Singapore’s Untapped Hinterlands: Opportunities and Obstacles?

Chiu Chai Hao

Kenny Ng Jia Wei
Executive Summary

In reference to shifting paradigms and re-visiting past policies, Prime Minister Lee once remarked, “We leave no stones unturned. But some stones, after we look at them, the original place was quite nice, and we put them back.” Singapore’s successes in economic management is built upon her efficiency and malleability in adapting policies catered to the nascent phases of the surrounding region’s, if not the world’s, economy.

It is imperative that we become the gateway into an accelerating Asia. Under an overarching theme of obstacles and opportunities, this essay explores the key principles behind our interactions with the new, untapped hinterland: how we can foster better links with our neighbours, the types of impediments that may arise and how our policies can be further polished to tackle the impediments faced.

First, we contend that Singapore will increasingly rely on Asia as an export market and the relationship will only deepen in the long run. This symbiosis can be extended to developing countries outside of the continent in the future to bring mutual economic benefits to all parties.

Next, we recognise that Singapore’s regional economic objectives can be encumbered by the region’s diverse ideologies, social structures and political interests. The complications of inept macroeconomic planning will inhibit economic cooperation, whilst internal divisiveness will threaten Singapore’s prized socio-political cohesiveness.

We put forward our nation needs to build more solid partnerships between the people, private and public sectors. Acting as a catalytic cornerstone, these partnerships can ease political, infrastructural and economic constraints, simultaneously bolstering our presence in Asia’s entrepreneurship through SMEs.

Singapore is in a part of the world that vaunts the most promise for growth. Now is an important time for Singapore to utilise its existing competitiveness to harness opportunities.

A rolling stone gathers no moss. Neither shall our economy.

(298 words)
1 Refining the Singapore Story under Changing Circumstances

“Once you see Singapore as a global city, the problem of hinterland becomes unimportant. For a global city, the world is its hinterland.”

– S. Rajaratnam, Address to the Singapore Press Club, 1972

The essence of Singapore’s economic miracle is her transformation from a regional backwater to a first world economy without any natural endowments or hinterland\(^1\). As Rajaratnam alluded to in his speech, Singapore has defied the unfavourable economic predicaments since independence\(^2\), plugged herself into the global economy and developed into a bustling hub for maritime, aviation and financial activities.\(^3\) Merchandise trade was 313.4 % of Singapore’s Gross Domestic Product in 2011, epitomising the open nature of the Republic's economy\(^4\).

Besides enjoying a favourable geographical location, Singapore’s international competitiveness stems from her farsighted policies that have created an economy with an educated labour force, price stability, world class infrastructure and a corruption-free, pro-business environment – collective, painstaking efforts of Singaporeans.

\(^1\) In this essay, a hinterland refers to the region or area which the economy of Singapore relies on for growth, for imports of raw materials and more importantly, export markets for goods.

\(^2\) In 1965, the newly-independent country was facing the loss of the Malaysian hinterland, stymied trade with China due to the Chinese political challenges and British military withdrawal.

\(^3\) Singapore is currently the world’s second busiest port in terms of total shipping tonnage. Changi Airport has become an aviation hub with 6,100 weekly flights connecting to over 220 cities in about 60 countries and territories worldwide, recording a 10% increase in total passenger traffic to 51.2 million in 2012 over 2011. Singapore has also become a major node in the international financial network, being the fourth largest foreign exchange market in the world after London, New York and Tokyo.

“After this crisis, the world is not going to be the same again. This is not just another cyclical downturn and recovery. The world's economy is undergoing a structural shift.”
– Prime Minister Lee Hsien Loong, Parliamentary Speech, 27 May 2009

Yet the recent Global Financial Crisis (GFC) is a painful reminder of the drawbacks of being an open city-state economy. Besides underlining our high dependence on the global economy and our vulnerability to external shocks, the GFC has also reshaped the changing order of the global economic landscape. Advanced economies which have traditionally been the economy’s hinterland are predicted to experience weak growth as they undergo fiscal consolidation, austerity cuts and financial deleveraging. Meanwhile, emerging economies are slated for strong economic growth and will take up an increasing share of global demand.

While there are numerous emerging economies globally, this essay will focus on emerging Asia as Singapore’s main hinterland in the intermediate term for several reasons. ASEAN, together with China and India, makes up the world’s largest emerging regional market and is our largest trade bloc. (See Appendix 1) While Singapore’s most immediate economies form the main focus, this essay also recognises the rise of smaller non-Asian markets in Africa, Central and South America as well as Eastern Europe, especially with technology reducing transport and communications costs.

---

5 As an export-led economy with small domestic market, Singapore was the first Asian country to slip into recession in the 2008 GFC due to a slowdown in international and regional trade.
6 See Appendix 1 for evidence on a rebalancing global economic order.
7 It is estimated that by 2030, Asia’s economy will be larger than that of the United States and European Union combined, with Asia’s share of world GDP swelling from under 30% to more than 40%. It has potential to grow even further – housing more than half of the world’s population in 2012.
As Singapore seeks to adapt and thrive in the new economic landscape, this essay will examine the opportunities and challenges from closer economic links with emerging Asia, scrutinise our current economic circumstances and advocate policies that will enable Singapore to ride on the new wave of growth with minimised risks and increased resilience.

In this essay, emerging Asia refer to the economies of China, India and ASEAN.
2 Opportunities from Emerging Asia

*The Association of South-east Asian Nations (ASEAN) is enjoying a golden period, with high-growth and resilient economies.*

– The Economist, 2013

While the essay title might suggest that these hinterlands are uncharted, there is hardly any emerging economy that is *untapped*. Instead, we view emerging Asia as a hinterland with greater economic benefits to be reaped in the future.

**Huge, Rising Export Markets**

*The Asian Consumer Story*

ASEAN, China and India together present impressive rates of economic growth that are predicted to last\(^9\). The rising middle class emerging from growing incomes herald higher discretionary spending and demand for discretionary goods. Together, emerging Asia is home to 54% of the world’s population and is expected to account for 40% of global middle-class consumption by 2030\(^{10}\) (See Figure 1). Firms and investors, especially local SMEs, can thus capitalise on the growing export market, expand beyond the domestic economy, reap further economies of scale and become more competitive.

