

Singapore's Immigration System: Past, Present, and Future

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Introduction

Singapore is a wealthy city-state in Southeast Asia with many unique attributes: a harsh criminal justice system that employs corporal punishment, a functional democratic government where a single party has won every election since independence, and adherence to free trade and open capital market policies even though most other countries that gained independence at the same time embraced protectionism. Although Singapore's immigration system is less well known, policy makers around the world should pay it attention.

Shortly after Singapore gained independence in 1965, it welcomed permanent immigrants and temporary foreign workers to labor in its growing economy. Part of the political demand for immigrants was been technocratic, but much of it has also been cultural. Lee Kuan Yew, the first prime minister of Singapore, argued that “[immigrants] will do many jobs better than the next generation Singaporean would because the next generation Singaporean will have been brought up in an easier environment that has not deprived him of enough basic necessities to make him really want to work so hard”¹. As a result, Singapore's immigration policy allows in so many workers of every skill level that 47 percent of all residents in 2017 were foreign-born.

¹ Eng Fong Pang and Linda Lim. “Foreign Labor and Economic Development in Singapore.” *International Migration Review* 16, 3 (1982): 551.

The foreign-born population² of Singapore is larger than that of most other developed countries, with a handful of small oil kingdoms as notable exceptions. By comparison, only 13.7 percent of American residents in 2017 were foreign-born. Singapore still has more immigration even when compared to American immigration hubs like Los Angeles and New York City, where about 37 percent of each city's population is foreign-born. In 2017, none of the top ten largest American cities had an immigrant percentage of their populations above 40 percent, well below Singapore's 47 percent. Singapore has an exceptionally large number of foreign-born residents who are complementary to the city-state's policies of free trade, free capital flows, and other relatively unregulated cross-border economic exchanges.

Singapore allows in many foreign workers but those who are lower paid are also generally more heavily regulated, have less labor market flexibility, and fewer civil rights than those immigrants who are highly paid. Singapore's immigration system offers many advantages relative to immigration systems in other countries and thus has supported the city-state's rise from a poor developing country in 1965 to the fourth wealthiest in the world. Even so, there are still many marginal improvements that would improve Singapore's immigration system.

The United States and Singapore can learn much from each other about immigration because their situations and histories are similar. Like the United States, Singapore is a wealthy country that borders a developing nation. The United States and

² This chapter will use American terminology to describe the different visa categories in Singapore's immigration system. Going forward, this chapter will describe immigrants as foreign-born residents in Singapore who are on visas that allow for permanent residency and, eventually, citizenship. Temporary foreign migrants cannot seek citizenship but are allowed to work, live, and study for a specified period of time.

Singapore both had a problem with illegal immigration that they have since largely resolved with a combination of liberal visa policy and enforcement, although the U.S. problem has since resurfaced since 1964 as it abandoned its liberal visa policies. Moreover, the United States and Singapore both parallel a long history of welcoming and assimilating immigrants under a framework of British inspired liberalism. Unlike the United States, however, Singapore's government is highly technocratic and has sought to craft an immigration policy that maximizes economic and wage growth through allowing in foreign workers that comport with government growth plans³

The Number of Immigrants

Forty-seven percent of Singaporean residents were born abroad in 2017, a large increase from 28 percent in 1965 when Singapore gained independence (Figure 1). The smallest foreign-born population as a percent of Singapore's population was 21 percent in 1981, which then quickly rebounded when the government liberalized immigration in the early-1980s (Figure 2)⁴. Growth in the foreign-born population has accounted for nearly all of the increase in Singapore's population since the 1990s, especially since the birthrate in Singapore fell below replacement level for the first time in 1980⁵. Of the 47 percent who were foreign-born, 17 percentage points were naturalized Singaporeans or permanent residents while 30 percentage points were temporary migrants. By comparison, about 10 percent of American residents are legal immigrants or lawful

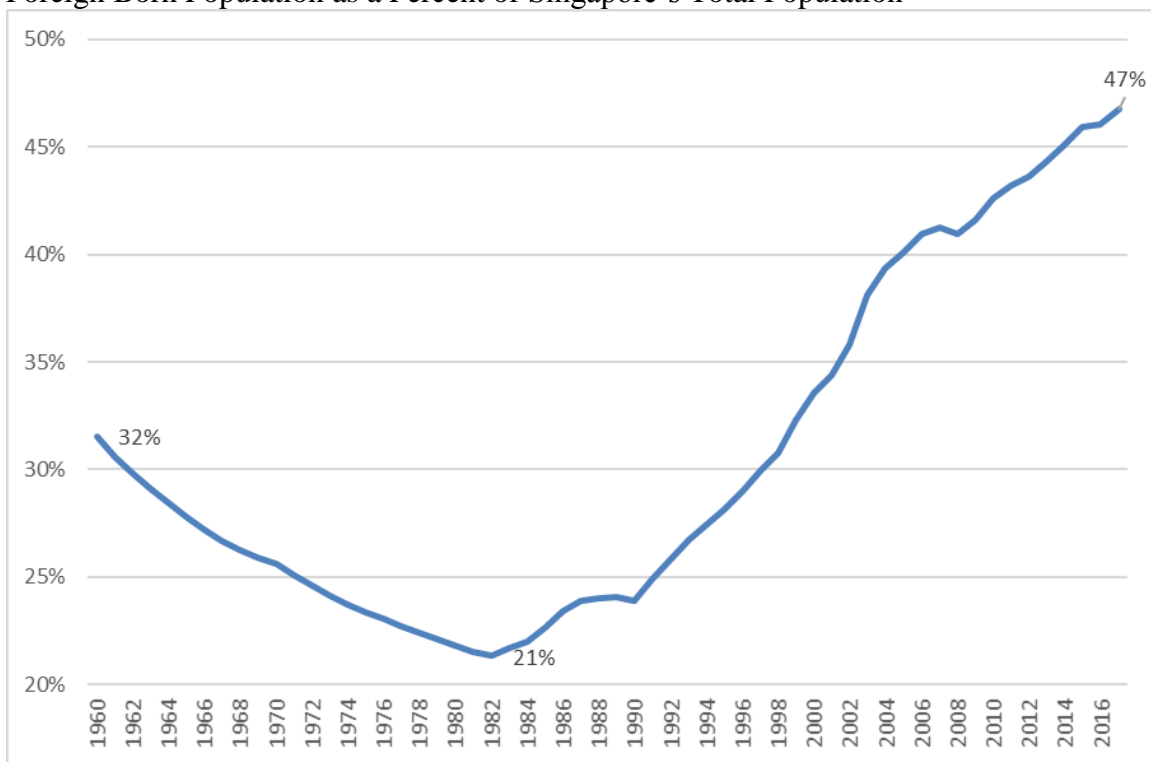
³ Chew Soon-Beng and Rosalind. "Immigration and Foreign Labour in Singapore" *ASEAN Economic Bulletin* 12, 2 (1995): 191.

