

Singapore's Productivity Challenge: Part I

“There have been no studies, to my knowledge, of the relative dependence of these countries [Hong Kong, Taiwan, South Korea, and Singapore] on foreign investment as an instrument of economic growth. My own subjective impression is that this dependence is strongest in Singapore and that the participation of national entrepreneurs in promoting industrial development is smaller than in the other countries. Certainly the inducements offered to foreign investments are stronger and more varied in Singapore... [Singapore's] position is probably unique in that she is now dependent on a continuing supply of foreign workers to sustain growth...”

– Dr Goh Keng Swee, former Deputy Prime Minister of Singapore, 1972 speech at University of Singapore.¹

“Prior to the start of the economic restructuring policy, our economy was in a low-wage, low-productivity mode, with growth generated largely through labour force increases, mainly foreign workers.”

– An Interim Report of the Deliberations of the Economic Committee, July 1985.²

“We've grown in the last five years by just importing labour. Now, the people feel uncomfortable, there are too many foreigners.”

– Mr Lee Kuan Yew, then-Minister Mentor and founding Prime Minister, 2011 speech at HDB's 50th Anniversary.³

“Our companies must remain nimble and adaptable, and restructure to rely less on low-skilled labour, and create more higher value-added jobs.”

– Population White Paper, January 2013.⁴

¹ Goh Keng Swee, *The Practice of Economic Growth* (Marshall Cavendish Academic, 1997), pp25-33.

² Ministry of Trade and Industry, *Report of the Economic Committee - The Singapore Economy: New Directions* (Singapore National Printers, 1986), p219.

³ “Fewer foreign workers in five years, says MM”, *The Straits Times*, January 28, 2010.

⁴ National Population and Talent Division, *A Sustainable Population for a Dynamic Singapore: Population White Paper* (Oxford Graphics Printers, 2013), p34

This case was written by Hawyee Auyong under the guidance of Donald Low, Lee Kuan Yew School of Public Policy (LKY School), National University of Singapore and has been funded by the LKY School. The case does not reflect the views of the sponsoring organization nor is it intended to suggest correct or incorrect handling of the situation depicted. The case is not intended to serve as a primary source of data and is meant solely for class discussion.

This case examines how Singapore's policy decisions for economic development in the past, while appropriate in their particular historical context, produced unintended consequences and knock-on effects that now limit the country's ongoing efforts to increase labour productivity in Singapore.

This case is divided into three parts. Each part is bookended by an economic crisis that Singapore faced or by the government committees convened to review economic policies in response to these crises.

- **Part 1:** From the 1961 Winsemius report to the 1985 recession.
- **Part 2:** From the 1986 Economic Committee report to the 1997 Asian Financial Crisis.
- **Part 3:** From the 1997 Asian Financial Crisis to current efforts to raise labour productivity.
- **Part 4:** The challenges facing policymakers in light of slowing global demand and future technological disruptions to jobs and employment.

Introduction

In 1961, Singapore's GDP was USD 704 million⁵ with an unemployment rate close to 10%.⁶ By 2013, Singapore's GDP had increased by more than 400 times in nominal terms to USD 295 billion,⁷ and its citizen unemployment rate was 2.9%⁸—an extraordinarily low level compared to those seen in most advanced economies. Against this stark historical backdrop, it would appear that Singapore's economic policy challenges today bear little resemblance to the pressing, existential challenges the country faced in 1961. In the 1960s, the economic priority was clearly job creation. Then, the country was faced with both a high unemployment rate and a rapidly increasing population (estimated at 4% per year⁹).

The biggest challenge for Singapore *today* is to support economic growth through increases in productivity. In his 2014 budget statement, Deputy Prime Minister Tharman said that “raising productivity is at the centre of our economic agenda,” and that it would be a “major, multi-year undertaking”. “Productivity” was mentioned no fewer than 25 times in his speech. The government's anxiety over labour productivity was understandable. It had committed, since 2010, to a reduction in the rate of growth of the foreign workforce in Singapore.¹⁰ The rapid and large increases in Singapore's foreign workforce had been a major contributory factor to Singapore's economic growth in the last decade. But Singapore's high dependence on less-skilled and lower wage foreign labour was seen by many analysts as a major obstacle to

⁵ Singapore Department of Statistics, “Gross Domestic Product at Current Market Prices”, data.gov.sg (April 21, 2014); Even in real terms, the Singapore economy is now more than 54 times as big as it was in 1961. See **Appendix 1**, Figure 1 for a chart on GDP and annual growth rate at 2005 market prices.

⁶ United Nations, *A Proposed Industrialization Programme for the State of Singapore*, June 13, 1961, p(ii).

⁷ Singapore Department of Statistics. “GDP”.