\(^9\) While there are multiple definitions and considerations of the ‘middle-class’, this essay considers the middle-class as families of income US$ 3,650 to US$ 36,500 a year.

\(^{10}\) Brookings Institution scholar Homi Kharas estimates that the European and American middle classes will shrink from 50% of the total to just 22%. Rapid growth in China, India, Indonesia, Vietnam, Thailand, and Malaysia will cause Asia’s share of the new global middle-class to more than double from its current 30% to 64% in 2030.
Figure 1: Rising Share of the Global Middle Class Consumption, 2000 – 2050.  
*Source:* Homi Kharas (2010). “The Emerging Middle Class in Developing Countries”,  

**Investment Adrenaline**  
*Accelerating Investment Inflows in the Region*

Many ASEAN nations have significantly under-invested in infrastructure and other fixed assets in recent years due to the 1997 Asian Financial Crisis (AFC)\(^\text{11}\). China and to a greater extent, India, are facing infrastructural deficits as well. Infrastructural development that lags behind economic expansion results in costly businesses disruptions such as power outages and dents investor confidence. The resulting investment deficit has thus created huge pent-up demand for infrastructure ranging from houses to factories. As the economies become more permeable to private investment in

\(^{11}\) During the years after the crisis, many of the region’s companies and governments began to concentrate more on paying off debts and repairing balance sheets rather than investing in new projects.
infrastructure\textsuperscript{12}, investment activity has surged and is expected to remain high, fuelling real economic growth in the short-term and raising the region’s productive capacity to pave way for sustained, non-inflationary growth (See Figure 2). This could also defuse the imminent ‘middle-income trap’, which the IMF warns would occur to economies with sub-par overhead capital\textsuperscript{13}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2}
\caption{Foreign Direct Investment (FDI) per capita, 2000 – 2013.}
\label{fig:fdi_per_capita}
\end{figure}

\textbf{On a per capita basis, ASEAN is pulling in seven times more FDI than India, and almost the same amount as China. As the top FDI destination, China alone accounts for 18\% of the world’s FDI, with ASEAN and India at 7\% and 2\% respectively. (OECD, 2013)}

\textbf{Figure 2: Foreign Direct Investment (FDI) per capita, 2000 – 2013.}
\textbf{Source: Economist Intelligence Unit}

\textbf{Rising Labour Capabilities}

\textit{Emerging Asia as the World’s Factory}

On the supply side, emerging Asia also offers a promising labour class on various skill-levels. While China responds to the growing pressure to rise up the value chain in

\textsuperscript{12} Indonesia, for example, has opened up increased infrastructural investments to private investors, making huge strides in easing her capacity bottlenecks. Source: International Finance Corporation, World Bank Group, 2013.

\textsuperscript{13} The IMF warns that India, the Philippines and Thailand are exposed to a larger risk of growth slowdown stemming from sub-par infrastructure.
manufacturing services, manufacturers are relocating to ASEAN countries with pools of cheap, unskilled labour available at lower prices. In countries like Vietnam, Thailand and Indonesia, unit labour costs are merely a fraction of China’s (See Figure 3). Both changes present opportunities for investments to pursue greater cost savings in different stages and types of production, positioning themselves closer to the growing markets.

![Unit labour costs](chart)

*Source: Economist Intelligence Unit*

**Figure 3: Unit Labour Costs of Selected Countries.**

**Source:** Economist Intelligence Unit

**The Flat World and Complementary Economies**

*Finding the fit for Singapore*

As globalisation allow for certain processes to converge on strategic sites\(^\text{14}\), Singapore can position herself as a key node in the regional network and develop complementary business areas. With the region’s abundance of land, labour and resources and rising middle class, Singapore can offer managerial talent and capital in return. This will also involve greater commitment to develop and brand Singapore as a hub for business, R&D and financial services – employing her competitive advantages to overcome the inherent

\(^\text{14}\) Saskia Sassen, “The Global City”. (Princeton University Press, 1992) * China’s rising labour costs together with her gradually appreciating currency has made it more lucrative for lower-end manufacturing services to be outsourced to countries such as Vietnam and Cambodia where there is a huge pool to be tapped and an increasingly stable political scene.
disadvantages of a small domestic market and benefit the most from the regional economies\(^\text{15}\).

Identifying and developing appropriate markets of growing importance allows Singapore to remain economically competitive and relevant. This essay distinguishes sustainable urban solutions, infrastructural expertise and consultation services as the export industries with the greatest potential, in view of the growth trajectory and demands of the region (See Appendix 2). As emerging Asia moves towards greater economic development and urbanisation, demand for sustainable solutions and expertise are indeed immense. Leveraging on Singapore's business-friendly environment, strong R&D infrastructure, socio-political stability and sound intellectual property framework that neighbouring cities have yet to rival will allow Singapore to develop her aforementioned niche areas to meet the burgeoning demand.

Having established Singapore's high level of economic development and niche in consultation services, she could spearhead the bloc's endeavour into less-ventured economies within and beyond the region. This could include Myanmar's newly-liberalised economy in the near term and developing economies in Central Asia and South America in the long term. This empowers the domestic economy to tap into rich natural resources, expand its markets and diversify risk as part of our city-state's broad-based growth strategy\(^1\).

\(^{15}\) Singapore's geographical centrality at the crossroads of the East and West as well as the high connectivity of our air and sea facilities also allow us to function as a regional business centre for foreign corporations operating in Southeast Asia.
3 Obstacles in Exploring the new Hinterland

Not all is rosy in Asia’s emerging markets. While there may be swathes of opportunities available, certain obstacles could surface preventing Singapore from realising the promised benefits of diversifying into emerging Asia.

Diversity In ASEAN
Asset or Liability?

