

A Publication by the Economic Society of Singapore

# ECONOMICS & SOCIETY

Volume 1, 2015

## Man & Economic Development

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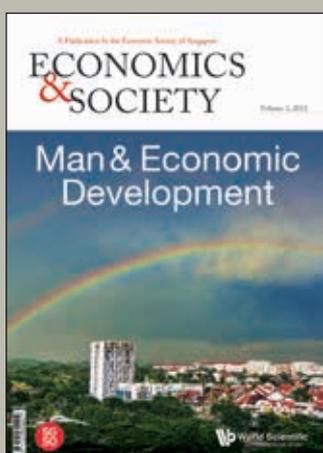
# About the Economic Society of Singapore

The Economic Society of Singapore (ESS), formerly the Malayan Economic Society, was established on 28 July 1956, as a result of an initiative by graduates and staff from the Department of Economics from the then University of Malaya in Singapore.

On 28 March 1969, the Society changed its name from the Malayan Economic Society to the Economic Society of Singapore, in response to the new independent and sovereign status of the Republic.

Since 1976, the Society has been one of the founding members of the Federation of ASEAN Economic Association (FAEA). The Society published a journal, the Malayan Economic Review (MER), which was later renamed the Singapore Economic Review (SER) in 1969. The SER is now regarded as the leading journal in the Asia Pacific and it is in the Social Sciences Citation Index (SSCI) indexed journal.

Today, ESS has expanded to include members from the academic, government and business sectors. The Society organizes conferences and networking sessions to foster discussions of current economic issues relating to Singapore and the region.



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# Our Mission

Since Adam Smith, the study of economics was largely motivated by the need to investigate the opportunities that people have for good living. Viewed in this light, economics is to promote a spirit of inquiry for the common good of humanity:

- A *willingness* to investigate issues in the local, school and wider community.
- A *readiness* to recognize social, economics, ecological and political dimensions of issues needed to solve them.
- The ability to analyze issues and to *participate* in action aimed at achieving a sustainable future.

(UNESCO, Teaching and Learning for a Sustainable Future)

Our mission is to help strengthen the foundation for economics to promote the above traits among citizens and fulfill what it has originally set out to do for mankind.

The foundation we mention above comprises of outlook, attitude and values. We hope our economics will promote:

- a responsible and compassionate outlook to life. We believe that every one of us must bear responsibility for the development and change of the society in which we live. Our sense of responsibility must extend beyond the afflictions caused by our own actions to include miseries around us, especially those that are within our ability to help remedy. We hope that every citizen will be mindful of the consequences that follow their actions; this will be the first step towards building a compassionate society.
- intellectual inquisitiveness by encouraging people to question both the unknown and the known. We hope to see minds freed from conformism, conservatism and short-sighted interests so that morbidity will not settle in the minds of especially our young learners.
- a balance between positive and normative economics. We need to remind readers that economics is not a value-free mathematical subject; and that it is the product of a relentless effort to understand the world around us and question the fundamental values required for sustainable living.

Together, these will lay the foundation to enable us to master the art of living, which is essentially the art of making choices that will be in line with promoting a good and harmonious living for all. This is economics for society.

# Foreword



It gives me great pleasure to introduce the first issue of ESS's economics and social policies bulletin, *Economics & Society: Man & Economic Development*. In contrast to ESS's well-established academic journal (the Singapore Economic Review) which caters to the academic audience, this bulletin provides for more reader-accessibility, with the aim that anyone with an interest in economics would be able to pick it up and enjoy reading it.

A misconception that economics revolves around banking and finance commonly arises. The reality is that economics also studies the problems of income inequality and unemployment, the designs of public policies such as education and health, the relationships between politics, law and economics etc. As a matter of fact, economics fundamentally examines the allocation of resources and the effects of incentives on individuals' choices. A perceptive mind would come to the realisation that economics can be found everywhere around us. It provides insights to everyday issues; how innovation and technology can affect our lives, to what degree should we preserve the environment, or even how we could optimise the abstract concept of happiness.

This bulletin is not a collection of dry, sophisticated economic theories. Rather, it brings together a range of interesting articles that are highly relatable to the general public and relevant to everyday lives. This inaugural issue includes an inspiring interview with Mr Heng Swee Keat (Minister for Education), a Singapore perspective of the 2007–08 global financial crisis, a resonating discussion of Singapore's shifting social compact, a forward-looking piece on the advancement of technology and its impacts on businesses, and ends off with a response to the question of “What is the purpose of learning economics?”

It is my hope that readers will learn from this bulletin the broad applications and diverse aspects of the subject, and discover the joy of exploring the vast field of economics. In line with ESS's continued commitment of bringing economics to the public, I hope this bulletin will further invoke interest in the intellectual minds of people.

With that, I wish to thank the contributors for their most crucial and highly appreciative role in creating this inaugural issue, the editorial team for their joint collaboration in putting the materials together, and World Scientific for their publishing efforts.

Finally, to the readers — thank you for your interest and support. May you benefit much from this publication — Enjoy the read!

**Euston Quah**

President

Economic Society of Singapore

# Note from the Editorial Team

## The Journey Continues

Singapore has been fortunate to take advantage of the locomotives of growth in the world economy over the last fifty years. Today, we are one of the leading economies in the world. However, we are at the cusp of changes and have to find our way to move forward without the benefit of being able to follow in the footsteps of other more advanced economies. How then, do we navigate the next 50 years?



We have chosen “Man & Economic Development” to be the theme for our inaugural issue as we feel that while we celebrate our success story in SG50, we must also remind ourselves that economic development is ultimately for man and the society. Economic development is a means to improve living condition so that every member of the society can have the opportunity to live a life he or she truly values. This was encapsulated in an essay written in 1961 by the late Dr Goh Keng Swee.

In order for us to journey towards sustainable development and therefore better living in the twenty-first century, economic, social, and financial inclusion must sit in the center of public and private sector initiatives. This is the way to ensure that the human aspect of economic development is not lost. If the stewards of our future economic development can bear this in their hearts and minds, we can be assured that not only can Singapore repeat its success story in the next 50 years, it can do even better with the inclusion of every Singaporean. The flame started by our founding fathers will keep burning as we continue our quest to achieve happiness, prosperity and progress for the nation.

In commemoration of the late Mr Lee Kuan Yew, our cover page features a rainbow to remind ourselves of the aspiration he had for each and every one of us. In a speech in 1996, he said:

“...When I set out, my Singapore dream was of a democratic society, keen and vibrant, a united people, regardless of race, language and religion, based on justice and equality, achieve happiness, prosperity and progress for the nation. That was how 30 years ago in 1966 my colleagues and I settled the words of our pledge. We did not focus our minds on our navels or we would have missed the rainbow in the sky. We pursued that rainbow and that was how together we built today’s Singapore.

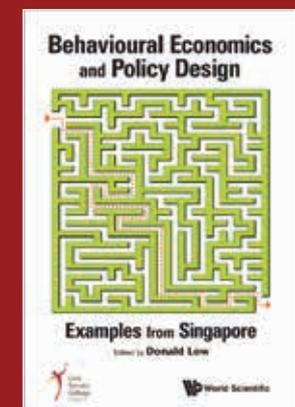
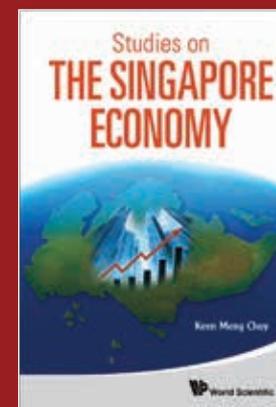
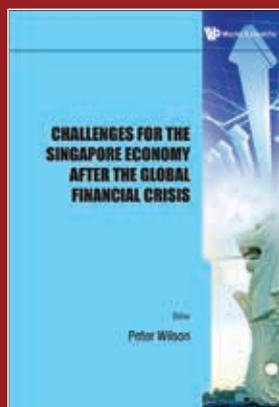
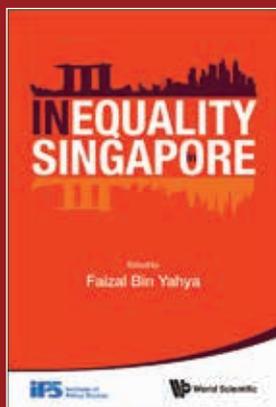
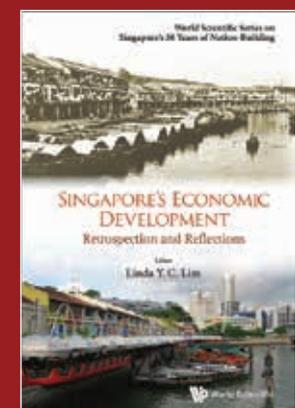
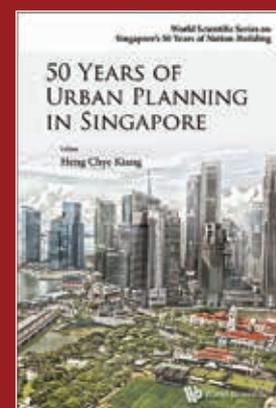
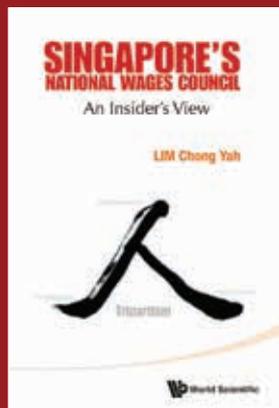
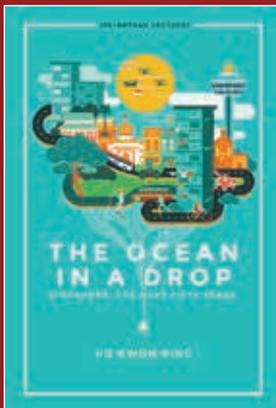
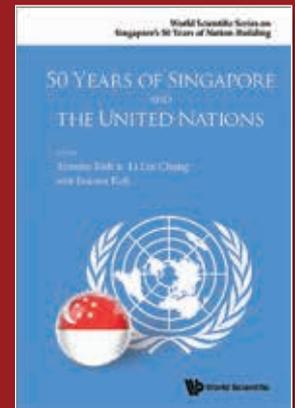
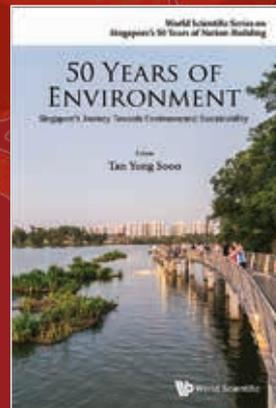
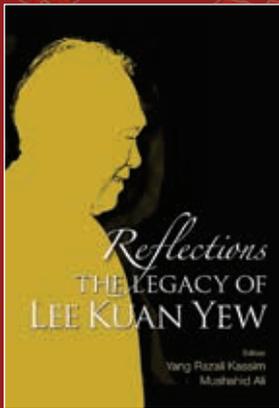
The sky has turned brighter. There is a glorious rainbow that beckons those with the spirit of adventure. And there are rich findings at the end of that rainbow. To the young and not so old, I say, look at the horizon, find that rainbow, go ride it. Not all will be rich; quite a few will find a vein of gold; but all who pursue that rainbow will have a joyous and exhilarating ride and some profit.”

With that, we wish you a thought-provoking journey through the following pages.

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# In Conversation with Minister of Education **Mr Heng Swee Keat**

**M**r Heng is perhaps best known as Singapore's Education Minister. But to those in the financial world, he's the man who helped steer Singapore through the global financial crisis of 2008 as Managing Director of the Monetary Authority of Singapore (MAS). Mr Heng, who holds a Master of Arts in Economics from Cambridge University, started his career in the Singapore Police Force and went on to serve as Principal Private Secretary to the then-Senior Minister Lee Kuan Yew. He was appointed as Chief Executive Officer of the Trade Development Board and also served as the Permanent Secretary of the Ministry of Trade and Industry, before joining the MAS. The ESS team spoke to the Minister in June to learn about his inspirations, his aspirations and the value of a good economics education in the world today.