⁸ Parliament of Singapore, “Annual Budget Statement”, February 21, 2014.

⁹ United Nations, p(i).

¹⁰ Parliament of Singapore.

productivity improvements;¹¹ it was also, potentially, a cause of low wage stagnation for Singaporeans at the lower ends of the income distribution.¹² In recent years, there have been more expressions of increasing citizen unhappiness over the congestion and competition for jobs and public goods created by Singapore's large migrant workforce.¹³

However, despite what seems to be stark differences in the operating contexts, a careful and more nuanced understanding of Singapore's economic history—its past challenges and the government's responses to them—suggests that today's challenges in raising labour productivity are, to a large extent, the product of economic policy decisions made in the past. They are largely the consequence of earlier decisions on Singapore's *economic growth model*, and in particular the decisions to rely heavily on multinational corporations (MNCs) as the main engine of investment and job creation, and to meet the economy's seemingly insatiable need for (cheap) labour by importing large numbers of foreign workers. Equally important is the fact that the Singapore economy has been grappling with a high and increasing dependence on foreign labour and relatively lower productivity growth (compared to other successful East Asian economies) almost since independence for at least four decades.¹⁴

An overview of Singapore's economic development

In 2013, Singapore became the richest country in the world by IMF estimates, with a per capita GDP of USD 61,567. The country is one of the most competitive and business-friendly in the world. Its economic success, especially in light of the uncertainties during the early years of independence, has been described by some as no less than being a "miracle".¹⁵ The country now has the World's 11th largest foreign reserves and the most technologically advanced military in the Southeast Asia.¹⁶

However, the country's economic success was not so certain in its early days. Singapore attained internal self-government from Britain in 1959. Although outwardly a vibrant and prosperous city, it was also plagued by deep structural inequality, endemic poverty among some segments of its population¹⁷, high unemployment and underemployment,¹⁸ and a population increase which was then the highest in the world.¹⁹

¹¹ E.g.: Linda Lim, "How Land and People Fit Together in Singapore's Economy", *Hard Choices* (NUS Press, 2014), p32; Megawati Wijaya, "In Singapore, productivity at all costs", *Asia Times Online*, March 23, 2010.

¹² "The Wage Revolution, Interrupted", *The Straits Times*, January 27, 2012.

¹³ Michael D. Barr, "Development Model Is the Root of Singapore's Immigration Problem", *Jakarta Globe*, April 3, 2014.

¹⁴ E.g.: Paul Krugman, "The Myth of Asia's Miracle", *Foreign Affairs*, Nov/Dec 1994; A. Young, "A Tale of Two Cities: Factor Accumulation and Technical Change in Hong Kong and Singapore," NBER Macroeconomics Annual 1992 (MIT Press, 1992).

¹⁵ E.g.: World Bank, *The East Asian Miracle: Economic Growth and Public Policy* (Oxford University Press, 1993).

¹⁶ Tim Huxley, *Defending the Lion City: The Armed Forces of Singapore* (Allen & Unwin, 2000).

¹⁷ Thum Ping Tjin, "The Old Normal is the New Normal", *Hard Choices* (NUS Press, 2014), p142

¹⁸ United Nations, p(ii).

¹⁹ United Nations, p1.

Singapore's first industrialization drive

In 1960, to help the country develop an industrialisation programme, the Singapore government invited the United Nations to send a survey team to the country. The report, “A Proposed Industrialisation Programme for the State of Singapore” (also called the “Winsemius Report” after team leader and Dutch economist Dr Albert Winsemius), helped to shape Singapore's economic development for the subsequent decades.

The report described the economic situation in Singapore then as “dire”. Though small, the population was increasing rapidly, both from a high birth rate and rapid immigration from the Malayan Peninsula. The country also suffered from high unemployment and underemployment. The UN team estimated that more than 200,000 jobs would need to be created in the coming decade,²⁰ and recommended both an immediate ‘crash’ programme and a longer 10-year programme to create the urgently needed jobs. Although the report emphasised how daunting this task would be, it was also cautiously optimistic that the country had great potential for economic growth and to industrialise. In particular, the report pointed out the high quality of labour in Singapore and the good potential for it to be deployed in manufacturing industries.²¹ Additionally, the report highlighted that *many domestic industries lacked only capital injections, in order to compete in world markets.*²²

Many recommendations in that report eventually found their way into Singapore's economic development policies, including the two most important aspects: a very high level of openness to foreign investments and relatively liberal immigration policies. The Winsemius report included a recommendation for the Singapore government to set up an entity to attract foreign investments into Singapore—what soon became the Economic Development Board (EDB).