Diversity becomes a challenge in integrating and working with the emerging Asian economies. Unlike the European Union, whose member countries are largely homogeneous in their political and economic systems, emerging Asia is arguably the most diverse regional grouping in the world – in economic development, political systems and language.\textsuperscript{16} Huge intra-region variation in socio-economic environments could impede the investments and business ventures into the region, as firms and investors without sufficient familiarity to the country in question would encounter difficulties and confidence issues.

Yet diversity is a double-edged sword. With booming confidence and interest in the region, the optimism could outweigh the potential obstacles. Ultimately, the economies of the region are market-oriented. Diversity provides an opportunity for governments and the private sector to offer \textit{tailored} advice on countries (which will be covered in detail later). Diversity is also seen as an advantage by investors that recognise the opportunities for complementarity in the region. With wages and skills varying across

\textsuperscript{16} See Appendix 3 for an illustration of the region's diversity.
states, companies can locate different stages of their operations in countries that possess the greatest comparative advantage.  

**Macroeconomic (mis)Management**

*When governments falter, nationalism and protectionism run high*

“It is understandable that in times of a severe downturn protectionist pressures mount but the lessons of history are clear. If we give in to protectionist pressures, we will only send the world into a downward spiral.”

– Indian Prime Minister Manmohan Singh, 2009.

Meanwhile, varying styles of macroeconomic management and unfamiliarity hinders the venture of local firms into the economies. In extreme cases, macroeconomic mismanagement could cause growth slowdown or cause the emerging economies to overheat and sway the volatile confidence of investors. Yet as our regional economies in the recent years have proved, macroeconomic management has been more prudent and economic fundamentals stronger since the Asian Financial Crisis (AFC).

---

17 In fact, such a change is already underway. Iskandar Development Region (IDR) in Malaysia has attracted huge interest among investors. Local firms and MNCs have also recognised the advantages of shifting low-cost production operations to IDR, which include the availability of land, cheaper factor cost and importantly, proximity to export markets in Asia and their regional headquarters in the more developed Singapore allow them to enjoy ‘the best of both worlds’.

18 Of particular concern is Vietnam India, the Philippines, China and Indonesia – countries that have to reinforce their economic institutions to prevent a deceleration in growth. (Source: IMF, 2013) The Vietnam economy stalled in 2012, beset by inflationary bubbles, large outflows of capital, the collapse of two major state-owned companies, and a crippling build-up of bad debt in the banking sector which the foreign investors have failed to identify in their rush to invest in Vietnam. (Source: Foreign Affairs, 2012)

19 Signs of an overheating economy include tight labour markets, low spare capacity and negative-value interest rates which fuels excessive credit expansion and high inflation.
This directs our focus to the more pertinent aspect of *dirigisme*\(^{20}\). In emerging Asia, we have observed reactionary waves of nationalism and protectionism under the era’s zeitgeist of regionalisation. Dirigisme heightens the unwillingness to sacrifice sovereignty for integration, an issue aptly exemplified by Indonesia’s recent policies\(^{21}\) and exacerbated by the GFC amidst fears from xenophobia, foreign capital, rivalry and growing distrust pertaining to territorial dispute\(^ {22}\). Such anti-foreign sentiments, especially when political claims over disputed territories come into foray, do not bode well for greater economic cooperation. Therefore, it is imperative for Singapore to emphasise the need for more prudent macroeconomic management whilst promoting greater cooperation within the region through deeper engagement as we can only benefit from the continued stability\(^ {23}\).

---

\(^{20}\) Dirigisme is an economy in which the government exerts strong directive influence. It designates a mainly capitalist economy with strong directive, as opposed to merely regulatory, economic participation by the state.

\(^{21}\) In the past year, policies have been proposed to lower foreign ownership limits in banks and mining companies, and to put controls in place on certain types of imports like Australian pork and exports such as rattan. For example, Indonesia remains espoused to protectionism, where citizens are encouraged to “buy local” products, mirrored by depressed foreign ownership limits in specific, strategic industries of banking and mining.

\(^{22}\) This refers to border disputes over the Spratly islands in the northern and southern reaches of the South China Sea and territory between Cambodia and Thailand, Brunei, China (People's Republic of China), Malaysia, the Philippines, Taiwan (Republic of China), and Vietnam all lay claims over the islands for ownership of its oil and gas deposits as well as commercial fishing and shipping zones.

\(^{23}\) The “Eyes in the Sky” initiative exemplifies economic benefits from political cooperation. The combined air patrols over the Malacca Strait by Indonesia, Malaysia and Singapore significantly reduced the incidence of piracy attacks in the Malacca Strait and saw Lloyd’s, the world’s specialist insurance market, remove the Malacca Strait from its list of war-risk zones in 2006 and downgrade the insurance premiums for shippers in the process.
An Inadequate Inherent Capacity

Dearth of the Local Entrepreneurial Talent

While opportunities in the vicinity are plentiful, the fundamental question to ask is: “How much can Singaporean firms benefit from emerging Asia?” Without globally competitive Singaporean firms, our economic upside potential will be capped. This is because MNCs tend to locate value-added R&D activities close to where there is an appropriate market size and demand conditions, which are *sine qua nons* for innovation. This, together with our low levels of domestic consumption, makes the Singapore economy especially vulnerable to external changes\(^\text{24}\).

Undeniably, despite recognising the importance of ‘inherent capacity’, Singapore’s SMEs and entrepreneurial culture has remained weak and this could restrict the potential of tapping into emerging Asia\(^\text{25}\). Moreover, should the region continue to move up the value chain, Singapore’s geographical disadvantage of being relatively further away from the main export destinations could become increasingly acute\(^\text{26}\). This increases the need for greater differentiation into competitive, higher value-added industries before the other countries catch up.

\(^{24}\) Refer to Appendix 4 for falling Average Propensity to Consume (APC) in Singapore.

\(^{25}\) A decade ago, Minister Mentor Lee Kuan Yew admitted to ‘a dearth of entrepreneurial talent among Singapore’s four million people.’