Photos courtesy of Ministry of Education, Singapore



↑ Minister Heng with post-secondary school students at the Pre-University Seminar 2015.

**For a start, what advice would you give teachers and students of Economics, given that you have practised Economics in a real-world setting and currently hold the portfolio of Minister for Education?**

**Minister Heng:** First, be rigorous. It's vital that students understand the concepts as thoroughly as possible. This was brought home to me when I was doing my MPA [at Harvard University]. I decided — just for the fun of it — to do a module on Applied Microeconomics.

I had a professor, Professor Brown, who told me I was not allowed to use the words “marginal cost” or “marginal benefit”, nor “opportunity cost”. These are basic concepts in Economics. How could I do a Microeconomics course without using those words?

His reason was simple. He told us “You’re

doing a course in public administration, so you know you’re going to write for your bosses and the public who have no background in Economics. This is an Applied Microeconomics course. You’re to apply the knowledge to tell your decision maker why you’re recommending action A rather than action B. Your boss has zero knowledge of Economics, so if you talk about marginal cost, he will be completely put off.”

He was right.

It was a challenge to write in such plain, simple English without the claddings of all these terms. You find that it forces you to be very rigorous — to say exactly what you mean.

Next, be humble about what we don’t know. It’s important to inject humility and acknowledge that the set of knowledge we have is imperfect and we can always learn better from other disciplines.

The world is complex. It's not possible to reduce complex phenomenon into simple equations. Even in the hard sciences, there are many things that we don't know. In the social sciences, we realise that human behaviour and human societies are just inherently hard to model and predict. They're not atoms and particles that can be easily acted upon.

There's a reaction to everything that we do. Human beings are adaptable beings and the changes in behaviour will change your model and equations, if done over a long period of time. This is why students must be encouraged to read beyond just Economics and see how they can integrate different strands of knowledge. Otherwise, if your only tool is a hammer, everything will look like a nail.

Lastly, make use of what you learn to make a positive impact in our community, our society and the world. I'd like to mention Dr Goh Keng Swee as an example here. Dr Goh had a lot of practical wisdom — he understood that situations are not totally predictable; there's certain ambiguity. He was also a man of action. We need to do things to make things happen. You can't improve lives if you don't take action. You can't just sit there and think that maybe I can come up with the idea and some other hardworking people will do it. We should encourage our students to have the habit of investigating ideas and doing things, so that they can see whether their ideas are going to work.

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**Your first degree was in Economics. Who are the economists who've influenced you and how has this field of study influenced you?**

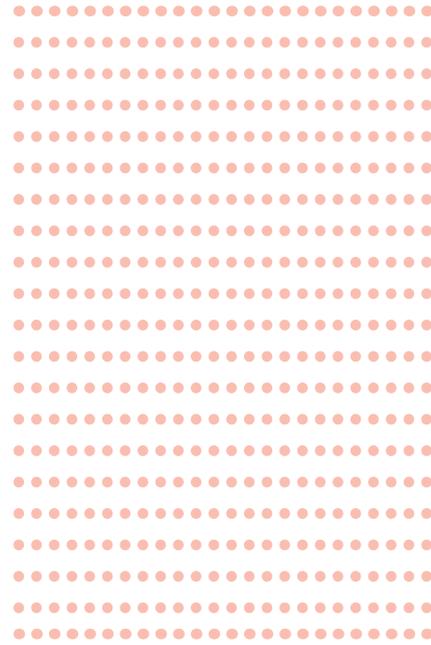
**Minister Heng:** Personally, Economics has been very helpful to me for a number of reasons.

First, there are some very powerful concepts like marginal cost, marginal benefit, opportunity cost, resource allocation in a world of scarcity and the interaction of players and the outcomes as a result of those interactions.

Second, how you seek to model behaviour and systems leads to very disciplined thinking about system-level impact and system-level feedback. If you have to do a general equilibrium model, you have to try to find some way to capture all the key forces at work, figure how they interact and the outcome of those interactions.

You have to then think about the second- and third-round effect until you get to some sense of general equilibrium. This discipline of thinking about how different forces interact and produce certain outcomes, which in turn create feedback into the next round of behaviour, is extremely useful.

Third, when I was studying Economics, there was a greater recognition of the importance



At the Pre-University Seminar 2015, post-secondary school students proposed solutions to create the future they desired.



## ● In Conversation with

of quantitative analysis. I found quantitative reasoning and quantitative analysis to be helpful in understanding the order of the magnitude of issues and problems. Although I would add that if you're not careful, it can lead to complacency that we have that precision.

Economics is not a precise science; however sound your econometric model, it depends on the underlying assumptions about behaviour. How you structure those behavioural equations will affect the outcome in a very significant way.

When I was studying Economics, the main debate was Keynesianism versus Monetarism. So there was a lot of focus on Keynes versus Friedman. Both were great influences. Of course Keynes had died; but Friedman was still alive. And I met Friedman at an event back in 1998, when we had a short chat. I think both had a tremendous impact on the world of economics thinking.



Minister Heng testing out an innovative solar-powered car developed by secondary school students. →





← Minister Heng with participants at the NE Show 2015.

**If you have the chance to further your studies in Economics, what would you specialise in and why?**

**Minister Heng:** I'd like to look at innovation. If you look at the literature on innovation, especially if you look at the growth model, it's TFP [Total Factor Productivity] and it's a black box.

If you look at the Schumpeterian model, you have this mysterious figure called the entrepreneur who created all these changes in wealth. Every society needs a certain spirit of enterprise.

If you look at Peter Drucker, he talks about a more systematic process of innovation. But after all these years, despite all that's been written about innovation, there's still room to explore Paul Romer's New Growth Economics. Romer's work is very significant yet there has been no

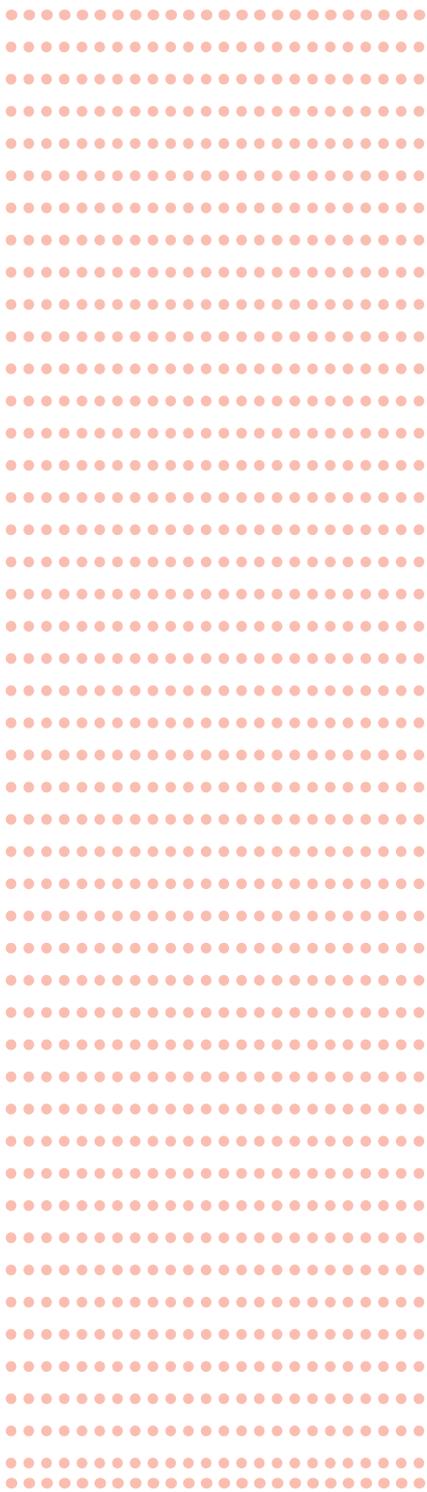
significant follow-up to the New Growth Theory.

Why study that? First, because it's going to be very important for Singapore and second, it will be important to the world.

When we talk about economic growth and growth accounting — you basically decompose it into labour, capital and TFP. But how exactly do the variables interact? What does it mean to develop human capital? How much embodied knowledge is there in capital? What really is the process of TFP growth? All these are important issues. In the era of information revolution, what does that mean?

However, I'm not sure at my age whether I will want to go and study Economics further. If my interest is in innovation, I'd rather be a practical man and try to do something and let others study that.

I believe strongly that our ability to



overcome challenges and seize new opportunities depends greatly on the inventive mindsets and innovative capacity of our society. Today, in many areas, you'll find that the marginal cost of many new products is close to zero. Music sold on iTunes is a very good example, and drugs is another. All this depends on our society's capacity for innovation. As we strive to develop our innovative capacity, we're essentially trying to address the fundamental economic problem, which is, how do we make scarce resources count more than they do today?

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**As the Managing Director (MD) of the Monetary Authority of Singapore (MAS) from 2005–2011, you won the Asia-Pacific Central Bank Governor of the Year award from the British banking magazine *The Banker* for your handling of the Global Financial Crisis. In your perspective, is an Economics background essential for doing well as a central banker?**

**Minister Heng:** First of all, although I won the award, the honour really goes to the MAS. Many people worked really hard during the period; I was just the head of the organisation to receive the award.

A lot of people think that the central bank governors were the saviours of the world, but one important reason why Singapore did well during the crisis is because we have a governance system that allowed us to do many right things all along. For instance, we had ample reserves, which provided the buffer that boosted confidence. If we were in a state where reserves were running low or government was running a huge fiscal deficit, we wouldn't have been able to survive the crisis unscathed.

As for your question, is an Economics background essential for doing well as a central banker? Yes, because I don't think you can formulate monetary policy without understanding basic economic concepts and basic macroeconomic forces at work.

You may ask, do you then need a degree to do that? The answer is no. Look at the Prime Minister. PM was Chairman of the MAS and his first degree is in Mathematics. But he has a voracious appetite for knowledge. He has probably read more Economics texts than many Economics students and grasped the concepts quite deeply. So, if this is your question — I notice you used the word “background” — indeed PM has a very strong background in Economics. You do need that background to steer the economy, to understand the macro forces at work, to look at the interaction and to see whether after all those interactions — after the first-round and second-round effect, what the outcome will be.

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**You have headed various organisations throughout your career. What advice would you give to aspiring leaders?**

**Minister Heng:** You need to first acknowledge the fact that what you know is a tiny fraction of the total effort. With this sense of humility, you then need to ask yourself what's the most impactful thing you can do for the organisation.

For me, it's to engender a sense of meaning and purpose in what we do; to ensure that everyone feels that this is a meaningful job — for the people and for Singapore. The organisation has a certain tone that allows everyone to put in their best efforts and those efforts need to be well aligned. We don't want teams of people who work at cross purposes because if we do that, we're just

As we strive to develop our innovative capacity, we're essentially trying to address the fundamental economic problem, which is, how do we make scarce resources count more than they do today?

going round and round — one group will negate the efforts of another group.

As the head of the organisation, I also try to challenge people to innovate and to pioneer new things. When I was at MTI, we faced severe challenges because we had the dotcom bubble in 2001 and SARS in 2003. It was after the Asian Financial Crisis and investments into ASEAN had come down this way and investments in China had gone that way, and the gap was opening up. That was very negative for us. The question was what could we do when we have such macro forces at work against us?