⁴ Pang and Lim, "Foreign Labor and Economic Development in Singapore", 551-552; Charles W. Stahl "Singapore's Foreign Workforce: Some Reflections on Its Benefits and Costs" *The International Migration Review* 18, 1 (1984): 43-44.

⁵ Organization for Economic Cooperation and Development, "Recent Trends in International Migration in Asia and Central Eastern Europe" in *Trends in International Migration 2003* (Paris: OECD Publishing 2003): 73.

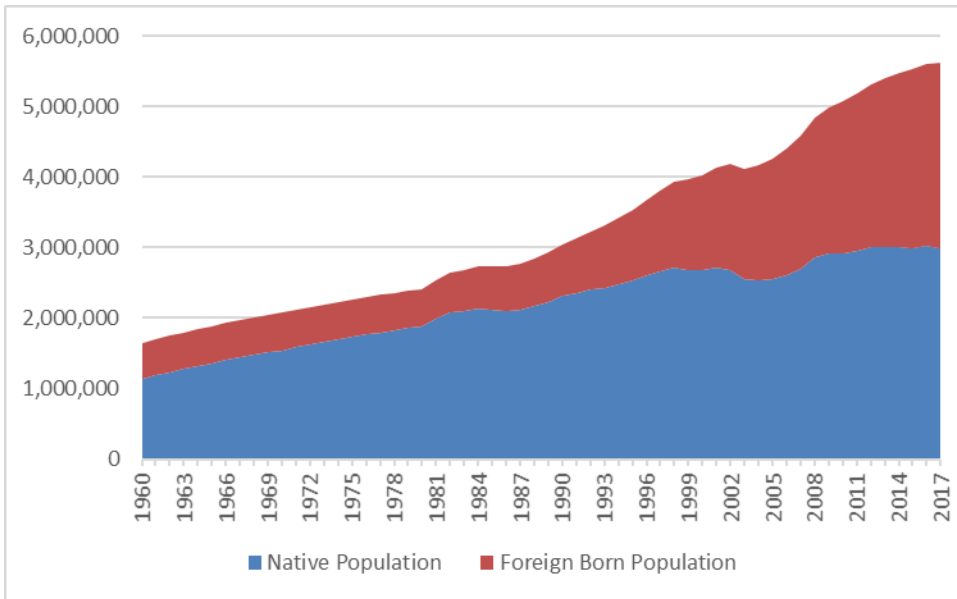
permanent residents while about 4 percent are temporary migrants or illegal immigrants. Every year since independence, the percentage of Singapore's the population that was foreign-born was greater than that in the United States regardless of whether one focuses on the permanent settled foreign-born population or the temporary or illegal immigrant population.

Figure 1
Foreign Born Population as a Percent of Singapore's Total Population



Sources: Singapore Census, World Bank, and author's calculations (missing years linearly interpolated).

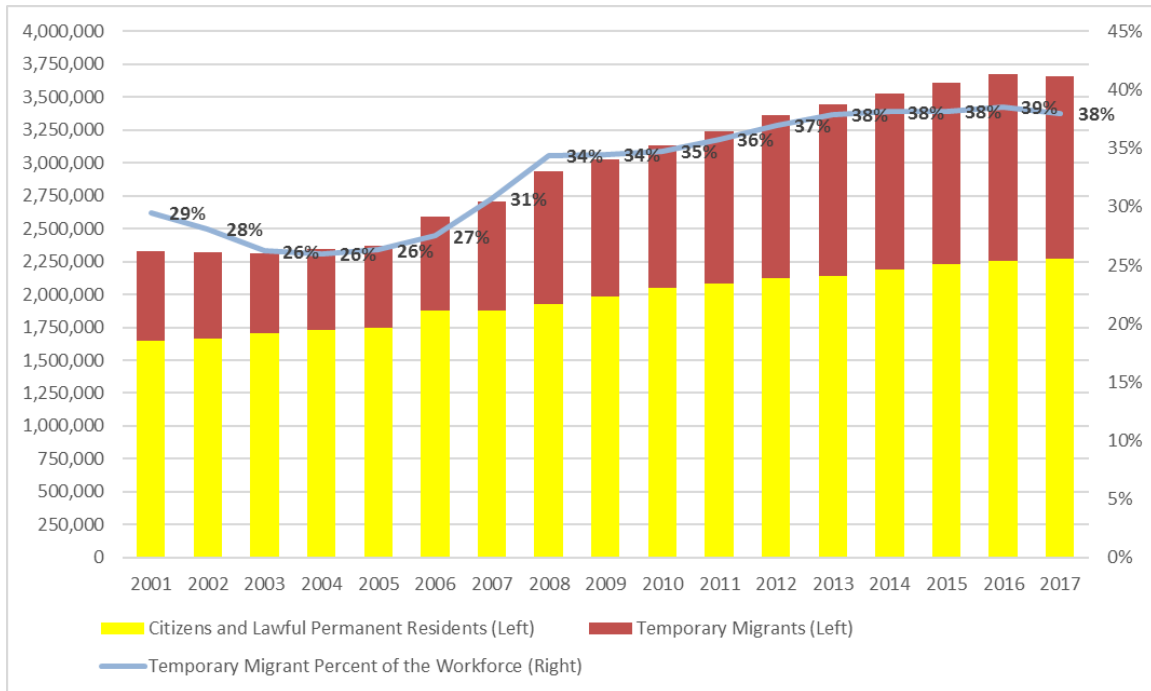
Figure 2
Singapore's Total Population by Nativity



Sources: Singapore Census and author's calculations (missing years linearly interpolated).