\(^{26}\) There is a growing risk of footloose MNCs setting up their regional headquarters right where the market is. Singapore’s relative distance from the emerging China market has already been pointed out as an disadvantage in comparison to cities like Shanghai and Hong Kong (European Chamber, 2011).
Domestic Obstacles – The New Divide

The rising inequality and immigrant-influx conundrums

“...the most successful Singaporeans will continue to do very well. The average Singaporeans ... are much better off than people in most other countries. But at the lower end, incomes have risen far too slowly, especially in real terms.”

– Prime Minister Lee Hsien Loong during the 2011 Presidential Address Debate

As emerging Asia becomes Singapore’s new hinterland, the loss of certain manufacturing services to cheaper, foreign bases is inexorable given the stiffer wage competition and relocation of services. Yet this is likely to be met with huge domestic resistance, disgruntlement, and even xenophobia from the population should they not recognise the inevitable fact but rather, regard the shift as a ‘siphoning of jobs’ to the regional countries. Displaced workers in the sunset industries are structurally unemployed, and require re-training and re-equipment with the relevant skills to remain employable. Additionally, some may not acquire the skills required to fill the void in the emerging sectors. Meanwhile, immigrants may also be required to fill up the high-skilled jobs created. In a more competitive job market, xenophobic sentiments are likely to run high.

Moreover, as Singapore remains globalised and continues to reorganise her economy along the lines of innovation and opportunity, inequality is expected to rise further, as predicted by Samuelson’s Factor price equalization theory. Rising inequality is an

---

27 Factor price equalization theory by Paul A. Samuelson (1948) states that as a result of international trade, the prices of identical factors of production (wages in this context) will be equalized across countries. This thus depresses the wages of un- and low-skilled labour due to the huge supply of them in the less developed economies while increasing that of high-skilled labour which are of limited supply.
incontrovertible fact regardless of the indicator used\textsuperscript{28} (See Figures 4 and 5). Such inimical inequality and xenophobia makes it more jarring to socio-political cohesion than ever before. These could hinder domestic governance by rendering bitter-pill, coherent policies that all segments of society can rally behind much more difficult to achieve.

![Chart 1 Gini Among Resident Employed Households](image)

**Figure 4: GINI Coefficient Among Employed Households, 2002 – 2012**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio Household Income from Work Per Household Member(\ast)</td>
<td>8.82</td>
<td>8.81</td>
<td>8.87</td>
<td>9.06</td>
<td>9.23</td>
<td>9.38</td>
<td>9.64</td>
<td>9.43</td>
<td>9.35</td>
<td>9.19</td>
<td>9.14</td>
</tr>
<tr>
<td>Ratio Household Income from Work Per Household Member After Accounting for Government Transfers and Taxes(\ast)</td>
<td>7.71</td>
<td>8.28</td>
<td>8.24</td>
<td>8.30</td>
<td>8.69</td>
<td>8.68</td>
<td>7.94</td>
<td>8.00</td>
<td>8.10</td>
<td>7.54</td>
<td>7.87</td>
</tr>
</tbody>
</table>

Notes:
1. Household income from work includes employer CPF contributions.
2. Refer to glossary for the government transfers and taxes that were included in the paper. Data on income after accounting for government transfers and taxes for 2012 are preliminary.
3. Based on ranking of all resident employed households by their household income from work per household member.
4. Based on ranking of all resident employed households by their household income from work per household member after accounting for government transfers and taxes.

**Figure 5: Ratio of Household Income From Work Per Household Member at the 90\textsuperscript{th} to the 10\textsuperscript{th} Percentile**

**Source (Figures 4 & 5):** Department of Statistics Singapore, *Household Income Trends, 2012*

\textsuperscript{28} Singapore’s GINI coefficient stood at 0.478 (before Government transfers and taxes) and 0.459 (after Government transfers and taxes) in 2012.
The challenge is thus a political need to establish a new social compact and to better engage the citizens, ensuring that the economic reasons and realities are conveyed and understood through clearer communication channels.
4 Singapore: The Long Road Ahead

The road ahead is not free of challenges. Even as Singapore charts her differentiated growth path, competition is inevitable\textsuperscript{29}. While leveraging on Singapore’s favourable economic environment is important in maintaining her competitive edge\textsuperscript{30}, Singapore needs to cooperate, rather than compete, with regional economies. For increased effectiveness and reach, private-public partnership should continue to be the guiding principle of our policies.

**Identifying Sources of Growth**

*Revisiting and Turning Stones of the Economy*

To this end, Singapore can become a high-end manufacturing, services and consultation hub without having to worry about immense cost outlays and logistical hurdles in encouraging sustainable enterprise and technology. With a large established sovereign wealth fund, Singapore can focus on encouraging and supporting local firms in strategic industries that she intends to nurture.

It remains critical for Singapore to continue to pursue her export-oriented growth strategy, negotiate bilateral, multilateral agreements and push for the realisation of the ASEAN Economic Community to further enjoy the benefits of reduced trade barriers. Yet of paramount importance is to develop resilience through nurturing her inherent capacity.

\textsuperscript{29} Singapore has to constantly think of ways to stay ahead of the region to remain competitive. Even with sustainable development identified as a sector of potential development, China too has clear intentions to develop the profitable green industry as well, with generous state subsidies indicative of her interest to become a global leader in this field.

\textsuperscript{30} Intellectual property rights remain as the key deterrent of FDI from innovative industries into China.

By expounding on the strengths of Singapore as a platform to Asian markets and nurturing globally competitive local SMEs in the sector, Singapore will be able to benefit from the range of sophisticated, cutting-edge urban solutions, obtain new avenues of economic growth, buttress the expertise in the related sectors of research, engineering and consultancy services and assist the development of local SMEs in partnership with MNCs and Globally Competitive Corporations (GCCs)\(^31\).

Being a gateway into emerging Asia, Singapore can also offer consultation services for firms seeking to invest in the region. The government could identify this as a new area of growth, encourage and nurture consultancy firms in consumer-related fields\(^32\) to provide upstream research on consumer trends and demands in the Asian markets, as well as data-gathering and consumer-prototyping. Local universities and think tanks could play a part in improving the investors’ understanding of the region, such that products and services are tailored to suit the Asian markets in order to increase corporate profitability.