Submitted in 1961, the report projected that a crash industrialisation programme would solve the unemployment problem by 1965. However, Singapore's bid to join the Federation of Malaya (now ‘Malaysia’) would interrupt these industrialisation plans. The political uncertainties during that period added to investors' reluctance to start operations in Singapore, although Singapore did continue to industrialise and develop economically in those years.²³ Between 1963 and 1965, Singapore would first join (the economic rationale for the merger was that it would a “Common Market” for Singapore-produced goods and service) then leave the Federation (due to political differences). Dr Winsemius would later call these years the “lost years” of Singapore, and said that by being forced to leave the Federation Singapore “at last got its hands free”.²⁴ Once Singapore no longer had to deal with the political problems that the Federation created and got down to addressing the challenge of job creation through industrialisation, it quickly solved its unemployment problem. There was no shortage of companies willing to set up operations in

²⁰ Ibid.

²¹ Ibid, p(xv).

²² Ibid, p(xvi).

²³ Parliament of Singapore, “Annual Budget Statement”, December 13, 1965.

²⁴ Albert Winsemius, speech transcript: *The Dynamics of a Developing Nation—Singapore* (Singapore National Library, June 19, 1984), p11.

Singapore. During the two years in Malaysia, the federal government had refused to issue any “Pioneer Certificates” (certificates giving corporate income tax exemption for a limited period to companies that were engaged in new, ‘pioneering’ activities; the incentive still exists today). One year from independence, the Singapore government had already issued 58 such certificates and had given in-principle approval for 25 more.²⁵

By 1970, just five years after independence, Singapore had achieved full employment.²⁶ This was achieved in spite of an increase in the number of unemployed persons from the years when Singapore was part of Malaysia.²⁷

The start of Singapore's dependence on foreign labour

Singapore was by the 1970s attracting investments that created jobs at a rate far higher than the indigenous increase in the working age population. To meet this growing demand for labour, Singapore had to resort to importing large numbers of immigrant workers. By 1971, Singapore was importing more than 40,000 workers per year from Malaysia alone²⁸ (See **Appendix 2** on how foreign labour can be useful to a developing economy). Singapore even had to reverse its bans on workers from non-traditional source (NTS) countries such as Sri-Lanka, Bangladesh, and Thailand when Malaysia could not supply enough workers.²⁹

Given the choice between slower growth and (arguably) more sustainable levels of immigration and faster economic growth, it seemed the government chose the latter. Considering that Singapore had originally embarked on industrialisation with the primary aim of providing employment for its domestic population, some began to question if the policy of importing large numbers of immigrant workers in pursuit of rapid economic growth should be reconsidered at some point in the future.

In 1972, Dr Goh Keng Swee, by then Minister of Defence, but who was Singapore's economic architect and the Minister of Finance when many of the early policies to attract foreign investments were introduced, observed in a speech at the University of Singapore, albeit with a disclaimer that his views lacked “official sanction”:

*“The question we must answer sooner or later is this: “When do we stop growing?” Or to be more precise, at what point do we stop importing foreign workers and cease to encourage foreign entrepreneurs and capital in Singapore? Because of our limited land area, industrial expansion together with the concomitant population expansion will produce overcrowding to increasingly uncomfortable limits.”*³⁰

²⁵ Parliament of Singapore, “Annual Budget Statement”, December 5, 1966.

²⁶ A. Winsemius, *Dynamics*, p12.

²⁷ Parliament of Singapore, “Annual Budget Statement”, December 13, 1965.

²⁸ K. S. Goh, *Economic Growth*, p26.

²⁹ A. Winsemius, *Dynamics*, p18.

³⁰ K. S. Goh, *Economic Growth*, p26.

Dr Goh also emphasised the need to develop domestic sources of capital and capabilities, and warned against an over-reliance on foreign investments (even while acknowledging the critical role of these investments when Singapore was in a “desperate” position):

“If we have [selected the right industries to develop in Singapore], our dependence on multinational companies will be lessened and we will be able by our efforts to develop export markets for such products as we have the capacity to specialize in. The scope for improvements in wage level will be all the larger and will depend on the resourcefulness of our salesmen, the ingenuity of our scientists and engineers, the efficiency of our management and the skill and industry of our workers...”

“[I]f our dependence on the multinational companies is complete a difficult situation may emerge with a growing gap between our GNP and our GDP.³¹ It will be accompanied by increasing, not diminishing, inequalities in the distribution of income. This is not a prospect that we can contemplate with equanimity.”³²

Indeed, even before the start of Singapore's foreign investment-driven industrialisation drive, the Winsemius Report had noted that there already existed a gap between foreign- and local-run firms as early as 1961:

“Singapore's manufacturing industry can be divided into two groups. On the one side, there are a limited number of usually well managed factories, for the greater part subsidiaries of foreign firms. On the other side, there exist many small establishments characterised by low productivity.”³³

Clearly, Dr Goh was warning against the risk of entrenching the local-foreign productivity divide that in all likelihood had been worsened by the pursuit of foreign investments and industrial know-how to solve the pressing unemployment problem.