Singapore's government does not differentiate between naturalized workers and those who were born citizens when reporting the characteristics of its workforce. However, the evidence available shows that immigrants make an outsized contribution to the composition of the workforce (Figure 3). Some portion of citizens in the workforce are naturalized Singaporeans. Additionally, the percent of the workforce who are temporary migrants has averaged 37 percent from 2010 through 2017 and is trending upward over time. Thus, the contribution of foreign-born workers to Singapore's workforce is likely much greater than the 38 percent who are temporary foreign workers and maybe even greater than their fraction of the entire Singaporean population.

Figure 3
Workforce by Citizenship and Immigration Status



Sources: Singapore Ministry of Manpower Yearbook of Manpower Statistics multiple years, Siow Yue Chia, and author's calculations.

Temporary migrants account for a large portion of the growth in Singapore's foreign-born population since the early 1980s and about 38 percent of the stock of people living in Singapore in 2017. In 2017, Singapore's temporary migrant population of about 1.7 million can be divided into many categories. Four percent were students, 79 percent held some kind of work visa (Employment Pass, S Pass, Foreign Domestic Worker, or Work Permit), and 17 percent were dependents of citizens, permanent residents, or those on work visas (Table 1).⁶ Since 2012, the number of students has fallen considerably while the number of temporary migrants in other visa categories has either increased or stayed roughly constant.

⁶ Singapore's government does not count foreign-born citizens differently from native-born citizens like the United States does. Thus, I worked backwards to estimate the actual foreign-born population using data from Singapore's Census. Missing foreign-born data are linearly interpolated because the United Nations only reports foreign-born stocks in 5-year increments and 2017.

Table 1
Temporary Migrant Population by Type of Visa, 2012-2017

	2012	2013	2014	2015	2016	2017
Students	89,654	77,721	79,949	65,292	66,949	65,858
Employment Pass	179,308	170,985	175,888	179,554	184,110	197,575
S Pass	134,481	155,441	159,899	179,554	184,110	181,110
Foreign Domestic Worker	194,250	202,073	207,868	212,201	234,321	230,504
Dependents	224,135	233,162	239,848	261,170	267,796	279,898
Work Permit	687,347	715,029	735,533	734,540	736,439	691,512

Sources: Singapore Department of Statistics annual “Population in Brief” reports, 2012-2017.

Singapore’s Modern Immigration System: 1997-Present

Liberal immigration laws led to the current large foreign-born population. Singapore has a two-tiered immigration system that is heavily managed by the Ministry of Manpower (MOM)⁷. The first tier contains highly paid professionals with skills and their families who are encouraged to become permanent residents and eventually citizens⁸. The second tier includes temporary migrant workers who are skilled and semi-

⁷ Brenda S.A. Yeoh and Natalie Yap, “Gateway Singapore: Immigration Policies, Differential (Non)Incorporation and Identity Politics” in *Migrants to the Metropolis: The Rise of Immigrant Gateway Cities*, edited by Marie Price and Lisa Benton-Short. Syracuse: Syracuse University Press, 2008: 183.

⁸ Philip L. Martin, “Movement in the Asia Pacific Region: Singapore Perspective”, *The International Migration Review* 29, 3 (1991): 84.

skilled, encouraging a large and rotating flow of lower-skilled workers to labor in Singapore and then return home without the possibility of naturalization⁹. Unlike the American immigration system, Singapore does not have a labor market test or series of complex wage regulations except that worker wages must be above a certain threshold to even qualify for more portable and flexible visas, many of which could eventually allow for naturalization¹⁰. The second tier also includes levies on many types of temporary worker visas that employers must pay directly to the government as well as numerous regulations concerning the health, safety, and working conditions of temporary migrant workers¹¹.

Singapore's immigration system facilitates the inflow of foreign talent to create a modern knowledge-based economy, to encourage the immigration of foreign investors, and boost the productivity and employment opportunities for Singaporean citizens¹². Labor market flexibility, through the rapid and liberal recruitment of temporary migrant workers when the economy is expanding as well as the repatriation of those same workers when economic growth slows, is essential for Singapore's immigration policy to achieve its economic goals.

The legal process to hire a foreign worker from abroad is straightforward. The employer, sometimes working with an employment agency, identifies suitable foreign job candidates and then applies to MOM's Work Pass Division to sponsor these candidates.

⁹ *ibid.*

¹⁰ Martin Ruhs, "Temporary Foreign Worker Programmes: Policies, Adverse Consequences and the Need to Make Them Work", Working Paper no. 56, The Center for Comparative Immigration, 2002: 10.

¹¹ Aris Chan, "Hired on Sufferance: China's Migrant Workers in Singapore", *Research Reports*, China Labour Bulletin, 2011: 9-10.

¹² Yeoh and Yap, "Gateway Singapore", 183; OECD, "Recent Trends in International Migration", 77.

If MOM approves the worker then they are first granted an In-Principle Approval letter while the actual visa is issued after other health, safety, bonds (for non-Malaysian workers only), and security regulations are fulfilled¹³ After the worker is hired, MOM's Foreign Manpower Management Division's Enforcement Inspectorate enforces worksite health, safety, and living condition regulations through inspections, work place raids, and audits in coordination with other law enforcement and regulatory agencies¹⁴.

As mentioned above, the first tier of Singapore's immigration system is for professional workers¹⁵. The most used professional visa is the Employment Pass for skilled and professional immigrants who have managerial, executive, or specialized jobs in Singapore and who earn a monthly salary of at least \$3,600. Immigrants on the Employment Pass who are more skilled and educated have higher wage thresholds that they must meet. In addition, those with an Employment Pass must have good professional qualifications such as a university degree or specialized skills and also can sponsor some family members if they earn at least \$6,000 a month. Ninety-five percent of the 197,575 workers on an Employment Pass were working in December 2017 while the other 5 percent were temporarily between jobs¹⁶. Another professional visa is the Personalized Employment Pass for workers whose last overseas fixed monthly salary was at \$18,000. This visa is easier to acquire than the Employment Pass and allows more legal flexibility once residing in Singapore. The last major professional visa is the

¹³ Mui Teng Yap, "Singapore's System for Managing Foreign Manpower", in *Managing International Migration for Development in East Asia*, ed. Richard H. Adams Jr. and Ahmad Ahsan, 220-240. (Washington DC: World Bank Group, 2014): 232; Yeoh and Yap, "Gateway Singapore", 188.

¹⁴ Yap, "Singapore's System for Managing Foreign Manpower", 232.