**Growing our Inherent Capacity**

*Nurturing SMEs, Entrepreneurs and World Beaters of Tomorrow*

Alongside providing sufficient capital and funding support for start ups, a SME-centric approach is critical in building globally-competitive SMEs and increasing Singaporeans’ stake in the economy. To enhance their technological capabilities, the government should partner SMEs working in the same product sector with research institutes and

\(^{31}\) This is already evident from positive precedents – the successful ventures of private firms such as Hyflux and Sembcorp into the global water reclamation and desalination markets including countries like China, Algeria and the United States of Emirates.

\(^{32}\) Examples include marketing, branding, design, consumer research, market intelligence and analytics;
established companies allow them to enjoy the agglomeration benefits and facilitate the transmission of ideas and best practices to increase productivity and profitability\textsuperscript{33}. While these efforts allow local enterprises to compete with GCCs, the success of such ventures ultimately depends on the tenacity and entrepreneurial spirits of the SMEs.

**Nurturing Capable Entrepreneurs and Innovators**

“In the end, the location of the new economy is not in the technology… it is in the human mind.”

– Alan M. Webber

Focus should be placed on increasing the innovative capacity of the economy. There is also a need for a more flexible, ‘bottom-up’ approach. In nurturing an innovation-friendly environment, Singapore should focus on infrastructural investments and offer greater flexibility in the development of industry clusters among the private sectors. The latter will be better able to interpret market signals and allocate resources according to demand and factor conditions\textsuperscript{34}.

Meanwhile, our education system has to encourage and develop risk-taking and creativity. Singapore’s education system has adequately equipped our students with

\textsuperscript{33} With experienced entrepreneurs, venture capital firms and relevant think-thank offering tailored advice, the SMEs are able to gain access to resources necessary for global and domestic expansion.

\textsuperscript{34} Singapore’s shipbuilding industry (specifically the development and prosperity of Sembcorp and Keppel Corporation) is a pertinent example of such a natural development.
knowledge and skills\textsuperscript{35}. Yet these do not always translate to traits are inherent in entrepreneurs and world-beaters. As the fuel for innovation, the cultivation of these skills is crucial to our economic development. The social environment is equally important - Singaporeans need to look beyond education attainments as an indication of success, and accept failures as a learning process for adaptable entrepreneurs that do not cower in face of risk.

Also, re-training and continual education should continue to grow in importance with further economic restructuring and become part of the society’s learning culture. These efforts will increase the quality and productivity of our human capital, which has and will remain as Singapore’s core competency.

\section*{Rethinking the Social Compact}

\textit{Bridging divides and Steering the boat through testy waters}

Finally, this essay advocates a relook into our national priorities in the construction of a new social compact alongside a strengthened social safety net to bolster Singaporeans against an increasingly unpredictable and volatile economy. Besides GDP, a more comprehensive and indicative measure of Singaporeans’ economic well-being would serve as a better economic goal.

Niccolo Machiavelli noted that the demise of city-states was caused by internal failings and an inability to quench the internal strife between social classes. The political

\footnote{Indeed, despite Singapore’s consistently high PISA (Programme for International Student Assessment) ranking as well as numerous achievements at International Science and Mathematic Olympiads, there is a disproportionate paucity of world-beaters in our midst.}
challenge now is the need to better engage the citizens, ensuring that the economic reasons and realities are conveyed and understood through appropriate communication channels. Singaporeans will also need to be more understanding and tolerant, just as it takes two hands to clap\textsuperscript{36v}.

**Conclusion**

“If one does not know to which port one is sailing, no wind is favourable”.


The obstacle of Singapore’s economy has been an unchanged one, mainly a small domestic market with scarce natural resources but the gravitational pull of Asia’s turning tides has led to the question of how the region can better benefit us and *vice versa*. For our export and investment destinations, capturing every port of call is not the main motivation behind this essay. Rather, how we fully utilise each opportune moment within a region replete with cheap labour supply, scale, productivity potential, disposable incomes of rising middle-classes and beyond, how we network ourselves to overcome stiff competition, the requisite for regional macroeconomic prudence and how we increasingly pioneer policies and resolutions through public-private partnerships to stay relevant, resilient and united in a booming Asia, is its true didactic basis. Patience is needed for these policies - and policy-makers in particular have to be cognisant of this.

We cannot remain idle, and clarity in vision remains a necessity.

\textsuperscript{36} For instance, they need to recognise the economic thrust into emerging Asia is a non-zero sum game that benefits all Singaporeans, and not a zero sum game where the upper- and middle-classes gain at the expense of the lower income class.
Singapore’s Untapped Hinterlands: Opportunities and Obstacles?

APPENDIX

Chiu Chai Hao

Kenny Ng Jia Wei
Appendix 1: The Rebalancing Global Economic Order

Singapore’s NODX Destination

Figure 6: Singapore’s NODX Destination
The declining importance of G3 economies (United States of America, Japan and European Union) and growing importance of regional (Asia less Japan) economies.