A nascent emphasis on productivity

Notwithstanding Dr Goh's disclaimer of the lack of ‘official sanction’ for his views, others within the government began to take the issue of labour productivity (and overdependence on foreign labour) seriously.

Singapore's early industrialisation efforts had been premised on the country being a dependable and value-for-money base of production for the early offshoring efforts of multinational

³¹ Gross Domestic Product (GDP) is the total value of goods and services produced within the boundary of a country's territory. Gross National Product (GNP) is the total value of goods and services produced by all the nationals of a country (persons or corporations) whether inside or outside a country's territorial boundary. Here, Dr Goh was concerned that an overdependence on foreign companies and foreign capital would mean that much of the value generated by the economy would be due to foreigners.

³² Ibid., p33.

³³ United Nations, p52.

corporations (MNCs).³⁴ Because these companies had a choice between competing locations, it was necessary to ensure that Singapore's workers compared well against those in other "competitor" countries within the region. Productivity would be a key measure of how well Singapore's workforce stood in comparison.

In 1972, the government passed the National Productivity Board Bill to promote the National Productivity Centre under EDB to a full statutory board, the National Productivity Board (NPB).³⁵ In collaboration with the National Trades Union Congress (NTUC), the Singapore Employers' Federation [SEF, now SN(ational)EF], and the Singapore Manufacturers' Association (SMA); NPB would adopt a "total productivity approach" to promote productivity consciousness among employers and workers as well as provide managerial and technical training to companies in Singapore. The government stressed the importance of productivity, insisting that wage increases without accompanying productivity increases would upset the "economic apple-cart" and risked "imped[ing] economic growth". Singapore's dependence on foreign investments was an important motivation behind the need to improve productivity vis-à-vis other 'competitor' countries.

Box article: What is productivity and why is it important in Singapore?

"Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker."

- Paul Krugman, *The Age of Diminished Expectations*.³⁶

Simply put, productivity is the efficiency with which resources (or 'input factors'), such as labour and capital, are converted into outputs such as goods and services. Productivity measures are expressed as a ratio of output to input factors. Outputs can be expressed in many different measures (such as number of widgets produced), but are commonly measured by market value (i.e. in money value terms) to enable international or inter-industry comparisons. Depending on the purpose of productivity measurement, output can be expressed as a ratio of the input factor that is of interest, such as per unit of labour, capital, or even land in order to judge how efficiently these factors are used. One of the most commonly used measures of productivity at a country level is 'value-added per worker' (alternatively called 'labour productivity', in units of dollars per worker). 'Value-added' in turn represents the 'value' that is created through an

³⁴ J. F. Ermisch and W. G. Huff, "Hypergrowth in an East Asian NIC: Public Policy and Capital Accumulation in Singapore", *World Development* Vol. 27 No. 1, 1999, p21.

³⁵ Parliament of Singapore, "National Productivity Board Bill", March 23, 1972. A statutory board is formed and given certain powers under an act of parliament (a "statute") in order to achieve certain objectives as set out in the statute. Such an entity usually has more operating autonomy than a government ministry.

³⁶ Paul Krugman, *The Age of Diminished Expectations, Third Edition: U.S. Economic Policy in the 1990s* (The MIT Press August 8, 1997).

organisation's production process, and is equal to the difference between sales and the cost of generating those sales.³⁷

In Singapore's context, 'value-added per worker' is what government officials usually refer to when they talk about 'labour productivity' statistics. Labour productivity is important to measure because it is closely related to individual incomes and, therefore, living standards. However, different government agencies might be concerned about different productivity measures. For example, the land authorities may measure how efficiently land is used by computing 'value-added per hectare'.

Although 'value-added per worker' is commonly used in Singapore to measure labour productivity, it can be argued that a more accurate measure of labour productivity is 'value-added per work hour'. However, the 'value-added per worker' measurement is more reliable in Singapore's context because work hour statistics gathered by the Ministry of Manpower are based on employer surveys and might not be very reliable.³⁸

Improving productivity is important for a developed country like Singapore because its input factors are close to being fully utilised. In early stages of development, countries can grow their economies by mobilising under-utilised input factors—labour in particular. As more factors are utilised, the efficiency with which these are used (i.e. productivity) then becomes *the most important factor* in growing the economy. Further injection of labour inputs alone does not increase living standards even if it increases national income since that increase in national income has to be shared by a proportionate increase in the labour force. What matters for living standards is not total income but income per capita. In the long run then, as Krugman points out, the growth in standards of living within a country depends almost entirely on its ability to sustain productivity growth.