¹⁵ Ministry of Manpower. "Work Passes and Permits, Singapore", (2018).

¹⁶ Ministry of Manpower. "Foreign Workforce Numbers, Singapore", (2018).

EntrePass which is for eligible foreign entrepreneurs, innovators, and investors who want to start and operate a new business in Singapore.

The second tier of Singapore's immigration system contains three major visas for skilled and semi-skilled workers. In addition to the rules listed below, they all must have private health insurance and comply with restrictions unique to each visa that are too numerous and specific to mention here¹⁷. The first of these types of visas is the S Pass for mid-level staff and technicians who earn at least \$2,200 a month¹⁸. The Work Permit is for semi-skilled foreign workers in the construction, manufacturing, marine shipyard, process, or services sectors of Singapore's economy. Employers must provide housing and pay a substantial levy for each migrant worker under the Work Permit but there are few wage regulations (Table 2). Notably, 40 percent of the Foreign Workers on Work Permits labor in the construction industry¹⁹.

The most interesting and unique second tier visa is for Foreign Domestic Workers (FDW) who labor in the home and in childcare. The FDW must be female, 23-50 years of age, be from an approved country of origin in South or East Asia, and have a minimum of 8 years of education. Once in Singapore, the FDW cannot start a business or change employers²⁰. The employer of an FDW must also meet stringent regulations. She must work at the employer's home address and cannot be related to the employer while the employer must pay a \$5,000 security bond, pay for medical exams, and cover most other

¹⁷ Siow Yue Chia, "Foreign Labor in Singapore: Rationale Policies, Impacts, and Issues", *Philippine Journal of Development* 38, 70 (2011): 114, 117.

¹⁸ Yap, "Singapore's System for Managing Foreign Manpower", 231; Ministry of Manpower, "Work Passes and Permits".

¹⁹ Ministry of Manpower, "Foreign Workforce Numbers".

²⁰ Ministry of Manpower, "A Guide for Foreign Workers", Singapore, (2011): 6.

costs of living. Many of those rules are more relaxed for FDWs from Malaysia²¹.

Despite those intrusive rules and regulations, FDWs have high levels of satisfaction with their jobs according to government surveys and most intend to apply again for work as an FDW²².

Employers of many of the skilled and semi-skilled workers in the second tier must adhere to a dependence ceiling that sets the maximum percentage of workers in a firm who can be on temporary migrant work visas²³. The dependence ceilings range from 10 percent in the service sector to 87.5 percent in the construction and processing sectors (Table 2). On top of that, employers must also pay a foreign worker levy every month based on the skill-level of the worker, the sector where they work, and other factors (Table 2).

Table 2
Monthly Levy and Dependence Ceiling by Sector, 2017

Sector/Visa Type	Maximum Dependence Ceiling	Monthly Levy (S\$)	
		Higher-Skilled	Basic-Skilled
S-Pass	10%	330	330
<u>Work Permit</u>			
Construction	87.5%	300	700

²¹ Md Mizanur Rahman, “Foreign Manpower in Singapore: Classes, Policies, and Management”, Working Paper no. 57, Asian Research Institute: National University of Singapore, (2006): 17.

²² Ministry of Manpower, “Ministry of Manpower: Foreign Domestic Worker Study, 2015”, Singapore, (2016): 5; Ministry of Manpower, “How to Employ a Foreign Domestic Worker: Practical Advice for Anyone Hiring a FDW”, Singapore, (2017).

²³ Organization for Economic Cooperation and Development, “The changing role of Asia in international migration” in *International Migration Outlook 2012*, 157-207, (Paris: OECD Publishing, 2012): 183; Rahman, “Foreign Manpower in Singapore”, 183.

Services	10%	300	450
Marine Shipyard	77.8%	300	400
Process	87.5%	300	450
Manufacturing	25%	250	370

Source: Singapore Ministry of Manpower.

Note: Only basic tiers included.

Singapore originally introduced the foreign worker levy in 1987 to decrease business reliance on foreign workers and to incentivize said businesses to invest in more capital-intensive labor-saving production techniques as part of the government’s “Second Industrial Revolution” strategy²⁴. As Table 2 shows, the foreign worker levy is substantial and usually at least 25 percent of the salary costs²⁵. Shortly after the levy was introduced, the government abandoned its goal of incentivizing firms to replace workers with machines, but the levy remained as a form of immigration tax to raise revenue²⁶. Singapore is one of the few countries to use economically-oriented fees to regulate the entry of workers rather than numerical caps, labor market tests, or points-based systems²⁷.

²⁴ Charanpal Singh Bal, “The Politics of Obedience: Bangladeshi Construction Workers and the Migrant Labour Regime in Singapore.” (Ph.D thesis, Murdoch University 2013): 50.

²⁵ OECD, “The Changing Role of Asia”, 183; Yap, “Singapore’s System for Managing Foreign Power”, 234.

²⁶ Bal, “The Politics of Obedience”, 49-52; Charan Bal, “Myths and Fact: Migrant Workers in Singapore”, *New Naratif*, (September 9, 2017).

²⁷ Ruhs, “Temporary Foreign Worker Programmes”, 9.

Although the government's original intent for the foreign worker levy and the dependence ceilings was that it would spur more capital-intensive economic development by raising the cost of substitutable labor, the levy is now just a tax on foreign workers while the dependence ceilings cap tax revenue for each firm²⁸. The government has increased the dependence ceiling and the foreign worker levy in all sectors affected, both behaviors of a state trying to increase tax revenue collected from migrant workers rather than trying to disincentivize their employment. For example, the dependence ceiling in the construction sector was 50 percent in 1987 and the levy was S\$200 a month. In 1998, the government increased the construction dependence ceiling to 80 percent and the levy to S\$430. The government then increased the dependency ceiling to 87.5 percent in 2010 along with a levy that has since risen to S\$700 for construction workers with a basic level of skill²⁹.

On paper, employers pay the foreign worker levy, but the incidence of taxation actually falls on the foreign workers themselves in the form of lower wages. The supply of foreign workers is large and relatively inelastic, meaning that a decrease in their wages does not much lower the quantity willing to work in Singapore. Any taxes on labor will hence disproportionately fall on the workers, who are the supply side in this model. Some commentators on this situation blame a lack of wage regulations for foreign workers, no labor market test for hiring foreign workers, and minimal government enforcement of existing regulations regarding the withholding of wages or "kickbacks" that workers pay to their employers; but those comments miss the point³⁰. So long as the

²⁸ Bal, "The Politics of Obedience", 46, 50; Bal, "Myths and Fact".