I must say that people responded very well. We held many strategy sessions on how we could reposition Singapore's economy. Similarly, when I was at the MAS — by 2005, we had a very strong financial system — the question was where could we take it further? How could we grow the financial sector and contribute to Singapore's economy to create good jobs and at the same time, maintain that high level of supervision so that we don't run into a financial crisis? Those were very major challenges but if you constantly prod people to think about them, I'm sure we can do better.

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**As a final question, what's one book currently on your bookshelf that you would like to share with our readers?**

**Minister Heng:** Well, there are many books that I'd like to share with readers. Since it's in the context of "Economics & Society", I'd say for

Economics students, they should certainly read the book *An Intellectual Biography of Goh Keng Swee* by Ooi Kee Beng.

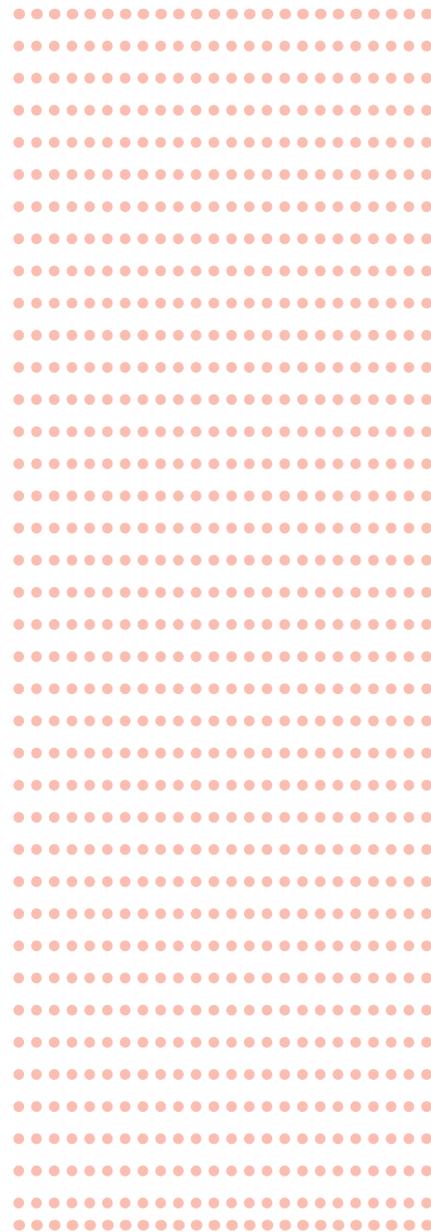
Why do I recommend the book? First, Dr Goh had deep insights, many of which come across strongly in this book, particularly those related to human behaviour and how our society is organised.

Second, Dr Goh had a lot of practical wisdom. He was conceptually deep, yet he was able to apply concepts in ways which took into account the reality of the world. When I say practical wisdom, there's a certain recognition that the world is an imperfect place and we have imperfect knowledge, so it's never possible to have a perfect outcome which everyone will be happy with. But what we must strive to do is to continually make the best possible decisions and improvements.

Third, Dr Goh was a man of action. He was decisive, he did his homework, he did his analysis and then made decisions on what had to be done.

To sum up, Dr Goh cared about his work and he cared about people. He put his intellect — a formidable intellect — to use in the service of Singaporeans. So I think reading this book has the potential to benefit many people, especially students. I hope they will make the effort to do so, after which teachers can discuss with them the book's valuable insights.

The interview was conducted in June 2015.  
Mr Heng Swee Keat is now the Minister for Finance.



# The Post-Crisis Era: Challenges for the Singapore Economy

by **Christabelle Soh**



**T**he book chapter by Manu Bhaskaran and Peter Wilson covers five areas: The Impact of the Global Crisis on Singapore; The Post-Crisis Challenges for the Singapore Economy; Singapore's Economic Strategy; Re-thinking Singapore's Economic Strategy; and The Economic Strategies Committee (ESC). This essay expands the original content by concluding with the follow-up to the ESC's recommendations in the Singapore Government Budget from 2010–2015.

## **The Impact of the Global Crisis on Singapore**

The trigger for the 2008-2009 global financial crisis was primarily the collapse in the US housing market. As the housing bubble burst and house prices declined, homeowners became less able to pay back their mortgages, resulting in banks carrying lots of 'bad debt'.

In essence, the creditors (financial institutions such as banks) found themselves in trouble because the debtors (homeowners) could not repay their debt. One of the most famous victim of the bad debt would be the US investment bank Lehman Brothers which eventually filed for bankruptcy.

As financial institutions were less able to collect money from their debtors, they also became less willing and able to lend money to other entities such as other financial institutions and firms that wished to borrow money to expand their businesses. This situation where it is difficult for people to get loans from banks is termed a 'credit crunch'.

The credit crunch spread to the rest of the global financial system as modern financial institutions are often multi-national in nature and it is normal for inter-bank borrowing to cross national borders (i.e., European banks that used to borrow from US banks find that they are now not able to do so, and in turn, are less able to lend to others).

The credit crunch also affected the US economy as less borrowing by firms and households also meant less spending in the economy overall (borrowing is presumably for the sake of spending). Reduced spending caused reduced production of goods and services, and hence, lower economic growth. The US economy was observed to enter a recession in Dec 2007.

Singapore did not suffer much of a credit crunch as our banks were less exposed to the toxic assets (i.e., were not creditors to bad debtors). Our government also acted quickly to provide liquidity so that borrowing and lending were not curtailed. As such, the reduction in the availability of credit in Singapore was limited and temporary, so much so that the Asian Development Bank labelled the situation in Singapore as a 'credit hiccup' rather than a 'credit crunch'. This explains why at the start of 2008, Singapore's concern was inflation rather than economic growth.

However, towards end 2008 and 2009, the global recession triggered by the US recession started to affect Singapore via the trade channel. As Singapore's major trading partners experienced recessions or slower growth, our exports began to decline. This caused a lagged recession in Singapore. At the same time, the inflationary pressures eased off and the concern turned towards economic growth instead of inflation.

Aggressive government initiatives to stem retrenchment such as the \$4.5 billion Jobs Credit Scheme introduced in January 2009,

coupled with flexibility in the labour market to reduce wages or get workers to work shorter hours instead of firing them, cushioned the effect of the recession on employment. The resilience of the Singapore economy allowed a fast rebound as the global economy started to recover in 2010. In fact, by April 2010, Singapore had



recovered all the output lost since the peak of the first quarter of 2008. Singapore had fully recovered.

### The Post-Crisis Challenges for the Singapore Economy

While Singapore has recovered from the crisis, amidst the opportunities, the post-crisis world still holds many challenges for Singapore.

First, the post-crisis world is still a volatile one. Financial stresses are not over in the advanced countries, especially in Europe where the unresolved debt crisis continues to impact the real economy. A volatile global economy carries great risks for small and open economies like Singapore as the nature of our economy makes us extremely susceptible to external influences.

Second, the major policy responses to the global financial crisis have negative downstream effects that will manifest in the post-crisis world. Some countries will face inflationary pressures

In view of the opportunities and challenges Singapore faces in the post-crisis world, it is timely to review Singapore's development strategy, which, since independence, has always been government-led and centred on maintaining economic growth such that the fruits of growth can be redistributed to citizens in the form of 'supply-side socialism' in that citizens benefit mainly from job creation and provision of social services such education and healthcare.

from the use of unconventional monetary tools like Quantitative Easing while others will face problems related to a huge rise in public debt due to the increase in government spending and/or reduction in taxes when expansionary fiscal policy was employed. For these countries, funding or trying to reduce the public debt will create headwinds for growth. The problems faced by these economies may again affect Singapore due to our openness. Imported inflation is possible; as is a slowdown in growth transmitted via the trade channel.

Third, weak global recovery in terms of growth and employment, coupled with discrediting of free-market ideologies which are seen to be the reason for the mess in the first place, may result in countries returning to populist protectionist policies. Governments are under pressure from the voters to protect jobs and one way this may be done is to reduce competition from foreign goods and services. For Singapore, an export-oriented economy, this does not bode well.

Fourth, there is an inevitable re-balancing of the world's currencies that has yet to happen. The currencies of countries that have persistent Balance of Payment (BOP) surpluses (e.g., China) must appreciate against those that have BOP deficits (e.g., US). However, the process for this to happen could be chaotic. For trade-dependent Singapore, movements in exchange rates would have significant effects. As China moves into higher value-added manufacturing as it loses its price advantage from having a cheap currency, albeit limited, there will be more competition with Singapore.

Other challenges also stem from western countries' households needing to rebuild their savings, which will dampen consumption and hence exports from Singapore in the short run. Additionally, while regional growth driven by economic integration will be good for Singapore, this growth could be curtailed by regional political instability such as those experienced recently in Thailand and Malaysia.

### **Singapore's Economic Strategy**

In view of the opportunities and challenges Singapore faces in the post-crisis world, it is timely to review Singapore's development strategy, which, since independence, has always been government-led and centred on maintaining economic growth such that the fruits of growth can be redistributed to citizens in the form of 'supply-side socialism' in that citizens benefit mainly from job creation and provision of social services such education and healthcare.

Just post-independence, the small size of the domestic market and the dearth of natural resources convinced the Singapore government of the futility of import-substitution strategies that were adopted by many post-colonial developing countries. Instead, Singapore looked outward to generate demand for its goods and services. To this end, Singapore's strategy was to facilitate trade as much as possible. Singapore became an ardent advocate of free trade, actively participating in bringing about multilateral trade deals (e.g., ASEAN Free Trade Area (AFTA)) and signing numerous bilateral trade agreement (e.g., with US, Japan, and India).

To produce the goods to export to the rest of the world, Singapore's lack of indigenous entrepreneurs and domestic investment in the early days again pushed the government to look outwards. The solution adopted was to attract foreign direct investment (FDI). The big plan was to have foreign firms produce goods in Singapore to export to foreign countries and in the process, create employment and income for Singaporeans. To do so, enabling economic structures were put in place to attract FDI to Singapore. Two key players were the Economic Development Board (EDB) and Jurong Town Corporation (JTC); the former to actively woo multinational corporations (MNCs) to Singapore by offering incentives such as tax breaks or 'monopoly status', and the latter to strengthen the pull factor by offering structural support such as ready-built factories and the associated necessary infrastructure.

The building of the infrastructure to make Singapore an attractive destination for FDI was centrally planned by the Singapore government through statutory boards such as JTC. To pay for it, the government made use of the compulsory savings, budget surpluses, and rent from land acquired under the Land Acquisition Act of 1966 (more than 90% of land in Singapore is owned by the government and leased back for residential, commercial, and industrial development). The practice of centrally deciding the allocation of national savings continues today via Government-Linked Companies (GLCs) such as Temasek Holdings that invests the same source of funds mentioned previously.

The above described the strategies for economic development. For macroeconomic management, the tools of choice were currency and labour cost management. Control over exchange rates was chosen over control over interest rates with the aim of keeping inflation low and stable. Given the openness of the economy, exchange rate management which affected trade, was a more effective lever in taming the inflation dragon as opposed to interest

rate management which targets consumption and domestic investment.

Since management of inflation via exchange rates precluded depreciation as the primary tool of gaining cost-competitiveness (depreciation of the currency to lower export prices necessarily means higher import prices and hence imported inflation), labour cost management was chosen as the tool for gaining price-competitiveness via cost-competitiveness. As such, flexibility in wages was intentionally built in such that in an economic shock, wages can decrease to absorb the shock and protect employment.

There has also always been active government intervention at the more micro level in the form of industrial and labour force policies. There were perpetual calls to "Restructure" and "Up-

grade" to keep moving up the value-added chain and prevent the Singapore economy from being hollowed out from having too narrow a manufacturing base should a fierce competitor be encountered. This diversification was done in recognition of the susceptibility to external swings our export-and-FDI oriented strategy necessitated. The same spirit of risk diversification could also be observed in the more recent years where local firms were encouraged to ex-

pand overseas to increase the net income from abroad to counter a shortfall in exports should it happen.