The following is a simple illustration of breaking down GDP growth into its various parts; Seen from the perspective of the labour factor, growth in GDP can be accounted for by an increase in the labour force and by an increase in the amount of 'capital' (e.g. machines) used by labour. But after accounting for increases of all input factors, there is usually an unexplained 'residual' called Total Factor Productivity (TFP) that is attributable to better technology, innovation, or better business processes that improve the efficiency with which resources are utilised:

³⁷ In practice, value-added at a firm level is largely equal to wages plus profits plus depreciation.

³⁸ In late 2013, amendments to the Employment Act were to have included mandatory payslips (which would have properly accounted for working hours), but this amendment was delayed because of objections from businesses citing increased business costs. PAP MP Zainal Sapari said in parliament that the lack of mandatory payslips would allow irresponsible employers to cover their tracks when they underpay or flout the law ("Move for compulsory payslips deferred", *The Straits Times*, November 15, 2013). According to a survey by migrant workers' rights group Transient Workers Count Too (TWC2), as many as a quarter of a million foreign workers suffer from salary underpayment ("Issuing payslips 'will not add to employers' costs'", *Today*, November 20, 2013).



Coupled with efforts to increase labour productivity, the government changed the focus of foreign investments targeted towards more capital-intensive projects and became much more selective in granting corporate tax exemptions. The 1970 Economic Expansion Incentives (Relief from Income Tax) (Amendment) Bill raised the threshold of capital investments needed to qualify for corporate tax exemption, and reduced the number of years of tax exemption granted.³⁹ From November 1970 to March 1971, the government awarded only nine Pioneer Certificates, reflecting a greater selectivity in attracting investments⁴⁰ and a desire—just six years after the country independence—to reduce significantly the Singapore economy’s dependence on cheap (foreign) labour.

However, just as government became more selective in its choice of investments, the 1970s brought a number of global economic shocks—the 1973 oil crisis, the 1973 US stock market crash and secondary banking crisis, the 1974 recession in global trade, and general stagflation in much of the developed, Western world. At the height of the 1974 world trade recession, world trade contracted by 11% quarter-on-quarter.⁴¹ Because of the heavy external orientation of the Singapore economy, the country faced heavy job losses of up to 2% of the workforce. One of

³⁹ Parliament of Singapore, “Economic Expansion Incentives (Relief from Income Tax) (Amendment) Bill”, July 22, 1970.

⁴⁰ Parliament of Singapore, “Revision of Industrial Policy (Withdrawal of incentives to foreign investors)”, March 26, 1971.

⁴¹ OECD Quarterly real trade data.

Singapore's responses was to focus *even more strongly* on attracting investments.⁴² President of NTUC Devan Nair explained to workers in February 1976 that in order to keep unemployment down, the government needed to lower labour costs in relation to its competitors so as to attract investments in an unfavourable global environment⁴³. Although the government did not abandon the effort to attract more capital-intensive (and hence higher value-added) projects, amendments made to export incentives in 1975 removed discrimination against labour-intensive investments. This policy of holding down wages would continue until mid-1979. The priority during this difficult period was attracting investments—regardless of their productivity or wage-raising potential.⁴⁴

Because of these decisions, the Singapore economy never contracted during that troubled decade. The lowest real annual GDP growth recorded in the 1970s was 4.6% in 1975, and this had rebounded strongly to 8.7% by 1978.⁴⁵ Thus, purely from the perspective of maintaining high growth rates, it appeared that the Singapore government had made the right decision to bring in whatever investments came along, rather than be picky about the 'quality' of such investments.

But in hindsight, it was during the late 1970s that the government's decision to pursue more capital-intensive investments while holding down labour costs first gave rise to serious contradictions, with capital- and labour-intensive industries beginning to hinder each other's expansion.⁴⁶ At a macro-level, labour force expansion *increased* in its relative contribution to economic growth after 1975, in contrast to the earlier 1966-74 period.⁴⁷ In the middle of a troubled decade and faced with an uncertain global outlook for the global economy, the government had declined to slow down labour force growth because of the overriding need to sustain economic growth and to keep unemployment low by continuing to attract foreign investments.

The 'Second Industrial Revolution'

By 1978, when it had become clearer that Singapore's (and the world's) economy was on the mend, the government again warned of the dangers of depending on labour-intensive industries, and of the need to shift the economy more decisively towards capital-intensive industries. Nonetheless, the government estimated that Singapore would continue to depend on foreign investment for at least another 10 to 15 years even as it upgraded its industries and developed indigenous industrial capabilities.⁴⁸

⁴² Garry Rodan, *Singapore's 'second industrial revolution': State intervention and foreign investment*, ASEAN-Australia Economic Papers No. 18, 1985, p14.

⁴³ "Devan Nair on the Workers and the Nation", *Singapore Economic Bulletin*, March 1976, pp39-40.