²⁹ Bal, "The Politics of Obedience", 51.

³⁰ Bal, "The Politics of Obedience", 58-63.

supply of workers is more inelastic than the demand for their labor, the workers will pay most of the foreign worker levy regardless of the amount of government oversight. Indonesia, China, and the Philippines have signed bilateral agreements with Singapore regarding migrant worker wages and conditions but there is little consistent evidence that this results in higher take home wages for workers from these countries³¹. Resultantly, the foreign worker levy is a regressive tax on lower skilled migrant workers³².

In addition to the economic visas mentioned above, Singapore does allow a small number of immigrants through purely based on their family ties to another immigrant or a citizen of Singapore. This is especially important for marriage as about a quarter of all marriages in Singapore were between a native and a foreigner in 2010, mostly a Singaporean man marrying a woman from a poorer country³³. The income of the Singaporean immigrant or citizen is the most important factor in determining whether family members can lawful immigrate to Singapore and how many can come, with higher paid immigrants on more flexible work visas having the greatest freedom in this regard.

International students also make up a large but falling proportion of the migrant population. Singapore's student visa system allows the students to work legally and is liberally regulated for several reasons. First, Singapore's government wanted the city-state to be a regional education hub as illustrated by nine campuses of foreign universities in Singapore by 2010, something that would be impossible without allowing foreign

³¹ OECD, "The Changing Role of Asia in International Migration", 197.

³² Brenda S.A. Yeoh, Shirlena Huang, Joaquin Gonzalez III, "Migrant Female Domestic Workers: Debating the Economic, Social, and Political Impacts in Singapore", *The International Migration Review* 33, 1 (1999): 117-119.

³³ OECD, "The Changing Role of Asia in International Migration", 190.

students to study in Singapore³⁴. Second, Singapore's government sees international students as a potential major source of economic growth because some of them settle there or forge international business relationships post-graduation³⁵. Third, foreign-students subsidize Singapore's university and education systems through higher fees and better research talent³⁶.

The last facet of Singaporean visas and immigration policy falls under a more miscellaneous category. There are several minor flexible visas for travelers who want to work on the holidays in Singapore, who are there for technical training, or to get exemptions from employment prohibition in non-work visas.

Singaporean citizenship law is based on *jus sanguinis* and a modified form of *jus soli*. The former allows for citizens to pass their citizenship onto their children while the latter allows for the children of Singaporean-born parents to attain citizenship. In both cases, at least one parent must be a Singaporean citizen. In the case of *jus soli*, a child born in Singapore is a citizen if he or she has one parent who is a citizen of Singapore and the parents are legally married. For naturalization purposes, citizenship is available to skilled workers, entrepreneurs, investors, and their immediate families³⁷. Singapore has not allowed dual citizenship since 1960³⁸.

The History of Singapore and Its Immigration System

³⁴ OECD, "The Changing Role of Asia in International Migration", 175; OECD, "Recent Trends in International Migration", 75; Philippe Herve, "Chapter 1: Trends in Labor Migration in Asia" in *Building Human Capital through Labor Migration in Asia*, 1-71 (Japan: Asian Development Bank Institute, International Labour Organization, and OECD, 2015): 10.

³⁵ OECD, "The Changing Role of Asia in International Migration", 175.

³⁶ Brenda Yeoh and Weiqiang Lin, "Rapid Growth in Singapore's Immigrant Population Brings Policy Challenges", *Migration Policy Institute: Migration Information Source*, (2012).

³⁷ Linda Low, "Movement in the Asia Pacific Region: Singapore Perspective", *The International Migration Review* 29, 3 (1995): 757.

³⁸ Yeoh and Yap, "Gateway Singapore", 178.

Singapore's current immigration system did not emerge fully-formed in the 21st century but was instead the product of inherited cultural norms, laws, administrative tweaks, and occasionally major legal reforms. Singapore's modern immigration system originated in 1819 when a British expedition established a strategically-located trading post on the island of Temasek. In the early days, the British government imposed zero controls on the movement of people in to and out of Singapore, which was the norm for that time. As a result, large numbers of Chinese, Indians, and Malays moved there as both temporary workers and permanent settlers or immigrants. British trading ties with China especially encouraged the movement of Chinese subjects to Singapore seeing as six million Chinese landed from 1895-1927; though most returned back to China³⁹. Until 1910, immigrants to Singapore were not only overwhelmingly transient males but also a large percentage of Indian, Malay, Indonesian, and Chinese immigrants were indentured servants until 1910 when the British outlawed the practice⁴⁰.

The 1928 Immigration Restriction Ordinance ended the period of *laissez faire*, *laissez passer* immigration to Singapore⁴¹. In 1933, the British Alien Ordinance set strict numerical quotas on male Chinese immigrants but left female immigrants quota-less in an effort to equalize the sex ratio⁴². After World War II, the British imposed a comprehensive immigration ordinance to control the number and quality of immigrants to Singapore while simultaneously maintaining open borders with Malaysia⁴³. The British began to withdraw from Singapore in 1959 when it granted self-government to the city-

³⁹ Pang and Lim, "Foreign Labor and Economic Development in Singapore", 548-549.

⁴⁰ Pang and Lim, "Foreign Labor and Economic Development in Singapore", 548.

⁴¹ Yeoh and Yap, "Gateway Singapore", 177-178.

⁴² Pang and Lim, "Foreign Labor and Economic Development in Singapore", 549.

⁴³ *ibid.*

state. In 1963, Singapore merged with Malaysia and then severed ties in 1965 when it gained full independence, erecting the first immigration barriers with Malaysia and maintaining its highly restrictive system⁴⁴.