### Singapore’s Top NODX Markets, 2012

<table>
<thead>
<tr>
<th>Market</th>
<th>2011</th>
<th>2012</th>
<th>% Y-o-Y Growth</th>
<th>% Share</th>
<th>% Contribution to Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>177396</td>
<td>178333</td>
<td>2.2</td>
<td>0.5</td>
<td>100</td>
</tr>
<tr>
<td>Top 15 Markets</td>
<td>160146</td>
<td>163407</td>
<td>-0.1</td>
<td>2.0</td>
<td>90.3</td>
</tr>
<tr>
<td>EU 27</td>
<td>26,915</td>
<td>25,888</td>
<td>0.2</td>
<td>-3.8</td>
<td>15.2</td>
</tr>
<tr>
<td>China</td>
<td>20,613</td>
<td>21,056</td>
<td>7.1</td>
<td>2.2</td>
<td>11.6</td>
</tr>
<tr>
<td>United States</td>
<td>16,829</td>
<td>16,640</td>
<td>-11.6</td>
<td>-1.1</td>
<td>9.5</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>14,653</td>
<td>16,346</td>
<td>-11.5</td>
<td>11.6</td>
<td>8.3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>14,577</td>
<td>13,704</td>
<td>0.1</td>
<td>-6.0</td>
<td>8.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>11,024</td>
<td>11,719</td>
<td>-1.2</td>
<td>6.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Japan</td>
<td>10,793</td>
<td>11,026</td>
<td>1.9</td>
<td>2.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Taiwan</td>
<td>9,564</td>
<td>10,394</td>
<td>-0.6</td>
<td>8.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Korea, Rep Of</td>
<td>7,746</td>
<td>8,673</td>
<td>-2.7</td>
<td>12.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>7,107</td>
<td>7,641</td>
<td>0.7</td>
<td>7.5</td>
<td>4.0</td>
</tr>
<tr>
<td>India</td>
<td>5,725</td>
<td>5,192</td>
<td>7.2</td>
<td>-9.3</td>
<td>3.2</td>
</tr>
<tr>
<td>Australia</td>
<td>4,897</td>
<td>4,788</td>
<td>9.8</td>
<td>-2.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Panama</td>
<td>3,858</td>
<td>4,454</td>
<td>72.1</td>
<td>15.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2,764</td>
<td>3,092</td>
<td>26.9</td>
<td>11.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>3,083</td>
<td>2,795</td>
<td>-8.9</td>
<td>-9.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Others</td>
<td>17,250</td>
<td>14,926</td>
<td>29.4</td>
<td>-13.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Emerging Asia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G3 Economies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 1: Singapore's Top NODX Markets, 2012**

Of the top 15 export destination for Singapore's non-oil domestic exports (NODX), 11 of them are in Asia and 7 of them are in the countries classified as emerging Asia in this essay. While the G3 economies are the destination of 30.8% of the NODX, emerging Asia accounts for more than 36.6% (with the other countries not reflected in the table) and is touted to grow even further.

**Source:** IE Singapore, Review of 2012 Trade Performance (2013)
Appendix 2: Identifying New Industries of Growth

This essay identifies sustainable urban solutions, infrastructural expertise and consultation services as the exports with the greatest potential, in view of the growth trajectory and demands of the region. While measures to develop these niche areas in the economy are covered in the essay, this appendix offers reasons for these three industries as future growth engines of the economy.

Why is Singapore suitable as a development centre for sustainable urban solutions?

1. **Singapore’s strong engineering and R&D base** allows it to branch out to meet the demands of sustainable growth paths. This is by no means an easy task. As research on environment and sustainability issues are often multidisciplinary, Singapore should provide more grants for its interdisciplinary research institutes, and focus on capability-building for the future through environment and sustainability education.

2. **Her unique geographical location** close to the Tiger Cub economies allows businesses and investments from the West to reach Asian markets with ease. Close to some of the largest tropical rainforests and sprawling urban centres, there are huge opportunities for R&D in the world’s oldest and most biologically diverse lowland forests for natural products as well as urban management solutions. For one, Tropical Rainforests in Borneo, Peninsula Malaysia and Sumatra, up to 70 million years old, are hotbeds of biological products. Growing metropolises in emerging Asia such as Indonesia, Philippines and China present future demands for urban management solutions.

3. **The compact and highly urbanized nature of Singapore** makes it an ideal site for testbedding, experimentation and modification before commercialising and exporting the improved technology. It has been estimated that by 2030 two-thirds of the world population will live in urban centres, clear evidence of the growing demand for urban management solutions to house the population without straining the capacity of urban infrastructure.

   Singapore is in good position as a pilot city for pilot-scale integrated systems to be built and trailed. Key precincts, such as the Marina Bay District, Treelodge@Punggol and Jurong Lake District have already become such test-bed centres. In these, new concepts and prototypes developed at research centres and universities in collaboration with private sector partners can applied through government-supported test-bedding programs before their entry into regional and global markets.

Why is Singapore suitable as a development centre for infrastructural expertise and consultation services?

1. As mentioned in the essay, Singapore’s complementarity to the other economic systems in emerging Asia and booming infrastructural investments amidst the infrastructural deficits present huge opportunities for Singapore to develop herself as a prominent centre offering such advice and expertise.
How can Singapore benefit from developing industries of sustainable urban solutions?

1 Government and government-linked corporations, by investing in the critical mass and providing for the high upfront costs, can lower the entry barriers and make the market more attractive for firms and providers. Infrastructure such as long-distance, high-voltage cables-importing and exporting electricity allows us to tap into a wider array of renewable energy sources from our neighbours (e.g. hydroelectricity from the Mekong region). This is modelled after the successful Liquefied Natural Gas (LNG) Terminal, which has drawn huge demand even before its completion in 2013.

2 An ASEAN Carbon Tax for the Future

Without a rural hinterland and limited sources of alternative energy, Singaporean businesses and government agencies must leverage on investments in research and development facilities to complement regional policies. It can be argued that Singapore is already highly successful in addressing climate change. Singapore was crowned Asia’s Greenest City in 2011 according to the Asian Green City Index, contributing less than 0.2% of the world’s emissions mainly due to our fuel taxes, vehicle quota system and clean-energy incentives. However, we as a region must collectively rise to the challenge to improve on carbon efficiency and minimise energy wastage.

A conjectural proposition is the introduction of an ASEAN carbon tax concomitant with the establishment of a Single Market by 2015. This zero-sum game overcomes the tragedy of the commons whereby the pricing system fails to acknowledge the negative external costs of production which includes pollution, pressuring low-cost manufacturers to be more environmentally competitive whilst consumers will be less inclined to utilise demerit goods. The revenue reaped by internalising the market failure should be invested in green research, subsidising the region’s private manufacturing sectors to transition into more energy efficient ones, compensate lower income earners akin to the models presented by Australia and Denmark and connecting with overseas environmental programs such as the European Union Emissions Trading Scheme. To help firms and families in the region adjust to the implications of the carbon tax, the carbon price should be initially below
market rates before progressively increasing to the world market price, as also recently outlined in China’s proposal to implement its own carbon tax.