⁴⁴ *Ibid*, pp14-15.

⁴⁵ Singapore Department of Statistics, "GDP".

⁴⁶ G.Rodan, *State intervention*, p16.

⁴⁷ Pang Eng Fong, "Economic Development and the Labor Market in a Newly Industrializing Country: The Experience of Singapore", *The Developing Economies* Vol. 19 Issue 1, March 1981; This analysis asserts that labour became more, not less, important to Singapore's economic growth *despite* government efforts to promote capital-intensive industries.

⁴⁸ Singapore Parliament, "Annual Budget Statement", February 27, 1978.

As the government though the EDB continued to attract foreign investment, by late 1978 the most serious constraint on economic growth was once again the shortage of labour, rather than insufficient capital or investments. Jobs were being created at an average rate of around 40,000 per year while the workforce only expanded by 30,000 to 32,000 per year.⁴⁹ Management at several electronics companies blamed labour shortages for abandoning plans for plant expansions and upgrades. The emergence of widespread job hopping (due to the tight labour market) was seen by the government as an erosion of the labour discipline that had contributed much to Singapore's attractiveness as an investment destination.⁵⁰ Malaysia had traditionally been an important source of labour because of the country's similar ethnic mix and culture, but Malaysia's own economic development efforts reduced the availability of migrant labour from that country. It was during this period that companies began to look for labour from NTS countries further afield such as India, Bangladesh, Sri Lanka, Thailand and the Philippines. Under pressure from businesses and to support economic growth, the government had to reverse its bans on migrant labour from these countries despite its concerns about potential social and political problems.⁵¹

In 1979, dissatisfied with the rate of industrial restructuring and reassured by the massive rebound in foreign investments in 1978, the government adopted more aggressive measures to force industries to restructure. Prior to 1979, the government had depended more on an incentives-based approach to encourage restructuring, such as accelerated write-downs for capital and stricter criteria for tax incentives and government grants. Now, it decided that a series of substantial wage increases was the best way to force less productive industries and companies to upgrade, close down, or relocate to countries with cheaper labour costs.⁵² These industrial restructuring efforts, driven by a clear government commitment to raise the wage of Singaporean workers, came to be known as Singapore's 'Second Industrial Revolution' in contrast with the earlier industrialisation efforts that had been focussed on solving the unemployment problem.

Addressing the opening of Japan Steel Works on June 8 1979, then Minister for Trade and Industry Mr Goh Chok Tong gave the first signal of impending wage adjustments.⁵³ Wage policy would be used to increase wages and induce "excessive" users of labour to automate, thus freeing up workers for better industries. He said that aside from the "social problems of integration and maladjustments", a high dependence on migrant workers was economically undesirable because:

"It helps to sustain low-skilled, low productivity and labour intensive industries. These industries in turn can afford to pay only low wages which in turn, cause them to depend on more imported labour to keep their wage costs down."

⁴⁹ G.Rodan, State intervention, p15.

⁵⁰ Ibid, p16.

⁵¹ Ibid.

⁵² Ibid, p17.

⁵³ "Cheap labour 'shake out'", *The Straits Times*, June 9, 1979.

This was a warning of the low-wage trap that could afflict some industries in Singapore should restructuring efforts fail to bear fruit.

Shortly after that in July 1979, the National Wages Council (NWC)⁵⁴ issued recommendations for across-the-board wage increases in absolute and percentage terms. The increases amounted to about 20% increase in wage costs for employers.⁵⁵ Although employers knew that wage increases were coming, the actual magnitude proved to be a shock for some. In particular, there were vocal complaints from domestic capital that their position was precarious owing to a relative lack of resources and funds for restructuring. At the same time, the response from some foreign investors was that the increased wage costs rendered Singapore unsuitable for labour-intensive production without necessarily making the country suitable for more sophisticated production.⁵⁶ Some employers suggested that the government could achieve the same effect of higher wages by reducing the increase in foreign workers, but the government dismissed this approach as being too gradualist. The government had no patience to wait for a lower foreign worker intake to translate into wage increases and then into increased automation and mechanisation.⁵⁷ It sought instead to force the pace of wage increase almost by government fiat.

