, a private limited company registered with the Accounting and Corporate Regulatory Authority. It has to be that is venture-backed or owns innovative technologies. Individual criteria Entrepreneur Has funding from a government-recognized venture capital backer or business angel. Is an incubatee at a government-recognized incubator or accelerator. Has a business network and an entrepreneurial track record. Innovator Holds an intellectual property. Has a research collaboration with an IHL or research institute in Singapore. Has extraordinary achievements in key areas of expertise. Investor Has investment track	No minimum required.	 Pass duration of 1 years for first-time candidates and first renewals. Subsequent renewals are up to 3 years. Only allowed to bring family in if they meet the requirements for total annual business spending and Singaporean employment. Spouse/Children Annual business spending of \$\$100,000. 3 full-time employees or 1 Singaporean professional, manager, or executive. Parents Annual business spending of \$\$200,000. full-time employees or 2 Singaporean professionals, managers, or executives.

Personalised Employment Pass	 An overseas foreign professional and last drawn fixed monthly salary overseas was at least \$\$18,000. Last drawn salary should have been within 6 months before application. An Employment Pass holder earning a fixed monthly salary of at least \$\$12,000. Not be unemployed in Singapore for more than 6 months at any time. Otherwise, the Pass will be canceled. 	• Earn a fixed salary of at least S\$144,000 per calendar year, regardless of the number of months in employment.	 Pass duration of up to 3 years. Can hold a job in any sector. Do not need to reapply for a new Pass if changing jobs. Can stay in Singapore for a continuous period of up to 6 months without a job to search for new employment. Allowed to bring family members. 			
Overseas Networks & Expertise Pass	 Either earned a fixed monthly salary of at least \$\$30,000 within the last year, or will earn a fixed monthly salary of \$\$30,000 under a future employer based in Singapore. Individuals who have outstanding achievements in the arts and culture, sports, science and technology, and academia and research are eligible even if they do not meet the salary criteria. 	No strict salary requirements.	 Pass duration of 5 years. Do not need to reapply for a new Pass if changing jobs. Spouse will be able to work on a Letter of Consent. Allowed to bring family members. 			
Skilled and sen	Skilled and semi-skilled workers					
S Pass	Have a degree or diploma. Technical certificates, such as courses for qualified technicians or specialists, may be considered. The certification should require at least 1 year of full-time study.	 Earn a fixed monthly salary of at least \$\$3,000. (Older, more experienced applicants need higher salaries to qualify.) For the financial sector, earn a fixed monthly salary of at least \$\$3,500. (Older, more experienced applicants need higher salaries to qualify.) 	 Pass duration of up to 2 years. Allowed to bring family members if earning at least S\$6,000. 			

Work Permit for migrant worker	 Work Permit holders are allowed to work only in these sectors: construction, manufacturing, marine shipyard, process, services. Each sector has its own eligibility requirements. Each sector has a list of eligible source countries. The number of Work Permit holders that can be hired is limited by a quota and subject to a levy. 	No minimum required.	 Pass duration of up to 2 years, depending on the validity of the worker's passport, security bond, and employment period. Not allowed to bring family members.
Work Permit for migrant domestic worker	 Must be female. 23 to less than 50 years old when applying for a permit. Helpers who are age 50 and above can renew their permits only until age 60. Minimum 8 years of formal education. Be from an approved source country or region. 	No minimum required.	Pass duration up to 2 years, depending on validity of security bond.

Source: Ministry of Manpower.

Note: IHL = Institute of Higher Learning.

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