While the approach has served Singapore remarkably well, the Achilles heel of susceptibility to external swings remains. Additionally, in terms of translating economic development into citizen welfare, rising levels of income inequality suggests that not all are benefitting equitably from this 'supply-side socialism'.

Three observations warrant a re-think of Singapore's economic strategy: growth has become more volatile; productivity is lower than one would expect despite the constant calls for 'upgrading'; and income inequality has risen.

## Re-thinking Singapore's Economic Strategy

Three observations warrant a re-think of Singapore's economic strategy: growth has become more volatile; productivity is lower

The recommendations of the Economic Strategies Committee did not represent a fundamental shift as the government would still play a key enabling role; the GLCs and MNCs would still be the main drivers; and the G3 economies remained the important markets. However, there was a little more emphasis on the counterparts to the MNCs, GLCs, and G3 economies in the form of encouraging SMEs' development, and encouraging firms to look at regional or global markets as export destinations. In sum, the recommendations were small steps in a different direction while largely maintaining the top-down, capital-intensive export focused approach.

than one would expect despite the constant calls for 'upgrading'; and income inequality has risen.

In response to the observations, there is cause to consider moving from an external-focused strategy to a domestically-driven, service and innovation oriented one. The assumption that Singapore's domestic market is small must be challenged. While the absolute number of consumers is small, the high purchasing power per consumer makes up a total purchasing power that is nothing to be sneezed at. As such, it may be possible to reduce the focus on exports and replace it with domestic demand by focusing on high-income services such as medical services, tertiary education, and wealth management. A re-orientation away from exports towards domestic demand would reduce the openness of the economy and provide a buffer against economic volatility from external demand shocks. Additionally, even within the export markets, there is room for diversification by rebalancing the focus from the G3 markets (US, Japan, EU) towards regional economies that are enjoying good rates of economic growth, which will also see a rise in demand for high-income services previously mentioned. This too, would address the volatile growth.

A move towards a more innovation oriented economy would entail, among other things, reducing the dependence on foreign workers as cheap foreign labour inhibits the incentive to adopt productivity-enhancing processes. Apart from the increase in productivity, restricting the inflow of foreign labour would also push up wages at the bottom end, resulting in a reduction in income inequality as well.

Widening the goals of economic policy to be more explicitly inclusive would address the observation of rising income inequality.

This widening would involve flipping the thinking behind 'supply-side socialism' where economic growth is seen to be the key to welfare enhancement via the creation of jobs. Instead of having a target growth rate and then determining how much foreign resources (in terms of FDI and foreign labour) are required to meet it, we can determine what growth rate can be achieved without excessive import of foreign labour and set that as the target instead. This necessarily tips the balance towards more inclusive, less unequal growth. Additionally, in terms of key indicators, there can be a formal adoption of indicators beyond GDP growth since the improvement in standard of living accruing to economic growth is less equally felt with the rising inequality. Other indicators to be considered include real median wage growth or the ratio of average income of the top income quintile to that of the bottom income quintile.

Finally, allow more decentralised market forces to determine the allocation of resources as opposed to 'picking winners' would also address the observation of volatile growth. In the early days of independence, there was a clear need for centrally planned, top-down direction for the allocation of national savings to picking 'winners' as this was crucial to survival and there was little room to fail (additionally, as an economy playing catch-up, 'winners' were more easily identified). However, the Singapore economy has since matured and there is more latitude to allow market forces to pick 'winners'. Less top-down intervention in terms of working through GLCs and attracting MNCs can be complemented by a lower enforced savings rate. A lower savings rate frees up more consumption which generates demand for goods and services that domestic Small and Medium Enterprises (SMEs) can take

advantage of. The shift from a MNCs- and GLCs-oriented economy to a more domestic SME-oriented one would have the effect of reducing the volatility in growth by creating a thriving domestic SME sector.

### The Economic Strategies Committee

The Economic Strategies Committee was set up in May 2009 to develop strategies for Singapore 'to build capabilities and maximise opportunities as a global city in a new world environment, so as to achieve sustained and inclusive growth'. The findings were released in February 2010.

The recommendations of the Economic Strategies Committee did not represent a fundamental shift as in the recommendations, the government would still play a key enabling role; the GLCs and MNCs would still be the main drivers; and the G3 economies remained the important markets. However, there was a little more emphasis on the counterparts to the MNCs, GLCs, and G3 economies in the form of encouraging SMEs' development, and encouraging firms to look at regional or global markets as export destinations. In sum, the recommendations were small steps in a different direction while largely maintaining the top-down, capital-intensive export focused approach.

### Conclusion – Follow-up to the ESC's Recommendations in the Singapore Government Budget from 2010–2015

The recommendations from the ESC were promptly taken up in the 2010 Budget which was themed "Towards an Advanced Economy: Superior Skills, Quality Jobs, Higher Incomes". In line with the ESC's key recommendations, two of the focus areas of the budget were increasing productivity and growing globally competitive firms.

To achieve the former, it was recognised that the market had a role to play in the 'natural selection' of higher value-added industries. On the supply-side, the Productivity and Innovation Credit (PIC) scheme was put in place to subsidise firms' efforts to increase productivity (e.g. purchasing productivity-enhancing machinery). This was the 'carrot' in the carrot-and-stick approach adopted. The complementary 'stick' was the moderation of cheap foreign labour inflow. For workers, the National Productivity and

Continuing Education Council was also set up to address worker re-training and upgrading.

For the latter area of growing globally competitive firms, improving partnerships between MNCs and local firms was one of the strategies adopted. The Partnership for Capability Transformation (PACT) was set up to facilitate not just the procurement of goods and services from local firms by MNCs, but also the development of local firms' competencies in meeting stringent quality and certification requirements. Access to growth funding for SMEs was also enhanced.

In terms of the re-structuring of the economy to achieve higher productivity, Budget 2011 carried on in largely the same vein with both one-off top-ups and long-term enhancements to the incentive schemes. The tightening of foreign labour inflow also continued. Of note in this budget was a noticeable shift to more explicit social spending under the 'Grow and Share' package, a small departure from the previous 'supply-side socialism'. The 2012 – 2014 Budgets continued with the consistency of the previous two budgets. Amidst the slew of new initiatives, foreign worker levies were further increased and dependency ratio ceilings were reduced. Both the PIC scheme and subsidies for retraining continued to be enhanced. On the social front too, the more explicit social spending observed in 2011 continued, with a clear emphasis to address income inequality and its associated problems.

All in all, over the period of 2011–2014, the budgets produced a mixed bag of results, with labour productivity fluctuating without a clear upward or downward trend.

After the big push towards restructuring and increasing productivity over five years, Budget 2015 was one of consolidation. Transition support packages were rolled out, with extensions made to both the Wage Credit Scheme and Corporate Income Tax rebates to allow firms time to adjust. Foreign worker levies, except for some in the construction sector, were frozen or deferred for the same purpose. For workers, SkillsFuture was introduced as a framework for continual re-training and upgrading. Whether the measures go far enough to address the problem of low productivity growth remains to be seen.

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This article is an excerpt from Bhaskaran M, Ho S L, Low D, Tan K S, Vadaketh S, Yeoh L K (2012). Inequality and the Need for a New Social Compact. *Singapore Perspectives* 2012.



# Towards a New Social Compact

by Chua Yeow Hwee  
and Manu Bhaskaran



The traditional social compact in Singapore had been based on the premise of self-reliance. The government would pursue economic growth to ensure employability of workers, while retirement funding would be achieved through a compulsory savings scheme that the government managed. The social safety net was therefore deliberately limited, without schemes such as unemployment benefits and tax-funded state pensions as in most developed countries. While this model of limited social security worked during the period of Singapore's economic take-off which delivered high and rising standards of

living for the vast majority of Singaporeans, strains are beginning to show in the traditional model as rising income inequality and higher economic volatility created more concerns among average Singaporeans about financial insecurity and the seeming lack of government support.

Consequently, as Singapore celebrates her 50<sup>th</sup> year of independence, it is timely to shed light on how Singapore is moving towards a new social compact between the Government and her citizens. This article first examines the need for a new social compact in Singapore by looking at global trends, as well as analysing headwinds in the domestic economy following the global financial crisis. We will then touch on rising income inequality, one of the key drivers for the strain in social compact. This will be followed by a discussion on how the Government has responded with new, uniquely Singaporean, policies that include increasing social spending and support for the needy. Finally, we conclude by assessing the features of the Budget 2015 and future policy changes in contributing to a new social compact.

### Need for a New Social Compact

There have been major political upheavals worldwide since 2011, leading to a paradigm shift in the social compact between a government and her citizens. In Middle-East and Africa, the successful uprising in Tunisia against their former leader led to similar anti-government protests in many Arab countries, culminating in the Arab Spring. In United States and Europe, a series of Occupy movements were held from New York to London, as anti-capitalism protests spread across the globe. With the use of Internet-based technologies, protestors managed to assemble together to unleash their pent-up frustration. Banners reading "We are the 99%", highlighted that the richest 1% of the world's population controlled more economic wealth than 99% of the population, a finding reiterated by Economics Nobel Laureate economist Joseph Stiglitz.

In Singapore, there have been many calls for a new social compact since the 2011 watershed election which signalled a degree of discontent among Singaporeans over issues such as weakly rising median incomes and the adequacy of retirement funding. The ability of CPF to provide for retirement adequacy as the Board increased the Minimum Sum amount remains an ongoing concern in the hearts of Singaporeans with its scheduled



annual adjustment to \$161,000 in July 2015. In addition, Singapore's first labour strike in 26 years due to foreign bus drivers from China began to cast doubts about Singapore's much lauded tripartite movement. Subsequently, Singapore experienced her first riot in over 40 years in 2013, as foreign workers in Little India overturned police cars and burned ambulances. This exacerbated the unintended consequences of the dependence on foreign workers as the electorate began to question the sustainability of Singapore's economic and social model.

In view of the domestic context illustrated above, many discussions were convened to explore the deeper issues in Singapore and the evolving role of the Government. The seminal background paper on "Inequality and the Need for a New Social Compact" (*Singapore Perspectives 2012*) in particular, highlighted the premise that Singapore was facing a fast-changing socioeconomic context and the Government needed to play "the role of an activist, more redistributive state, one that aims to strike a better balance between social protection and individual responsibility". Amongst others, increasing income inequality was highlighted as one of the key reasons for the strain in social compact and it was imperative to address this issue.

## Income Inequality

Income inequality for the past decades is a major issue worldwide, not just in Singapore. Thomas Piketty's *Capital in the Twenty-First Century* (2014) illustrated that the share of all income taken by the top ten percent of households increased sharply in Anglo-Saxon countries such as Australia, United States, and the United Kingdom, as well as emerging economies such as China and Indonesia. Piketty argued that, inequality tend to rise when the rate of return exceeded the economic growth rate and he postulated that the growth rate will likely fall below the rate of return in the near future, worsening income inequality on a global scale.

Singapore is no exception. In Singapore, there has been evidence of rising inequality. The ratio of the income of households in the highest decile to that of the lowest decile increased sharply from 11.5 in 2000 to 16.8 in 2013. In addition, the Gini Coefficient (before accounting for government transfers and taxes) increased from 0.442 in 2000 to 0.482 in 2007, before decreasing to 0.463

in 2013. It is hence evident that not all have benefited from Singapore's economic growth. The emergence of the "working poor", a segment of society which are employed but are unable to meet their basic needs, has focused attention on the need for an expanded social safety net.