With a strong financial background, Singapore is also poised to become the region’s water and carbon credit trading centre as the tax potentially broadens into a global emissions trading scheme. Singapore can stand to benefit from being the region carbon trading headquarters. The global carbon market was worth a record $176 billion in 2011 compared to $125 billion in 2008 despite a slowing global environment, exemplifying its resilience to external shocks.

## Appendix 3: ASEAN’s Diversity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>239.7 Bn</td>
<td>46,241</td>
<td>5,312,400</td>
<td>Democracy</td>
<td>English, Chinese, Tamil, Malay Languages</td>
</tr>
<tr>
<td>Malaysia</td>
<td>287.9 Bn</td>
<td>9,977</td>
<td>29,688,000</td>
<td>Democracy</td>
<td>Bahasa Melayu</td>
</tr>
<tr>
<td>Brunei</td>
<td>16.3 Bn</td>
<td>40,301</td>
<td>393,162</td>
<td>Absolute Monarchy, Islamic State</td>
<td>Malay</td>
</tr>
<tr>
<td>Thailand</td>
<td>345.7 Bn</td>
<td>4,972</td>
<td>65,926,261</td>
<td>Democracy, Constitutional Monarchy</td>
<td>Thai Language</td>
</tr>
<tr>
<td>Vietnam</td>
<td>123.6 Bn</td>
<td>1,407</td>
<td>88,780,000</td>
<td>Communism</td>
<td>Vietnamese</td>
</tr>
<tr>
<td>Indonesia</td>
<td>843.8 Bn</td>
<td>3,495</td>
<td>237,641,326</td>
<td>Democracy</td>
<td>Bahasa Indonesia</td>
</tr>
<tr>
<td>Myanmar</td>
<td>51.9 Bn</td>
<td>824</td>
<td>61,566,853</td>
<td>Democracy</td>
<td>Burmese Language</td>
</tr>
<tr>
<td>Cambodia</td>
<td>12.8 Bn</td>
<td>897</td>
<td>13,395,682</td>
<td>Democracy, Constitutional Monarchy</td>
<td>Khmer Language</td>
</tr>
<tr>
<td>Laos PDR</td>
<td>8.3 Bn</td>
<td>1,320</td>
<td>6,580,800</td>
<td>Democracy</td>
<td>Lao Language</td>
</tr>
<tr>
<td>The Philippines</td>
<td>224.8 Bn</td>
<td>2,370</td>
<td>92,337,852</td>
<td>Democracy</td>
<td>English and Filippino</td>
</tr>
<tr>
<td>China</td>
<td>7.32 Trillion</td>
<td>5,445</td>
<td>1,354,040,000</td>
<td>Communism</td>
<td>Mandarin Chinese</td>
</tr>
<tr>
<td>India</td>
<td>1.85 Trillion</td>
<td>1,509</td>
<td>1,210,193,422</td>
<td>Democracy</td>
<td>Hindi, English</td>
</tr>
</tbody>
</table>

Table 2: Diversity amongst ASEAN Nations - Asset or Liability?

**Source:** *World Bank, World Development Indicators 2013 and Various Sources, Compiled by author.*

ASEAN is arguably the most diverse region in the world. Add China and India into the picture, and the diversity increases further. On a per capita basis, Singapore, South-east Asia’s richest country, is 56 times more affluent than Myanmar, the region’s poorest. In terms of population size, Indonesia’s population of 248 million is 593 times larger than Brunei’s 420,000 citizens and China is the world’s most populous at 1.3 billion. Political systems range from quasi-dictatorships to vibrant democracies. Economic systems range from communist to capitalist.
Appendix 4: A Look at Singapore’s Inherent Capacity and Raising South-east Asia’s Consumption

Figure 8: Singapore’s Average Propensity to Consume, 1975-2000. (Real Consumption/GDP ratio)


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>0.80</td>
<td>0.61</td>
<td>0.52</td>
<td>0.46</td>
<td>0.41</td>
</tr>
<tr>
<td>US</td>
<td>0.68</td>
<td>0.69</td>
<td>0.66</td>
<td>0.68</td>
<td>0.68</td>
</tr>
<tr>
<td>UK</td>
<td>0.73</td>
<td>0.69</td>
<td>0.72</td>
<td>0.75</td>
<td>0.77</td>
</tr>
<tr>
<td>Japan</td>
<td>0.60</td>
<td>0.53</td>
<td>0.61</td>
<td>0.58</td>
<td>0.61</td>
</tr>
<tr>
<td>Taiwan</td>
<td>0.64</td>
<td>0.62</td>
<td>0.57</td>
<td>0.61</td>
<td>0.60</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>0.69</td>
<td>0.65</td>
<td>0.64</td>
<td>0.65</td>
<td>0.64</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.57</td>
<td>0.55</td>
<td>0.60</td>
<td>0.57</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Sources: Singapore—authors’ calculation; Taiwan in 2000—Bureau of Statistics; other countries—Penn World Table 6.1.

Table 3: APC in Selected Economies (Real Consumption/GDP ratio).


To quote Burke, “Mere parsimony is not economy.” Indeed, Singapore’s APC has fallen over time to become the lowest amongst the industrialised economies. The adverse effects of Singapore’s declining consumption rates has weakened the economy’s built-in stabiliser and increased volatility in economic growth, ceteris paribus, because private consumption is considered to be the most stable form of final aggregate demand, in contrast to the more varied alternatives of exports and investments, causing us to be more susceptible to exogenous shocks as recently experienced by the local economy’s recession during the GFC. A key take-away from the 10th Singapore Economic Roundtable was Singapore should transit from being an export-reliant
economy to one that is driven by domestic demand. Consumption can be bolstered through a stronger safety net as reflected by Lim Chong Yah’s proposed compulsory minimum wage scheme.