Despite protestations from foreign and domestic businesses, the lack of retrenchments and the tight labour market conditions convinced the government that there was still leeway for further wage increases, especially since wage growth had been restrained by the NWC throughout most of the 1970s. NWC continued to recommend significant (albeit lower and more flexible, in a small concession to businesses) wage increases for both 1980 and 1981, all of which were accepted by the government. Over the three years of 1979 to 1981, the total recommended wage increases from the employer's perspective amounted to 54-58%. The increase in take-home pay for employees was smaller because 8% of that increase went towards Central Provident Fund (CPF) contributions⁵⁸ and 4% went towards the Skills Development Fund (SDF) that was set up by the government to finance skills upgrading.⁵⁹

By 1981, the NWC was convinced that the high wage policy had succeeded and that jobs were being replaced by capital investment. The proof was in the 71% increase in fixed investment per worker (excluding petroleum projects) for new investment commitments and a 28% increase in

⁵⁴ Founded in 1972, a 'tripartite' body comprising representatives from the three social partners—the employers, the trade unions, and the Government. The Council meets every year to deliberate and forge national consensus on wage and wage-related matters. It issues guidelines on these matters every year based on the tripartite consensus reached during the deliberations. Ironically, it was first formed to *hold down* wage increase expectations. See: <http://www.tripartism.sg/page/National-Wages-Council/> (May 22, 2014).

⁵⁵ G.Rodan, *State intervention*, p21.

⁵⁶ Ibid.

⁵⁷ Ibid, p19.

⁵⁸ CPF is an individualized pension fund that has restrictions to prohibit most types of withdrawals before retirement.

⁵⁹ However, even these real increases in take home pay were partially negated by the relatively high inflation in those years, where the consumer price index grew by an average of around 7% a year (Singapore Department of Statistics, "Annual consumer price index"); Also, mandating part of the wage increases through CPF was done to prevent higher wages from translating immediately into higher domestic inflation.

value-added per worker, as well as a 37% decline in the number of new jobs created in the first quarter of 1981. However, given the short time period that NWC referred to, this assertion of success could have been premature.⁶⁰

However, the high wage policy did little to stem the increase in foreign workers. The number of foreign workers in all sectors of the economy rose from 69,428 in 1980 to 90,726 in 1982 according to the Ministry of Labour. By 1982, the government considered it necessary to forcibly phase out low skilled NTS workers. From January that year, the government stopped issuing work permits for new NTS workers with the exception of those in construction, shipbuilding and repair, and domestic service industries. Even for the remaining industries, there was a deadline to phase out these NTS workers after 1992.⁶¹

In an interview with Singapore Broadcasting Corporation for the documentary “Foreign Labour—A Dilemma?”, Prof S. Jayakumar (then Minister for Labour and Second Minister for Law and Second Minister for Home Affairs) said that the reason foreign workers had to be phased out was because they harmed the “national drive for a cooperative form of industrial relations”, explaining:

*“You see, they come from countries where they are used to confrontation with employers, instigation, taking up cudgels, which is contrary to our policy of promoting harmonious labour-management relations.”*⁶²

The following year in Parliament, Prof Jayakumar remained consistent in conveying the government's intentions, emphasising that these foreign workers would not become a permanent feature of the economy:

*“What every Singaporean needs to know is that there is a large number of foreign workers, 150,000, and we have to have them **temporarily**. But in the long-term economic and social interest, they will have to be phased out. **The Government will phase them out**. But while they are here, the Government will take strong measures to ensure that they do not sink roots here...”*⁶³ [emphasis added]

Therefore, at least until as late as 1984, it appeared that the government had every intention to eventually phase out less skilled foreign labour, *including* those from Malaysia, by 1991.⁶⁴

Revolution interrupted

These plans were disrupted by the severe recession that hit Singapore in 1985. The Singapore economy shrank for the first time since independence, with the growth rate dropping

⁶⁰ G.Rodan, *State intervention*, p22.

⁶¹ Singapore Parliament, “Work Permit Division (Effects of restrictive attitude)”, October 19, 1984.

⁶² “Jayakumar tells why foreign workers must go”, *The Straits Times*, November 7, 1983.

⁶³ Singapore Parliament, “Foreign Workers (Particulars)”, March 14, 1984.

⁶⁴ “Singapore Removes Curbs on the Hiring Of Foreign Workers”, *The Wall Street Journal*, January 16, 1984.

precipitously from 8.8% in 1984 to -0.6% in 1985.⁶⁵ The lingering effects of the global economic shocks of the past decade, coupled with a sharply contractionary monetary policy by the US Federal Reserve, caused a deep recession in the US that eventually spread to other developed and developing countries. Singapore, being a major trading partner of the US as well as many of the subsequently affected countries, eventually entered into a recession in 1985.

Part 2 of this case will examine how the 1985 recession affected Singapore, the country's policy responses, and the lasting effects the 1985 recession had on the country's efforts to raise productivity and wages and reduce its reliance on foreign workers.

⁶⁵ Singapore Department of Statistics, "GDP".