Many studies have shown that globalisation and technological advancements have played a significant role in widening the income disparity. Economics Nobel Laureate Eric Maskin's presentation in the 2014 Annual World Bank Conference in Development Economics specifically highlighted the need to allow "the low skilled workers of the world to share in the fruits of globalization" as globalized production led to an increase in inequality. In Singapore, it has been exacerbated with the domestic policies. With the signing of Free Trade Agreements and Comprehensive Economic Cooperation Agreements, Singapore developed a liberal immigration policy to spur economic development. As anticipated, the influx of low skilled foreign labour led to an increase in the supply of low skilled workers in Singapore, depressing the wages of jobs such as factory workers and cleaners. It is noteworthy that in comparison to countries such as Hong Kong, workers in the construction sector are paid 1.5 to 3 times less in Singapore due to tighter immigration restrictions in the former. On the other hand, as Singapore developed into a financial and bio-medical hub, highly skilled foreign labour became attracted to the city-state. This benefited the group with the necessary skills and knowledge, as there would be myriad of opportunities available. In addition, studies such as Goos and Manning's "Lousy and Lovely Jobs" (2003) demonstrated that technological changes have been more beneficial for skilled workers vis-à-vis their unskilled counterparts, leading to polarisation of job opportunities. With the advent of technological advancements in the past decade, it is no surprise that income disparity has been widening between the skilled and unskilled.

In her pursuit to be a global city, Singapore reduced personal income tax rates from 28% in 2002 to 20% in 2007 and supplemented the fall in tax revenue by increasing the Goods and Services Taxes (GST). While the potential regressivity of the GST was mitigated by the issue of GST Vouchers to the lower income, these tax reforms may have caused the fiscal regime to be less distributive than before. Furthermore, by focusing on high value-

added industries and Meetings, Incentive Travel, Conventions and Exhibitions (MICE), there has been a conscious effort to bring in world-class amenities, from Michelin Star dining to Formula 1. Behavioural economists have shown that people only cared about their relative consumption levels and would compare themselves to the affluent. While the world-class proceedings managed to position Singapore as a global city, this led to an unintended consequence of alienating the lower income group, who became envious of the ultra-rich as they were not able to afford the luxurious lifestyle. More importantly, the lower income group found themselves suffering from the negative externalities brought about by the Government's policies without enjoying the corresponding benefits. This includes higher traffic congestion, an increase in house and transport prices, as well as inflation, which only served to further reduce their purchasing power.

### **Government's Responses Towards a New Social Compact: 2012 to 2014**

The Singapore government does not eschew bold policy changes in response to changes in the economy. The taboo-breaking decision in building integrated resorts in 2004 is a case in point. Nonetheless, the call for a new social compact came at a challenging time for the Singapore Government. With an uncertain economic outlook due to the Euro-Zone Debt Crisis and the unravelling of the Middle East, the Singapore Government would need to meet the changing demands of the population without affecting domestic businesses and global investment confidence. In the face of these challenges, the Singapore Government piloted a conscious effort to alleviate income inequality and increase social support to the old and needy.

Firstly, the Singapore Government sought to address the issue of low income Singaporean workers. Budget 2012 was introduced as a "Budget for the Future" as the government attempted to tighten the foreign worker quota by reducing the Dependency Ratio Ceiling. This would inevitably reduce the maximum percentage of foreign labour that firms could employ. In addition, foreign worker levies would grow, increasing the cost of hiring foreign labour for firms. Conversely, Special Employment Credit would be granted to employers who hire older Singaporean workers, above the age of 50, earning up to \$3,000 per month. As discussed previously,

the wages of lower income workers had been suppressed due to the huge supply of foreign workers. With a decrease in supply of foreign workers due to the restrictions, as well the monetary incentives to hire Singaporeans and not foreign workers, this served to increase the wages of low income workers, thereby reducing the income disparity. This policy was a departure from the Singapore's Government liberal labour policies. Nevertheless, due to the tightening of foreign labour, firms especially SMEs were faced with a sudden sharp increase in wages. It became necessary for these firms to restructure in order to survive, and support in the form of Productivity and Innovation Credit Scheme were introduced by the Government to help firms restructure.

Furthermore, to ensure that firms consider Singaporeans fairly for a job, the Jobs Bank was introduced in 2013, whereby it became mandatory for employers to list job vacancies for a minimum of 14 days before they hire a foreign worker on Employment Pass. This complemented the drive towards eliminating discrimination in the workplace, amid the rising negative sentiments by Singaporeans who felt discriminated in their job applications as compared to their foreign counterparts. Even though the Government was against the notion of having a national minimum wage, the Progressive Wage Model (PWM) was introduced in 2014. Through the mandatory licensing regime in PWM, all cleaners would receive an entry-level wage of \$1,000 per month. An estimated 55,000 cleaners in the resident workforce who earned a median gross wage of \$850 per month previously are expected to benefit from this.

In addition, the social safety net policy entered a new phase during the 2013 National Day Rally. With the introduction of MediShield Life, there would be lifetime medical coverage for all Singapore residents, including those with pre-existing illnesses. MediShield Life sought to transform how healthcare will be financed as the burden of caring for the poor and sick will be shifted to the rest of society. With the pooling of premiums by all Singaporeans and the Government's support for the less well-off, Singapore is indeed one step nearer to a universal healthcare system, which is fundamentally dissimilar from the financing of the current 3Ms system (Medisave, Medishield and Medifund).

### **A New Social Compact in 2015**

With the different policies put in place, there is a build-up to a

Over the next few years, we should expect to see a clearer direction in the transformation of the social policies. To sustain the new social compact, the Singapore Government needs to move towards a new Economic Growth Model, broadening their economic goals from GDP growth per se to a range of objectives including maximising consumption per capita, improving median household incomes, and strengthening domestic businesses especially the small and medium enterprises. Amid the dynamic challenges and opportunities ahead, such as the ASEAN economic community taking effect in December 2015, there could be a more uneven distribution of gains between different stakeholders. It is hence imperative that we minimise income insecurities and enhance sustainability and resilience.

new social compact in 2015. In the 2015 Budget Debate round-up speech, Deputy Prime Minister and Minister of Finance Tharman Shanmugaratnam summarised that the Government is “seeking to build a stronger social compact for the future, a compact where personal and collective responsibility go hand-in-hand.” While he cautioned that Singapore could not go into the cradle-to-grave welfarism that was prevalent in some European countries, he acknowledged that there has been a major shift in the policy stance towards a more redistributive role during the past few years. This recognition is highly significant and has several implications for the new social compact.

Firstly, the new social compact entails that there would be an increase in government expenditure. A huge \$11 billion upsurge in expenditure was recorded for Budget 2015 as compared to the previous year, primarily due to the increase in development funds. With \$3 billion invested in the Changi Airport Development Fund, \$1.5 billion for the National Productivity Fund and \$1 billion for National Research Fund, it is clear that the focus is on economic and social infrastructure. In terms of social expenditure, 8% of GDP was budgeted in 2015, as compared to 5% in 2007. While this is still below 21.6% set aside by OECD countries in 2014, it

is expected that Singapore’s social expenditure will increase in the next decade. To pay for the expected hike in spending, the Government included Temasek Holdings’ long-term expected returns in the computation of net investment returns contribution (NIRC), as well as increased taxes for the top income earners amongst others. It is striking that the policy change to raise the marginal personal income tax rate for those earning at least \$160,000 per annum is the first in decades and could signal that the higher income will need to pay more taxes in future.

In addition, there would now be a safety net for needy Singaporeans during their retirement days with the introduction of the Silver Support Scheme. This scheme seeks to share their burden of retirement with the rest of society by supplementing their income with cash payments. A permanent programme, this is unlike other schemes such as the “Pioneer Generation Package” that was introduced in 2014 for Singaporeans above the age of 16 in 1965, in appreciation for their contributions to Singapore’s national development. Under the Silver Support Scheme, all Singaporeans will be eligible for the scheme once they turn 65, as long as they meet the criteria. While this scheme does not seek to replace the Government’s underlying philosophy that elderly care

is of individual responsibility and that the family should always be the first line of support, it provides social protection to the needy, a missing piece in Singapore's social policy.

Notwithstanding the above, social policies have been delivered in a rather piece-meal manner. Over the next few years, we should expect to see a clearer direction in the transformation of the social policies. To sustain the new social compact, the Singapore Government needs to move towards a new Economic Growth Model, broadening their economic goals from GDP growth per se to a range of objectives including maximising consumption per capita, improving median household incomes, and strengthening domestic businesses especially the small and medium enterprises. Amid the dynamic challenges and opportunities ahead, such as the ASEAN economic community taking effect in December 2015, there could be a more uneven distribution of gains between different stakeholders. It is hence imperative that we minimise income insecurities and enhance sustainability and resilience. The onus is on the current Government to continue to be brave in their political reform, transforming the Singapore economic and social policy over the next 50 years.

## Conclusion

In conclusion, the new social contract entails the need to minimise economic insecurity, and inequality of income distribution and to maximise opportunities for all Singaporeans. The expectations of policy have changed, with the focus on Singaporean's welfare

being instrumental in the success of the nation state. It is also worth mentioning that we have seen an increase in Singapore's social expenditures in recent years. Particularly, there is a stance towards greater social support in Budget 2015, whereby schemes such as the Silver Support Scheme enhance social protection for low-income Singaporeans. This is a departure from the past practice and is expected to continue.

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# The LASIC Principle: The Rise of Internet Finance and Inclusive Economy

by Tan Tze Koon & Eileen Tay

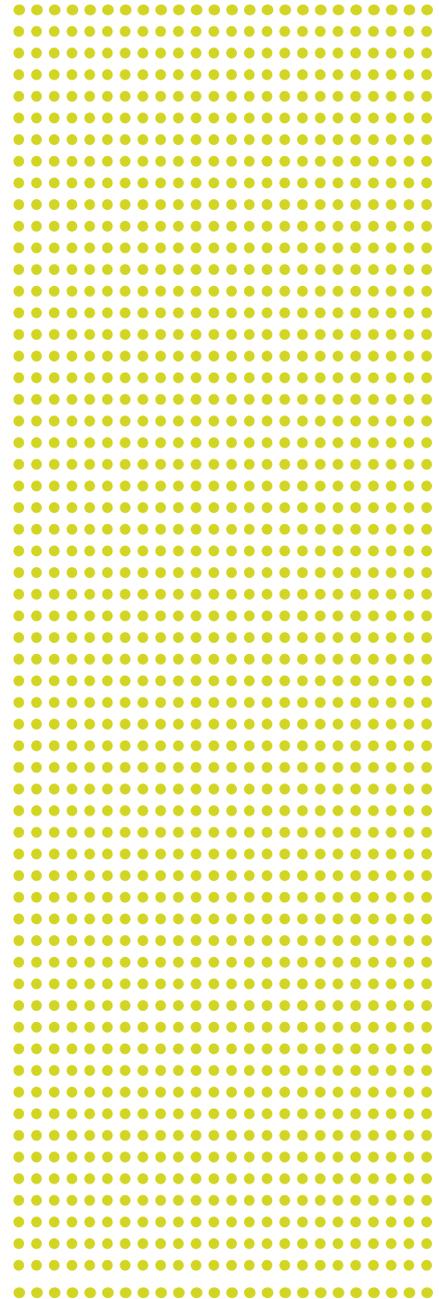




In the same way that the steam engine has transformed the world economy over the last two hundred years, technology is changing the way the world economy works. Singapore has been fortunate to take advantage of the locomotives of growth in the world economy over the last fifty years. Today, we are one of the leading economies in the world. However, we are at the cusp of changes and have to find our way to move forward without the benefit of following in the footsteps of other more advanced economies in the future.

Technology has been playing an increasingly important role in the world economy. If we are at the tipping point of a technological revolution, where will this lead us and how should we move forward? We discussed this issue with one of the leading thinkers in this field — Professor David Lee Kuo Chuen, Executive Director of Sim Kim Boon Institute for Financial Economics, SMU and Founder of Ferrell Asset Management. Professor David Lee has been researching this issue over the last couple of years and has authored and co-authored several articles and books in this area.