Given Singapore’s historical reliance on MNCs since it transitioned out of a Third World country, there is an overall weak inherent capacity or “software” in the domestic economy. We are vulnerable to paradigm shifts in their corporate strategies as low-income countries open up reasons that can maximise the profit-motive of foreign entities. More importantly, the subdued post-crisis environment is slowly unravelling a renewed wave of protectionism; in the long run, the overt mono-influx of corporations from the crisis-3 economies operating in Singapore must be balanced by a healthy mix of local enterprises oriented towards regional demand to diversify and minimise ourselves from external shocks.

However, what is limit to the amount of inherent capacity we can build? It takes two hands to clap- the blueprints for Singapore’s successful indigenous growth cannot be merely formed through just the domestic accumulation of “intangible capital”38. Thus, it is our interest that aggregate demand in Asian markets continues to grow, in particular the lower-income ASEAN economies as well as Singapore’s own domestic economy39, as stagflation would impede our returns from consumption and foreign investment.

<table>
<thead>
<tr>
<th>Country</th>
<th>Survey Year</th>
<th>National (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>2011</td>
<td>13.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2012</td>
<td>12.0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2010</td>
<td>20.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>2009</td>
<td>26.5</td>
</tr>
<tr>
<td>Lao DPR</td>
<td>2008</td>
<td>27.6</td>
</tr>
<tr>
<td>India</td>
<td>2009</td>
<td>29.8</td>
</tr>
</tbody>
</table>

Table 4: Poverty headcount ratio at national poverty line (% of population)

37 This refers to the EU, US and Japan
38 “Intangible Capital and Economic Growth” by Corrado, Hulten and Sichel discusses the significance of intangible capital playing a large role in the growth of advanced economies. Such value can be found in innovation, workers’ skills, research & development, management and brand equity within corporations.
39 Singapore must correct its falling APC (aggregate propensity to consume) so that domestic consumption can become a complementary growth engine. Refer to APC diagrams.
Unfortunately, an uneven increase of incomes in the region’s and individual countries’ socioeconomic classes has been reflected in a resurging Theil Index\textsuperscript{40}, revealing opportunities forgone from sub-optimal consumption. It is estimated that 62 million people are living in extreme poverty\textsuperscript{41} in Asia and the issue is most acute in rural areas due to the phenomenon of higher unemployment, the common genesis of perpetual poverty cycles. It involves lower disposable incomes, education and health rates, leaving less affluent individuals out from participating in finance-enhancing activities which lowers consumption spending, stifling imports of Singaporean products and services whilst rendering the individual economy stagnant. Under a Keynesian viewpoint, Singapore should strengthen intra-regional connectivity through developing local companies catered for regionalisation to sustain more inclusive growth.

Internally, individual members can strengthen their social safety nets to harness the market potential of ASEAN’s 660 million consumers. Foreign intervention from advanced economies can

\textsuperscript{40} According to the World Bank’s 2010 World Development Indicators. The Theil Index is a measure of regional income inequality.

\textsuperscript{41} The World Bank defines this as living below the international poverty line of US$1.25 (PPP) per day.
be injected into basic infrastructure such as telecommunications and transport to precipitate this process. The spillover of skills and technologies accelerates the structural change from labour-intensive rural sectors into more competitive manufacturing and services industries, facilitating a spur in more productive jobs and SMEs, incomes and private investment to contribute to demand for Singaporean exports.
Bibliography


On Myanmar: Myanmar, with ongoing political and economic reforms unveiled by President Thein Sein, presents economic opportunities for Singapore companies. With significant natural resources, a large population, and a geo-strategic location; its economy has yet to reach its full potential, weakened by decades of sanctions and autarchy. The scope of opportunities in Myanmar is immense, given its size, population, resources, market and relatively undeveloped economy. The reforms are attracting more foreign trade and foreign direct investment (FDI) and her domestic industries are also modernising and industrialising. Bilateral trade between Singapore and Myanmar has doubled from 2007 to 2011 to reach US$ 2.4 billion and is Myanmar’s third-largest trading partner. Singapore companies are in good stead because of their long-term relationship with Myanmar, having strengths in urban planning, power, hospitality, manufacturing, and logistics. Nonetheless, there are financial, legal and regulatory challenges to overcome and Singapore companies should focus on short-term, achievable goals while planning for the longer term. (Source: IE Singapore)

Coined by the economist John Keynes, “animal spirits” refers to a key psychological backbone of confidence or pessimism in consumption and investment. Lower investor confidence can carry the implication of stunting the inflow of foreign capital into an economy but can be corrected by implementing more predictable “legal, regulatory, and institutional frameworks” that will appeal to such innate investment “spirits” to reduce the risk of speculation and other non-productive decisions.

The 1997–98 AFC revealed the underlying weaknesses of the region’s economy then. Crony capitalism created extreme forms of moral hazard that led to excessively risky investments, leading to weak financial systems overloaded with non-performing assets. Despite these institutional weaknesses, many of the economic fundamentals in East and Southeast Asia remain strong. The rate of investment in most of the region remains high, many countries have large low productivity labor forces that can be shifted to higher productivity jobs, and educational levels in most countries are high. The degree to which these fundamentals will translate into high rates of growth over the next decade will depend on the pace at which these countries reform their economic institutions. (Dwight, 2004)

Example: China’s rising labour costs together with her gradually appreciating currency has made it more lucrative for lower-end manufacturing services to be outsourced to countries such as Vietnam and Cambodia where there is a huge pool to be tapped and an increasingly stable political scene.

The rise of Singapore as a prosperous city-state was premised on the social compact involving farsighted, effective leadership and a committed, hardworking populace. Yet as events of the General Election in 2011 and the Population White Paper reveal, there is a yawning disconnect between the governed and the Government in Singapore. History reveals, rather tellingly, that the fall of great city-states has often been partially premised on such disparity. City-states, owing to their small size and general dependence on trade, often require both decisive government and a dynamic economy to flourish. Machiavelli warned prophetically that the unavoidable consequence of such tensions is “political uncertainty and economic short-termism”, culminating in the state’s demise. It is these failings we must seek to avoid, by seeking to re-establish an effective channel of communication and by addressing the sources of tensions. (Source: TODAY, 2013)