At independence, Singapore was a very poor country, so its government adopted liberal trade, investment, and property rights policies it thought would lead to development. As a result, Singapore's economy expanded rapidly and unemployment fell so low that the newly independent government relaxed its immigration laws in 1968 to allow more temporary workers to fill jobs – setting its current dominant pattern of migration policy⁴⁵. From 1965 to 1985, Singapore suffered no recessions and Singapore did not suffer its second recession until 1998 due to the Asian Financial Crisis. From 1965 to 2017, Singapore's average annual rate of GDP growth was 7.5 percent, averaging 9.1 percent prior to 1998⁴⁶. In 2017, Singapore's per capita GDP, adjusted for Purchasing Power Parity (PPP) in current international dollars, was \$93,905 – the fourth highest in the world behind Qatar, Macau, and Luxembourg⁴⁷. In 1990, the first year when the GDP per capita in PPP and current international dollars measurement is available, Singapore was the 12th richest at \$22,198⁴⁸. In fact, Singapore's ranking in unadjusted GDP per capita rose from 50th in 1965 to 10th in 2017⁴⁹.

Regardless of the exact measurement, Singapore's spectacular rate of economic growth and its government's obsession with increasing it further led to numerous

⁴⁴ Soon-Beng and Chew, "Immigration and Foreign Labour in Singapore", 193.

⁴⁵ Chia, "Foreign Labor in Singapore", 118; Pang and Lim, "Foreign Labor and Economic Development in Singapore", 549; Bal, "The Politics of Obedience", 49; Yeoh and Yap, "Gateway Singapore", 179.

⁴⁶ World Bank, "World Development Indicators", (2018).

⁴⁷ *ibid.*

⁴⁸ *ibid.*

⁴⁹ *ibid.*

immigration liberalizations in the 1980s and ultimately to the creation of the dependence ceiling and foreign worker levy system for temporary migrant workers in some occupations by 1987⁵⁰. But by that time, illegal immigration in Singapore had become a minor concern. In 1989, Singapore amnestied 11,800 illegal immigrant Thai workers and subsequently followed this amnesty with a law that sentenced illegal immigrants to both three months in jail and a caning. When Singapore apprehended additional Thai illegal immigrant workers post-amnesty, the Thai government protested, prompting Singapore to extend its amnesty as well as pass a law punishing employers of 5 or more illegal immigrants with caning⁵¹. To combat illegal immigration further, the government also conducted an education campaign on immigration law for employers as well as further liberalized work permit and enforcement measures to guarantee that they could hire as many foreign migrant workers with few regulations – especially through bilateral agreements with poorer Asian nations⁵².

Liberalization of immigration laws, the amnesties, and, to a lesser extent, the increase in enforcement solved the illegal immigration problem in Singapore by replacing them with legal migrants. There is no evidence that Singapore copied this policy from the United States in the 1950s, but it looks almost identical to how the Eisenhower administration reduced the Mexican illegal immigrant population by 90 percent and cut cross-border flows by 95 percent⁵³. After liberalizing temporary migrant worker flows

⁵⁰ Low, “Movement in the Asia Pacific Region”, 753.

⁵¹ Soon-Beng and Chew, “Immigration and Foreign Labour in Singapore”, 198; Martin, “Labor Migration in Asia”, 183.

⁵² Rahman, “Foreign Manpower in Singapore”, 21; Amarjit Kaur, “Labour Migration in Southeast Asia: Migration Policies, Labour Exploitation, and Regulation”, *Journal of the Asia Pacific Economy* 15, 1, (2010): 6.

⁵³ Michael Clemens and Kate Gough, “Can Regular Migration Channels Reduce Irregular Migration? Lessons for Europe from the United States”, *Center for Global Development Brief* (February 2018); Alex

and resolving illegal immigration, Singapore adopted a more sweeping reform for permanent immigration and skilled workers under a broad framework that is still largely intact today.

The Economic Effects of Singapore’s Immigration Policy

The primary purpose of Singapore’s immigration policy is to increase the pace of economic growth with some added focus on boosting employment for Singaporean citizens⁵⁴. The four economic factors of production are entrepreneurship and knowledge, labor, capital, and land. Immigration impacts all factors of production as well as the efficiency with which they interact to produce goods and services more cheaply – also known as productivity.

Singapore’s population was low-skilled when the city-state gained independence and education is a costly means to boost human capital in the short run. Singapore got around this problem by increasing the supply of human capital through immigration just as it increased its supply of physical capital through openness to international capital markets⁵⁵. While the government also increased education spending with an eye on educating the next generation, the immediate boost to Singapore’s stock of human capital came from immigration.

Belying Singapore’s high average annual GDP growth of 7.5 percent from 1965 to 2017 is its low rate of total factor productivity (TFP) growth – the portion of economic output not explained by the factors of capital or labor. TFP, a truer measure of

Nowrasteh, “Enforcement Didn’t End Unlawful Immigration in 1950s, More Visas Did”, *Cato at Liberty*, (November 11 2015).

⁵⁴ Yap, “Singapore’s System for Managing Foreign Manpower”, 225.

⁵⁵ Stahl, “Singapore’s Foreign Workforce”, 39.

productivity, has consistently lagged in Singapore. Although a later revision of TFP in Singapore based on a slightly different methodology showed more growth than official statistics with little change for other countries, indicating a measurement problem unique to Singapore⁵⁶. The puzzle of low productivity growth in a country with high economic growth is partially explained by foreign worker churn. Additional foreign laborers increased growth by pushing out the production possibilities frontier, but these same foreign laborers slowed TFP growth by just adding more workers rather than more productive workers⁵⁷. A recalculation of Singapore's TFP growth rate from 1992-2002 that explicitly excluded temporary migrant workers in construction and FDWs raised it to 1.6 percent from 0.94⁵⁸.

Singapore's immigration policy also intends to increase the wages and employment opportunities for Singaporean citizens by allowing complementary immigrants and temporary migrant workers to settle in large numbers⁵⁹. Those complementary immigrants are typically either higher educated than citizens, lower educated, or have different skills not likely to be substitutable for citizens. From 1992 to 1997, a 1-percent increase in the number of semi-skilled temporary migrant workers increased employment for skilled and unskilled Singaporean citizens by 2.6 percent and 1.4 percent, respectively. Over the same period, a 1-percent increase in the number of

⁵⁶ Ministry of Trade and Industry, "Singapore's Productivity Puzzle; Estimating Singapore's Total Factor Productivity Growth Using the Dual Method", Singapore Ministry of Trade and Development (3rd Quarter 2010): 14-25.

⁵⁷ Friedrich Wu and Jang Ping Thia, "Total Factor Productivity with Singaporean Characteristics: Adjusting for Impact of Housing Investment and Foreign Workers", *Economic Survey of Singapore* (2002): 45-55; Chia, "Foreign Labor in Singapore", 125.