In the dialogue, Professor David Lee shared his vision that the future is going to be exciting for businesses that utilize financial technology to lower operating costs to serve the 70% unbanked and underbanked. He introduced the LASIC (low profit margin, asset light, scalable, innovative, and compliance ease) principle, which describes attributes of business models that can successfully harness financial technology to create sustainable social businesses for financial inclusion and impact investment.



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**Professor David Lee, can you share with us what you envision Singapore will be like in the next 50 years?**

**David Lee:** One can almost confidently forecast that changes will continue to occur at a super exponential rate not seen before. As technology advances to new frontiers, time will be further compressed. The next 50 years will likely witness occurrences that would have taken 100 years or more today to unfold. The future is all about paradigm, revolution and disruption. It is also about leadership in government who is adept to harness, innovate and execute revolutionary ideas and changes in a responsive manner, and to mobilise and connect the private sector to work hand-in-glove with the public sector.

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**How do you think the advances in technology will lead to paradigm, revolution and disruption?**

**David Lee:** There will be continual emergence of simpler, cheaper, initially-lower-profit-margin disruptive products that empower and allow consumers with low purchasing power and few skills to access products that would otherwise be inaccessible to them. Given the objectives of cost-down and lower profit margin, emerging markets with lowest consumption power and maximum welfare improvement will offer the potential for highest growth. With economies of scale, profit margin can increase over time as the product is adapted at higher cost with more features; known as reverse innovation, to cater to the more developed markets. M-Pesa is perhaps one such invention, and another is Ant Financial or Alipay.

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**In your opinion, who will face the greatest challenge in this disruption?**

**David Lee:** Mainstream financial institutions such as banks and fund managers are constrained by domestic and international regulation and prevented from servicing those at the bottom of the pyramid mainly because the compliance costs and infrastructure costs are high. Besides costs and culture, the business units are organized in silos with Key Performance Indicators designed to focus on perceived high margin business that may not be sustainable. Meanwhile, the financial world and especially asset allocators are struggling to find alternative asset classes that will protect the portfolio on the downside in a low growth, low yield and over-valued regime. With Quantitative Easing (QE), many managers and sovereign wealth funds have increased exposures to private equity and real estates. Given the massive liquidity, it makes sense to increase allocation to asset classes that have net asset valuations not directly linked to market prices. Delinking from short term irrational price fluctuation, caused by capital flow in an overly liquid environment, is important for long term investment and its sustainability.

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**What opportunities will this challenge present to the financial institutions?**

**David Lee:** As business costs for mainstream financial institutions continue to increase with more stringent capital adequacy requirement and higher compliance costs, operating costs can be lowered with the introduction of financial technology which will create opportunities to reach out to the unbanked and underbanked.

Lower margin businesses like micro-insurance and micro-loans will become viable. Technological advancements especially in the area of mobile technology will enable many unbanked and underbanked segments of the world to gain access to financial services. These technologies not only enhance the financial sector but also allow wider access to the banking and financial services. The unbanked and underbanked can be reached with business model using financial technologies which are low margin, asset light, scalable, innovative, and with ease of compliance (LASIC). The 70% of unbanked and underbanked can now be served with improved cost structure brought about by technology (which will vastly improve the world economy). With this access to untapped market via technology, diverse and profitable business opportunities will be created.

### Can you tell us more about the LASIC principle?

**David Lee:** The LASIC principle defines five important attributes of business models, which can successfully harness financial technology to achieve the objective of creating sustainable social businesses for financial inclusion and impact investment. The five attributes are: 1. low profit margin, 2. asset light, 3. scalable, 4. innovative, 5. compliance ease.

#### Low Profit Margin

In a world of wide-spread internet access where information and services are readily available for free, users have low willingness to pay for service providers of any kind (such as video streaming or internet games). High network effects exhibited

in such technologies require an initial phase of building up critical mass. This is a costly process which requires much marketing efforts. Once a critical mass is built, monetization becomes possible through channels such as advertising or subscription fees. The idea is to obtain a large mass of users and attain profitability through low margins and high demand. Low profit margin is a key characteristic of successful FinTech businesses.

#### Asset Light

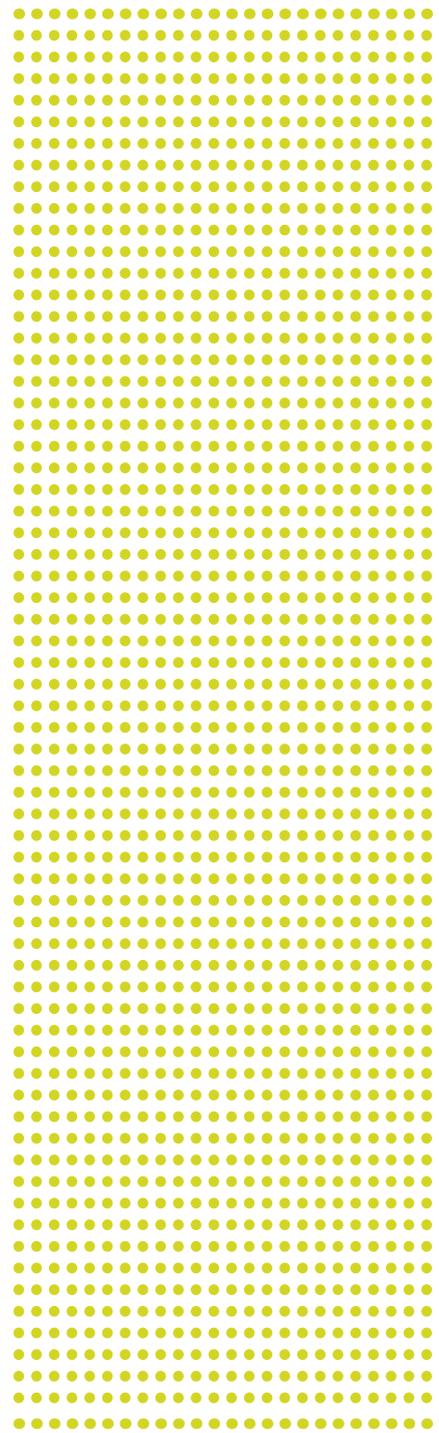
Asset light businesses are able to be innovative and scalable without incurring large fixed costs on assets. This will allow relatively low marginal costs which reinforces the first principle of “Low Profit Margin”. One can add on to an existing system (such as the mobile phone) that depreciates quickly but offers an alternative revenue source (such as an internet phone messaging service) at low marginal costs.

#### Scalable

Any FinTech business may start small but needs to be scalable in order to reap the full benefits of network externalities as described in “Low Profit Margin”. One has to be mindful when developing technology that it needs to be able to increase in scale without drastically increasing costs or compromising the efficiency of the technology.

#### Innovative

Successful FinTech businesses also need to be innovative both in its products and operations. With the increasingly widespread use of mobile phones and internet services, much innovation can be made in mobile technologies (such as contactless technologies) in the FinTech space.



LASIC predicts that disruption forces may perpetuate a low growth, low pricing power, low interest rate and therefore a low productivity environment with low labour force participation rate in the foreseeable future. If combined with a mission for financial inclusion, LASIC will ensure that the use of technology will bring about an inclusive economy that is sustainable, hence beneficial to mankind.

#### Compliance Ease

Businesses that are not subjected to high compliance regime will be able to be more innovative and will have lower capital requirement. While financial stability and consumer protection are important for a market to function, tight regulatory environment has its trade-off. Besides the advantage of a “compliance easy” environment, businesses that receive subsidies or incentives aided by social, financial and economic inclusion agenda brought about by an anti-income/wealth inequality regime will have the added advantage. The main advantage of operating in a lightly regulated environment is that lesser resources are spent on compliance activities and this encourages innovation.

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#### How do you see the banks responding to the rise of internet finance (that uses LASIC principle)?

**David Lee:** Banks cannot expand and sustain their profit growth if they do not expand the customer base. They have to use technology to lower cost for customer acquisition and to serve the customers. Without impact investment and financial inclusion, the profit growth is unlikely to be sustainable.

Secondly, the banks are organised in silos and they are all concerned with self-interest for business units respectively. So, how can the banks change? The answer lies in that the individual unit's Key Performance Indicator (KPI) must include a high percentage of overall performance from impact investment and financial inclusion. In that case, every unit will be bounded by a common mission and objective. The business

unit's performance is measured based on the overall impact of individual actions to improve the banks' overall long term interest.

### Can you provide examples of companies that have achieved financial inclusion using LASIC principle?

**David Lee:** I will cite three case studies; Alibaba Group, M-PESA and Fullerton Financial Holdings. Two of these three businesses are examples abiding by the LASIC principle with the third moving towards the same business model.

#### Alibaba Group

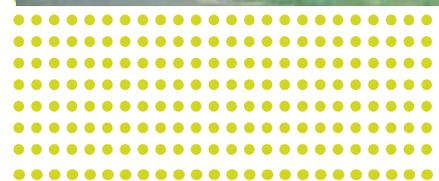
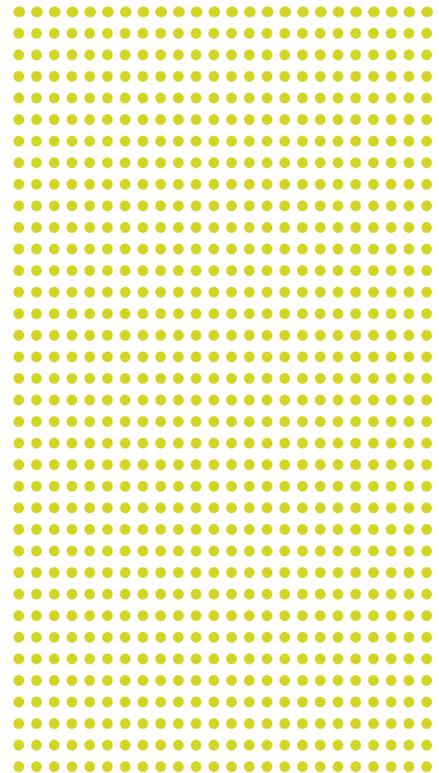
In September 2014, China-based Alibaba Group Holding Limited (Alibaba 阿里巴巴) became the first in history to raise USD25bil in its IPO. By investing in Alibaba, investors have not only bought a US listed company operating in China, they also own an entire ecosystem with retail, wholesale, big data and financial operations that has the potential to go global including companies like TaoBao.com (淘宝网), Tmall.com (天猫) and Juhuasuan (聚划算). Alibaba provides not only an inroad into the consumer market, but also the internet finance market in China's growing market.

Alipay is an online payment system, which was established in 2004 to address the issue of trust between buyers and sellers online for Alibaba. Alipay is not just a payment system, it also provides escrow services for all who transact within the Alibaba e-commerce business. Zhejiang Ant Small & Micro Financial Services Group Company (Ant Financial), which owns Alipay, is estimated to fetch a valuation of USD50bil with close to 190 mil users and 45 mil transactions a day at end 2014.

A related company — Alibaba Microfinance also lend to merchants dealing with Taobao and Tmall. Alibaba Microfinance grants loans to merchants dealing with Taobao by checking the borrowers' credit rating and the state of their businesses. Both applications and approval of unsecured loans are done online for Taobao merchants throughout China. The default rate on its microloans, of which lending amount never exceeds RMB1mil, is 0.87%. The loan terms are usually short and ranging from a few days to several months. Alibaba Microfinance has successfully capitalized on the advantages of internet finance via the use of big data from its E-commerce platform to provide small, fast and flexible loan services to small and micro-size enterprises.