Appendix 1

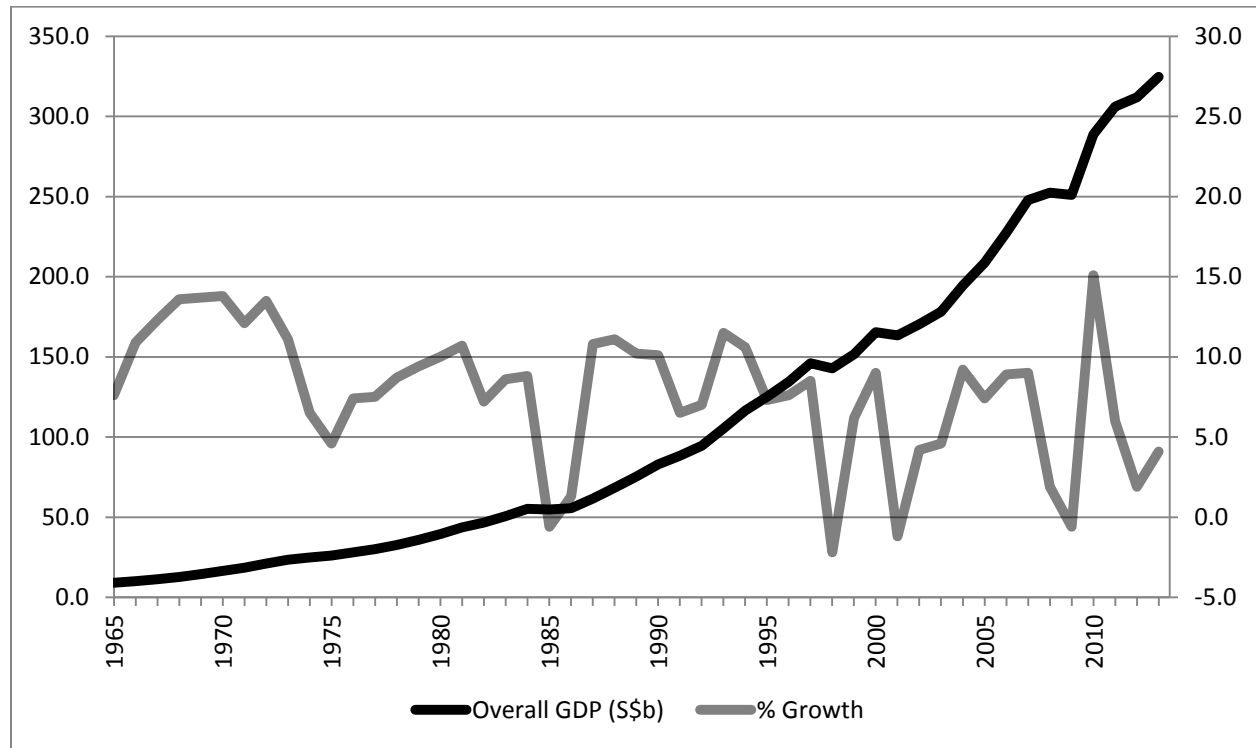


Figure 1 – Overall GDP at 2005 market prices and annual growth rates.⁶⁶

⁶⁶ Singapore Department of Statistics, “GDP”.

Appendix 2

How foreign labour can be useful to a developing economy

In a developing economy faced with a tight labour market, importing labour can give a quick boost to economic growth. Importing labour can also be useful where the indigenous labour force lacks certain skills needed for new industries and where it would take too long to develop these skills. After these new industries are established, the workforce can be localized through restrictions on importing more labour or through the transfer of skills and knowledge to locals. Having a pool of foreign labour can also be useful in times of economic crises when, theoretically at least, retrenchments can affect the foreign labour force first before impacting local employment.

The Singapore government also views foreign labour as a critical complement to the local workforce. The Ministry of Trade and Industry's (MTI) 2012 Occasional Paper on Population and Economy (September 25, 2012)⁶⁷ states:

“Given the improving educational profile and rising aspirations of Singaporeans, the number of Singaporeans willing to take up such less-skilled jobs will continue to shrink. By helping to fill these jobs, foreign workers thus play a complementary role to Singaporean workers. The complementary roles of local and foreign manpower facilitate the development of a healthy ecosystem of diverse industries, which lends resilience to our economy.”

At the higher skilled end of the workforce, businesses could benefit from the diversity that comes with employing foreigners:

“As cities race towards the next phase of innovation, a diversity of talent helps companies to compete for business on a global platform and understand the needs of global clients. Global teams with a diverse set of experiences, perspectives and backgrounds are key drivers of innovation and new ideas. Some sectors that could benefit from having a diverse workforce include higher value-added sectors like finance and business services and research and development. It may be desirable for these sectors to have access to some foreign manpower, even as we develop capabilities among Singaporeans to take on good jobs in these sectors.”

⁶⁷ <http://www.mti.gov.sg/MTIInsights/Pages/MTI-Occasional-Paper-on-Population-and-Economy.aspx> (May 20, 2014)