⁵⁸ Wu and Thia, "Total Factor Productivity with Singaporean Characteristics".

⁵⁹ Benedict S Chia, Shandre M. Thangavelu, and Mun Heng Toh, "The Complementary Role of Foreign Labour in Singapore", *Economic Survey of Singapore*, Singapore Ministry of Trade and Industry, (1st Quarter 2004): 53-64; Pang and Lim, "Foreign Labor and Economic Development in Singapore", 553-565.

immigrants with the Employment Pass for skilled and professional workers boosted employment of skilled and unskilled Singaporeans by 1.9 percent and 0.2 percent, respectively⁶⁰.

The male labor force participation rate (LFPR) fell slightly from 77.5 percent in 1990 to 76 percent in 2017. Over the same time, the female LFPR increased from 48.8 percent to 59.8 percent⁶¹. The Foreign Domestic Workers (FDW) visa for domestic house work and child care can account for some portion of this large increase in the Singaporean female LFPR, which is an integral part of the long-term governmental strategy of incentivizing skilled women to work and bear children⁶². Although there are no peer-reviewed academic publications on how the FDW visa has affected female LFPR and fertility in Singapore, there is ample evidence from the United States that more low-skilled immigrants in American cities incentivized skilled American women to reenter the workforce and work longer hours after they had children⁶³. The same complementary labor market effect of lower-skilled immigration is likely occurring in Singapore via the FDW visa.

Immigrants also have a large impact on the capital structure of Singaporean firms. Firms invest less capital in automation machinery in areas with lower skilled immigration in the United States. Likely, the quantity of lower-skilled migrants in Singapore had a similar effect on the type and quantity of capital invested⁶⁴. As explained above, the

⁶⁰ Chia, “The Complementary Role of Foreign Labour in Singapore”, 124; Chia et.al, “The Complementary role of Foreign Labour in Singapore”.

⁶¹ Department of Statistics, ““M182201 - Age-sex Specific Resident Labour Force Participation Rates Aged 15 Years And Over, (June), Annual,” Singapore”, (2018).

⁶² Yeoh et.al, “Migrant Female Domestic Workers”, 117.

⁶³ Patricia Cortes and Jose Tessada, “Low-Skilled Immigration and the Labor Supply of Highly Skilled Women”, *American Economic Journal: Applied Economics* 3, 3 (2011): 88-123.

⁶⁴ Ethan Lewis, “Immigration, Skill Mix, and Capital Skill Complementarity”, *The Quarterly Journal of Economics* 126, 2 (2011): 1029-1069.

government of Singapore attempted to decrease the number of temporary migrant workers to raise the relative cost of labor to capital and hence incentivize firms to invest more in capital-intensive production techniques, but the efforts failed in the 1990s, creating a leftover regulatory legacy of dependence ceilings and foreign worker levies still in existence today. Although the large number of temporary migrant workers probably changes the nature of capital investments in construction and other industries with large numbers of lower-skilled workers, temporary migrant workers also free up large numbers of skilled workers to complement more advanced capital in more productive and knowledge-intensive sectors.

Immigrants generally have an impact on land, housing, and real-estate markets that is larger than simply their impact on the labor market. Despite this large impact, how immigrants affect these markets is near totally ignored in Singapore and barely mentioned in the United States. Across the United States, a 1 percent increase in the employed foreign-born population increased local housing prices by 1.1 percent from 1970 to 2010⁶⁵. Similarly, an increase in the immigrant population of a metropolitan statistical area by 1 percent boosted rents and housing prices by 1 percent⁶⁶. The higher return to land explains the entire increase in the net-capital share for wealthy Americans that was famously discovered by French economist Thomas Piketty⁶⁷ and immigration can explain 23 percent of that U.S. increase since 1970 due to its large effect on land

⁶⁵ Gianmarco I.P. Ottaviano and Giovanni Peri, “Wages, Rents and Prices: The Effects of Immigration on U.S. Natives.” (Working Paper), Princeton University (2006).

⁶⁶ Albert Saiz, “Immigration and Housing Rents in American Cities,” *Journal of Urban Economics* 61, 2 (2007): 345-371.

⁶⁷ Thomas Piketty, *Capital in the Twenty-First Century*, (Cambridge: Belknap Press, 2014); Matthew Rognlie, “Deciphering the Fall and Rise in the Net Capital Share: Accumulation or scarcity?” *Brookings Papers on Economic Activity Conference* 1, (2015): 1-69.

prices⁶⁸. The large effect of immigrants on land prices and capital share by decile in the United States likely affects Singapore in a similar way.

Singapore's government owns 80 percent of real-estate while the remaining 20 percent is a heavily regulated private market where supply is highly constrained. Those two features of Singapore's land market likely exacerbates the impact some immigrants have on the housing market. Price increases in recent decades are pricing many Singaporeans out of the real-estate market⁶⁹. Temporary foreign-workers in Singapore increase the supply of construction workers which, in turn, increases residential construction, but their net-effect is to raise prices⁷⁰. Since wealthy Singaporeans and the government own virtually all of the land, the increase in the value of those assets accrue to politically powerful people who can create interest groups favoring liberalized immigration. However, the economic and social cost of rising real-estate prices that disproportionately impact poor and middle-class Singaporeans, pricing them out of the market for home ownership, are greater than the benefits.

A thriving city-state will likely have rising real-estate prices but the government restrictions on increasing supply exacerbate the effects of immigration and can potentially create negative political backlash. A further issue caused by the large inflow of immigrants and Singapore's restrictive housing market is that these are likely responsible for a portion of the lower-reported growth in TFP because of the

⁶⁸ Ryan H. Murphy and Alex Nowrasteh, "U.S. Immigration Levels, Urban Housing Values, and their Implications for Capital Share," *Economic Affairs* 37, 3 (2017): 411-421.

⁶⁹ Ashok Deo Bardham, Rajarshi Datts, Robert H. Edelstein, and Lum Sau Kim. "A Tale of Two Sectors: Upward Mobility and the Private housing Market in Singapore," *Journal of Housing Economics* 12, 2 (2003): 83-105; Sock Yong Phang, "The Singapore Model of Housing and the Welfare State", *Housing and the New Welfare State: Perspectives from East Asia and Europe*, Research Collection School of Economics (2007): 15-44.