In June 2013, Alibaba launched a new financial product Yu'E Bao. It allows Alipay's account holders to invest their excess cash in the fund with the entry level at RMB1. Account holders are allowed to redeem the fund at any time to pay for their online purchases from Alibaba. The Yu'e Bao platform provides electronic payment services for transactions on China's largest online shopping websites, Taobao Marketplace and Tmall.com. In addition to the automatic transfer functions, Yu'e Bao accounts can be used to shop, pay utility bills, buy lottery and train tickets, book holidays, and pay off credit cards, among other services. Account holders can handle all transactions online through personal computers and via Alipay Wallet-enabled smartphones.

Zhaocaibao (招财宝) is a platform for P2P (peer-to-peer) lending that allows automatic subscription (预约抢购), secured lending with invested assets (变现), SMEs P2P lending (中小企业贷), Retail P2P lending (个人贷), and



crowd funding (直接融资项目). Products are rated and guaranteed by financial institutions such as insurance companies and banks. With the online and mobile platforms beyond banks outlets, the investors have now broadened to include the Y generation with a minimum sum of RM1, which is affordable to most. The investors now enjoy the benefit of a demand deposit that pays market interest rates.

#### Safaricom's M-PESA

Safaricom has a customer base of 21.5mil and 34% of airtime top-ups are made directly through M-PESA. M-PESA (pesa means money in Swahili) is a mobile money transfer service launched in 2007 and it has the widest coverage in urban and rural Kenya. It drives financial inclusion by providing money transfer services, local payments and international remittance services. The mission of Safaricom is to deepen financial inclusion and transform lives. M-PESA has 81,025 agents, 122,000 merchants (24,137 active), and 19.3mil registered customers (12.2mil active). It has successfully penetrated 90% of its telecom customers. M-PESA accounts for 18% of Safaricom revenue and its agents employ more than 140,000 workers.

M-Shwari (a paperless banking platform with loan services by M-PESA) allows deposits as low as Kshs 1 and loans as low as Kshs 100 without having to visit a bank or complete account opening forms. The account is opened and operated from the phone, and there is free transfer between M-PESA and M-Shwari account. M-Shwari has 3.6 mil active customers with Kshs 4 billion in deposits and Kshs 1.2 billion worth of loans issued per month, with non-performing loans at only 2.7%. Cashless distributors have increased to 158 with 1271 distribution points. The growth is likely to be exponential given the

system upgrade to the API on smartphone for near real-time processing of transaction.

#### Fullerton Financial Holdings Pte Ltd

Fullerton Financial Holdings (FFH) is a fully owned subsidiary of Temasek Holdings Pte Ltd that is engaged in long term strategic investment and operation of financial institutions globally. FFH is interesting because it is a leading Asian institution that focuses on serving customers such as the self-employed as well as micro, small and medium enterprises (MSMEs) in the emerging markets. FFH has ten operating financial institutions in nine countries: Indonesia, Malaysia, Pakistan, Vietnam, UAE, Cambodia, India, China and Myanmar.

Fullerton India's Urban Business has over 219 branches across 20 states serving individuals and MSMEs. The main differentiation of Fullerton India is that it uses analytics to choose its customers by combining information from its customer base and credit bureaus. It provides services to customer segments that are not targeted by banks or are underserved by banks. The end-use of the unsecured loans to low income individuals are for home renovation, wedding, children's education and emergencies. For others, the unsecured loans are for business expansion or to fulfill working capital requirements. Using analytics and credit bureau information to select the right customers remains the driver for sustainable business growth. Fullerton India's Gramshakti provides rural financial services and its financial inclusion mission is to make financial services available at the doorstep of rural customers in seven states. This is an important financial inclusion service for those living in the rural areas that accounts for 50% of India's GDP. Its plan is to cover the "last mile" between its branches where financial services are

provided at the residence or place of business of the customers. Within 6 years to end 2014, it has grown from 8 branches in 2008 to over 200 branches, serving 30,000 villages.

Fullerton Myanmar started operations on 7 November 2014 offering short term and micro loans to groups of 5 and individual loans of not more than Myanmar kyat 500k. The loan tenure ranges from as short as three months to as long as 18 months. Loans are mainly for productive assets or micro business working capital such as livestock, sewing machines, shop stock, agriculture seed, health or education needs. It is clear that the model is replicated from the success in India with the potential use of biometric technology to ensure secure and quick transactions with doorstep service.

**If the above examples represent the business model of the future, what could be a key trend in financial technology that accompanies these changes?**

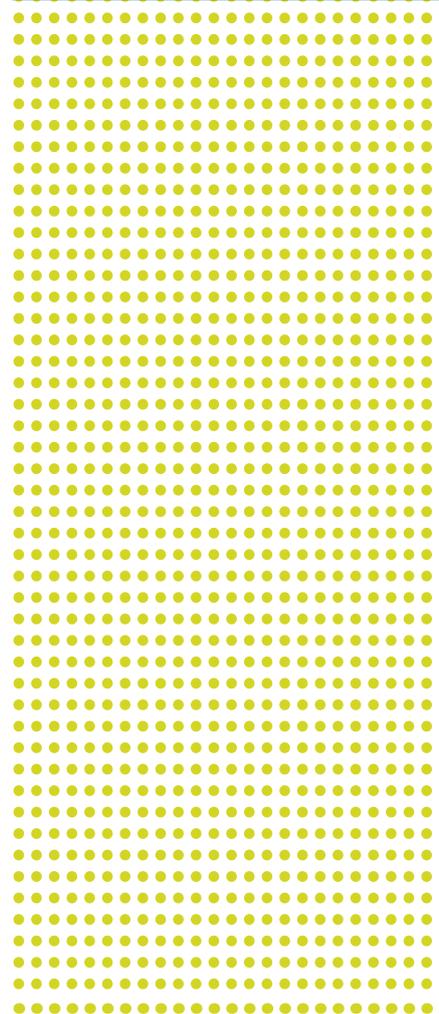
**David Lee:** One new development in financial technology that is drawing worldwide attention is the rise of cryptocurrencies. Cryptocurrencies are a type of programmable digital money that relies on cryptography to ensure secure transfer for tokens and to make records of all transactions on a decentralized digital register. Cryptography is used to ensure that the token spent is recorded on the register and is never spent twice. Interestingly, the cryptocurrency technology exhibits the characteristics of the LASIC principle. The technology is new and is still evolving. Currently, there are more than 500 cryptocurrencies in the market — there may not be a perfect cryptocurrency but each serves a different purpose. Cryptocurrencies

can open the door to a whole new economy of sharing and financial inclusion. It can allow the monetization of a person's social network (<http://getgems.org/>); distribution of music (Bitshares Music Foundation); crowdfunding (Swarm, Counterparty, Colored Coins); decentralization of data storage (MaidSAFE, Storj) and issuance of shares through cryptoequity (Hyperledger).

**In your view, how can Singapore leverage on these emerging trends to achieve the goal of becoming an inclusive society?**

**David Lee:** What I see in Singapore in the next 50 years is that we will have all the prerequisites for a repeat of its success story based on a strategy that will synergise finance, innovation, scalability, and an inclusive economy and society. As a leader in cyber security, information and communication, Singapore will be able to integrate various economic sectors via the cyber space, as well as integrate economic regions, especially finance and trade sectors, via decentralized peer-to-peer network. We will also move from high productivity and high-margin businesses to low productivity and low-margin “social businesses” that will improve the overall welfare of the people, as well as from a mere hardworking, knowledgeable and skilled workforce to an intelligent, nimble and technology-savvy workforce.

Singapore will survive well by not looking solely for solutions to existing problems especially low productivity and fertility that have given rise to low growth and an aging population, but more importantly for more innovative ideas for social businesses based on the Internet that will lead to an all-round inclusive economy and society. Such social businesses are distinct from other



businesses or social enterprises as they seek to address and solve a social need while pursuing a return for their shareholders. In short, they strive for common good by excelling in what they do. Businesses that do not contribute to societal welfare and well-being will find it increasingly difficult to sustain in the long run.

The future will be about reproducing similar but better “experience” than we had in the last 50 years in a futuristic and virtual world: a time-tested reliable and capable government that will strengthen Singapore’s survivability and livability by ensuring an optimum level of foreign reserves, a caring retirement and medical benefit scheme that promotes an inclusive society, a dynamic “wild wild west/Silicon Valley” entrepreneurial environment that will improve income equality, and a committed, compassionate and joyful community that remains united to achieve happiness, prosperity and progress for the nation. Singapore will survive well by not looking solely for solutions to existing problems, but more importantly for more innovative ideas for social enterprises that will lead to an all-round inclusive economy and society.

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This essay traces the thoughts of an ex 'A' Level Economics teacher as she reflects on the meaning and purpose of studying Economics; and its impact on life at large. She then examines whether the teaching of Economics can instill the values and outlook required to drive Singapore through the next phase of its economic and social progress.

### Does A = Passion?

I spent twelve years teaching in schools where it was not uncommon for students to score well in the 'A' Level Examination. As a young teacher, I used to take pride for the good job done. As time passed, I started to wonder whether I was celebrating a little too early. Two encounters in particular made me seriously rethink about what I have been doing.

The first took place about three years ago over a casual discussion I had with a group of students. One student left a

# Finding Purpose in Learning Economics

by Eileen Tay



## ● Education

deep impression when he commented that he felt cheated into reading Economics. I asked for the reason and his reply was that all along he thought the study of Economics was about humans but he couldn't find the humans in the subject — now where have all the humans gone?

Another encounter was over tea with a senior human resource personnel from one of the government agencies who was in charge of scholars' recruitment. She shared with me that many 'A' students seem limited in understanding the extent to which economic theories can be used to explain events that happen in real world as well as how issues are related.

These encounters, together with some other observations, made me wonder about the following three questions:

- What does getting an A in Economics mean?
- Do you need to have passion in the subject to get an A?
- As a teacher, did I manage to inspire students to have passion in their pursuit of Economics knowledge?

I took a break from teaching and my career when I conceived my child. I think it was one of the best things I have done as I finally found time to give serious thoughts to the above questions. This marked the start of my journey of reflection over the last two years.

### What is the purpose of studying Economics?

During my time as a stay-home-mum, I found myself drawn to the UK movement to review the teaching of Economics after the global financial crisis in 2008. A former student who was pursuing his undergraduate studies in the UK would occasionally send me links to update me on what was happening and I would follow up with my own readings to develop more depth and breadth in this subject area.

Although these resources have given many good ideas on how the teaching and learning of Economics can be improved, I can't help but feel that something else is still missing. One night, I laid my eyes on my convocation class photo, I asked my husband the following questions: "What's the purpose of studying Economics? How has it changed you as a person?" He was stunned by the question and attempted several replies. Though none of the answers satisfied me, it was helpful as it helped frame the questions that guided me in my next phase of reflection. I am sure many students will agree that the study of Economics has been useful in helping us understand how the modern economy works but we probably can't say the same about whether it has given us a sense of mission in our lives.

In other words, whilst we can say with pride that the current teaching and learning of Economics has helped produce many bright students who possess a good grasp of theories and skills to analyze the technical problems our economy face, can we say with certainty that the learning of Economics has produced students who are able to understand more about themselves and who know what to do with their lives even when they graduate with a good degree in Economics? Is our learning of Economics

merely restricted to the technical aspect and not to the way we live our lives?

We should not forget that Economics is a social science subject that has deep roots in moral philosophy. That is why Economics is not a value-free subject. At the end of the day, judgements will have to be made and this explains why we have Normative Economics. It is fair to say that what we have learnt, whether through academic or non-academic ways, will affect our principles and values. These principles and values will guide us in our lives and affect our perspectives on issues which in turn will affect our judgements and actions. This will affect the way we live our lives and ultimately how we function as a society. Hence, the study of Economics should guide us not only to think about various issues and our actions henceforth, but it should ultimately lead us to think about how we would want to live our lives and the type of society that we would like to live in.