⁷⁰ Stahl, "Singapore's Foreign Workforce", 47.

attractiveness of capital investments in low-productivity real-estate rather than industry, finance, or the service sectors⁷¹. Thus, the costs of immigration can increase due to affected problems in other government sectors.

How to Improve Singapore's Immigration Policy

Singapore fits well into the observed pattern that there is a policy tradeoff between openness to immigration and restrictions on the civil rights of those workers, including the ability to naturalize, collectively bargain, and control their own fertility⁷². Although Singapore's immigration policy has supported economic growth in the city-state since independence, there are some further minor reforms that could improve the quality of the system, select for more meritorious immigrants, and overall confer a greater benefit on Singaporeans. The following suggestions would marginally diminish the power of government bureaucrats and allow for both greater migrant flexibility and increased reliance on markets to select meritocratic immigrants.

The first such policy reform would increase the number of entrepreneurs. Only 16 percent of Singaporeans have considered starting a business compared to 40 percent of Hong Kong residents and 33 percent of Taiwanese⁷³. Singapore has been trying to boost entrepreneurship through various government subsidies and the S Pass with little effect⁷⁴. Since it is notoriously difficult to *ex ante* identify entrepreneurs, Singapore could potentially alleviate this issue by allowing temporary migrant workers in every visa

⁷¹ Ministry of Trade and Industry, "Singapore's Productivity Puzzle", 23.

⁷² Martin Ruhs, *The Price of Rights: Regulation International Labor Migration* (Princeton: Princeton University Press, 2013); Chun Han Wong, "Singapore Strike: The Full Story," *Wall Street Journal*, (August 31, 2013).

⁷³ Organization for Economic Cooperation and Development, *Structural Policy Country Notes: Singapore*, (Paris: OECD Publishing 2013):10.

⁷⁴ Scott Anthony. "How Singapore Became an Entrepreneurial Hub," *Harvard Business Review: Entrepreneurship* (February 25 2015).

category to become entrepreneurs and earn permanent residency if they meet a threshold of business size⁷⁵. At a minimum, temporary migrant workers could get a longer-term and more flexible work permit if they start a business. This would be a major reversal from current policy which does not allow temporary migrant workers to start businesses.

Singapore should also increase worker portability for migrants so that they can switch jobs between employers without *ex ante* government permission. This policy could be limited to employers in the same sector, but it would be even better for it to range across all potential employers of current non-portable visas. Increased work portability will reduce or eliminate instances of wage theft and abuse by empowering the worker to monitor the situation himself and take immediate, effective action by quitting his job without the fear of losing legal migration status⁷⁶. As a corollary, this will encourage employers to treat their workers better and invest more in their productivity. Related to this, Singapore should allow temporary migrant workers to live where they please rather than with their employers or in employer-sponsored housing⁷⁷. This will reduce instances of improper regulatory and substandard housing for migrants by introducing the discipline of market forces.

It should be easier and cheaper for migrants on temporary worker visas to adjust their status upward to more flexible visas, such as the S Pass, if they pass certain certifications and earn educational credentials⁷⁸. Such an upwardly mobile visa system that allows migrants to earn more flexible visas through proven achievement will attract

⁷⁵ Ministry of Manpower, "A Guide for Foreign Workers", Singapore (2011):1-24.

⁷⁶ Yap, "Singapore's System for Managing Foreign Manpower", 231.

⁷⁷ Human Rights Watch. "Maid to Order: Ending Abuses against Migrant Domestic Workers in Singapore," *Human Rights Watch* 17, 10 (December 2005): 110.

⁷⁸ Yap, "Singapore's System for Managing Foreign Manpower", 224.

talented foreigners who currently lack the education or capital to be educated abroad but also have the drive and skill to do so once in Singapore. To encourage upward visa mobility and employer support for ambitious migrants, S Pass holders should be exempted from any numerical quotas or dependency ratios to encourage employers to help upgrade their skills, productivity, and wages.

Another reform would be to stop counting return workers against employer dependence ceilings. This will encourage firms to hire and retain foreign migrant workers already familiar with Singapore's society, economy, and who possess firm-and-country specific human capital⁷⁹. As a side benefit, this could help increase Singapore's sluggish TFP growth figures by encouraging labor market specialization in lower productivity sectors that employ many foreign temporary migrant workers. Recalculating the TFP growth statistics to exclude foreign temporary migrant workers in construction and FDWs from 1992-2002 increased Singapore's average annual TFP growth rate to 1.6 percent compared with a 0.94 percent when those workers were included⁸⁰. The best solution would be to remove the employer dependence ceilings but the exemptions for return migrant workers are a middle ground compromise that would captures much of the potential gain that would be realized if the government removed the dependence ceilings.

Lastly, Singapore should create a "Schengen Zone" for developed countries in Asia and the Pacific Rim. Such a policy would allow lawful residents of any participating member countries to live and work in any member states as if they were citizens of that state. Its first goal should be to create a free movement zone with Hong

⁷⁹ Martin, "Labor Migration in Asia", 183.

⁸⁰ Wu and Thia, "Total Factor Productivity with Singaporean Characteristics"; Chia, "Foreign Labor in Singapore", 125.

Kong with the eventual goal of expanding it to Dubai, South Korea, Japan, Taiwan, Australia, New Zealand, and other developed smaller nations that are free traders, allow relatively unregulated cross-border capital flows, and are exposed to the global economy.

Conclusion

Singapore's economy and foreign-born population have risen rapidly since independence in 1965. Singapore's per capita GDP rose about 111-fold from 1965 to 2017 while the foreign-born population increased from 28 percent of the population to 47 percent over the same time. The growth in the foreign-born population can be divided into two tiers, the first for professional and skilled immigrants who have the possibility to naturalize and the second for semi-skilled workers who are barred from Singaporean citizenship and in many cases, from permanent residency.

Singapore's immigration policy aided rapid economic and population growth over the city-state's history. However, there are some problems with Singapore's immigration policy that could be holding back its growth. Fortunately, these problems can be fixed without overhauling the entire immigration system but instead by injecting more possibilities for upward migrant mobility, regulatory flexibility, and portability. Regardless, these problems are minor compared to immigration systems in other countries. Singapore's modern temporary migrant worker selection system is more market friendly than any other country in the world simply because it restricts immigration with dependence ceilings and prices rather than hard numerical caps and allows large numbers of skilled immigrants to settle permanently.

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