If we revisit history, we would meet the beautiful minds that created modern Economics and learnt that these great teachers were motivated not only by intellectual inquisitiveness and a hunger for theory, but also the desire to improve the human condition at large. Keynes once said that the role of economic thinkers like himself is to be "the trustees, not of civilization, but of the possibility of civilization". These men, imbued with a strong sense of mission, then went on their lifetime quest for Economics knowledge to help themselves and others understand the modern world and make the most of its possibilities. It was also this sense of mission that guided one of our founding fathers, Dr Goh Keng Swee, to help build the modern economy of Singapore.

The following is an excerpt from an essay written by Dr Goh when he was thirteen years old. It was the first among a series of short essays published in his school magazine.

### My Ambitions (1931)

Anybody who wants to prosper in this world must have an ambition. Ambition comes from a thought or when we get enthusiastic we determine to carry out our thought. He who has an ambition will do his best in order to satisfy himself. He will stick to his work and see that he is the best man that ever has done that work. Our ambition must be able to make ourselves useful to our country, our people and ourselves. To be ambitious, we must have determination so that we may never slack or shirk in our work.

It was this deep sense of social and moral responsibility that guided Dr Goh in his pursuit of Economics knowledge and drove him to take the lead in the “economic engineering” of modern Singapore some twenty years later. Now, the question is how do we keep this flame burning? This leads us to the next section of the essay - whether the teaching of Economics can instill the values and outlook required to drive Singapore through the next phase of economic and social progress?

### **Can Economics promote a compassionate outlook to life?**

As a student, my favourite topic was Economic Development. I was particularly interested in how education could help people break away from the poverty trap and promote economic development. However, as a teacher, I paid less attention to this area because it has been taken out of the ‘A’ Level syllabus. With the break afforded from not having to be in school to prepare students for the ‘A’ Level examination, my interest in this area has been rekindled.

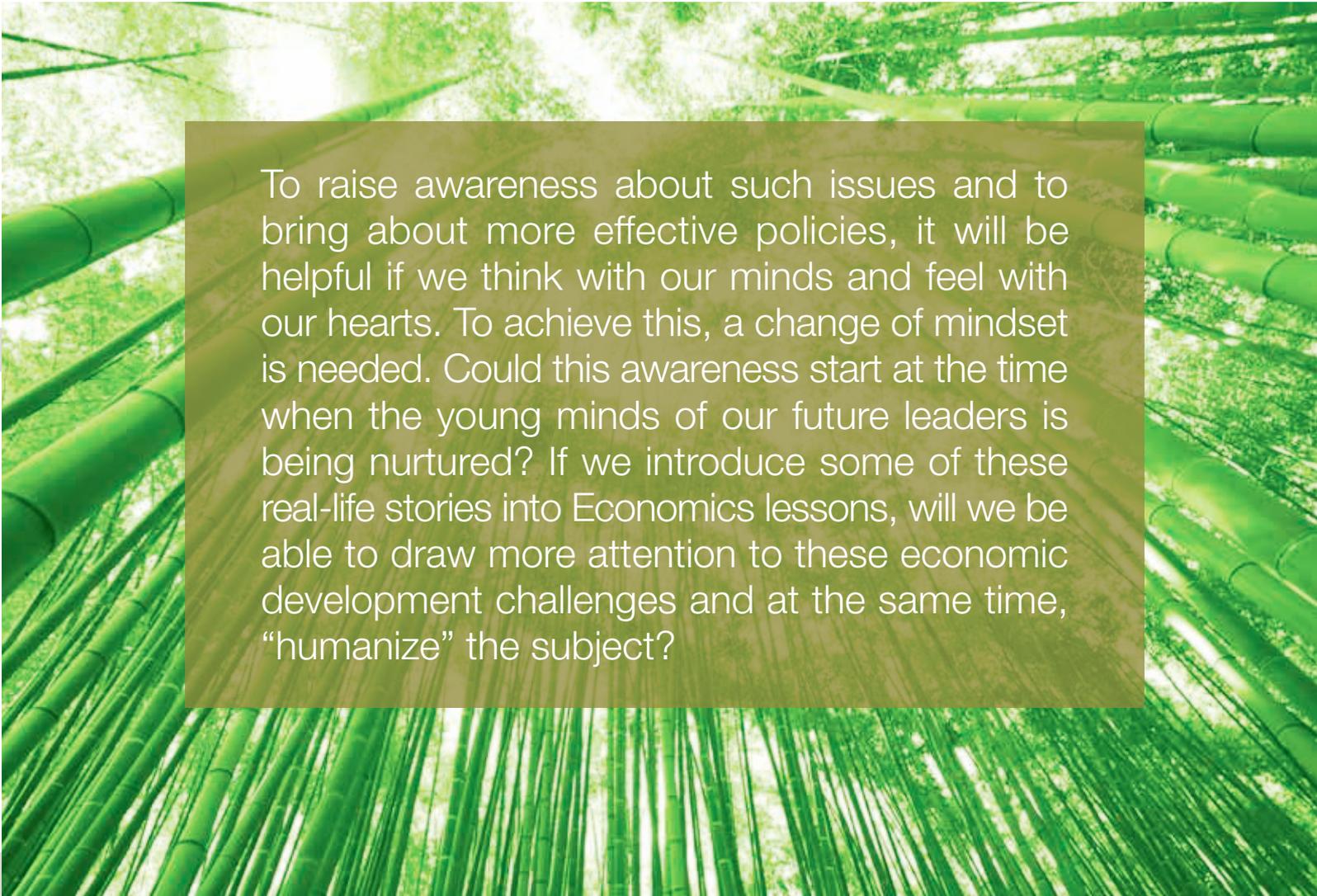
On a personal level, I wanted to gain a better understanding about the current situation with underprivileged students. Thus, I

volunteered to help tutor a group of lower primary school students in one of the neighbourhoods that has a higher density of low-income households.

On my first day, I was greeted with some “surprises”. The lessons were held in the void deck as there was a lack of suitable venues near the children’s homes. Arising from the above, it was challenging to keep the students focused as the gusts of strong winds would send papers flying and the students would be busy retrieving their notes.

I also discovered that most of the students have an average of five siblings and they live in two room HDB units. As I was walking a family of six siblings home one day, we saw a dead pigeon below their block of flat. The eldest boy told me that this is a common sight as shooting birds is a favourite past-time for the kids living there. He then walked off without taking a second glance.

My greatest concern lies with the observation that most of the students seem to be struggling with English. A few of the P2 students could not even write simple sentences to introduce themselves. I wonder how these students are going to cope in the mainstream education if they have problem reading and writing



To raise awareness about such issues and to bring about more effective policies, it will be helpful if we think with our minds and feel with our hearts. To achieve this, a change of mindset is needed. Could this awareness start at the time when the young minds of our future leaders is being nurtured? If we introduce some of these real-life stories into Economics lessons, will we be able to draw more attention to these economic development challenges and at the same time, “humanize” the subject?

## ● Education

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To raise awareness about such issues and to bring about more effective policies, it will be helpful if we think with our minds and feel with our hearts. To achieve this, a change of mindset is needed. Could this awareness start at the time when the young minds of our future leaders is being nurtured? If we introduce some of these real-life stories into Economics lessons, will we be able to draw more attention to these economic development challenges and at the same time, “humanize” the subject? Let me elaborate this idea in the context of market failure in education covered in most Economics lessons at the junior college level.

Currently, many of our students are able to explain the causes of inefficiency in the education sector and the policies the government can adopt to address the market inefficiency, which results in under-consumption. Hence, it is fair to say that our students are equipped with a certain level of technical skills to analyze the problems our society face in a general way. In other words, we have been successful to some extent in engaging the students’ minds, but what about their hearts?

One way to engage both the hearts and minds in the discussion of socio-economic issues is through the use of human stories that will encourage students to share personal experiences drawn from their community involvement. The sharing of these stories may help students feel more connected to the theoretical issues they discussed in class. This can nurture a greater sense of empathy and commitment in finding solutions that can address our socio-economic issues. Hopefully, over time, students studying this subject will be imbued with a sense of mission and social responsibility.

If our ‘A’ students are also people who have the hearts in the right places in the society, we can be assured that the flame started by our founding fathers will keep burning.

### **Will a value-based Economics education bring about greater social benefits?**

Economics education is generally offered from pre-university onwards. As such, it is more closely associated with higher education than general education. According to conventional argument, the divergence between social benefit and private benefit is more pronounced for general education than higher education. The reason is that the main beneficiary of higher education is the individual as the private returns are often more substantial and sustained through their working lives. Hence, higher education is less a merit good (i.e. a good deemed socially desirable and thus deserving of public finance to encourage consumption or provision) compared to general education.

I accepted this argument quite readily when I was teaching Economics. However, I am beginning to wonder whether the social benefits of Economics education can be enhanced if it can

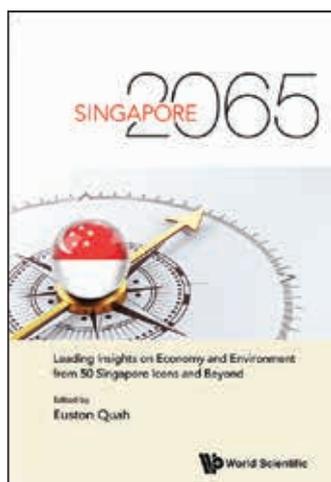
nurture love and responsibility towards self, community and environment at large; and guide students to live their lives and act for the collective good. This will be ideal for the progress of our society. Now, the question is how can Economics be taught such that we, as teachers teaching the subject, can be confident to say that our students are more than just “rational, calculated scholars in pursuit of self-interests”? In other words, can Economics be taught in such a way that the social benefits of learning the subject significantly outweigh the perceived private benefits?

As a start, perhaps we can include the social issues that are of growing concern to our society in the teaching of the subject. Examples include the aging population, growing inequality, erosion of culture and heritage due to urbanization, growing consumerism, global warming and loss of biodiversity. As we introduce a greater human angle to the examination of these issues, students can learn economics through both their hearts and minds. In the same vein, if the Economics students can be inspired to use both their hearts and minds in diagnosing, analyzing and proposing solutions to issues, could this lead to better policy making in the longer term? Can the teaching of Economics instill the values and outlook required to drive the Singapore society through the next phase of its economic and social progress?

Perhaps these are some issues that Economics students can discuss with their teachers in class. The focus of the discussion should not rest on whether Economics education deserve more public funding, even if it can be proven to be an important merit good. Rather, the focus should be aimed at getting Economics students to search through the depths of their hearts for what they feel should be the true purpose in studying the subject. Perhaps this is a debate that will engage the heart with the same, if not greater, degree of intensity, as the mind. Once the students are able to figure out the answer to this question, hopefully they will be able to discover greater passion in the learning of this beautiful subject.

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## Singapore 2065

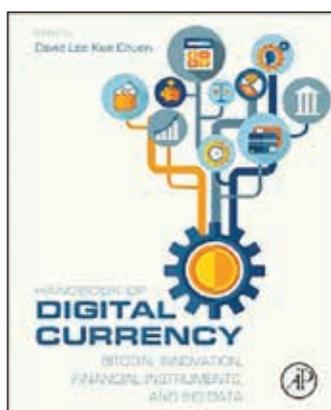
### Leading Insights on Economy and Environment from 50 Singapore Icons and Beyond

Edited by: **Euston Quah** (NTU, Singapore & Economic Society of Singapore, Singapore)

As Singapore enters its 50th year of independence, it is a time for introspection to look back at the successes and challenges of the past, but is also a crucial time to consider what the future holds for the nation.

*Singapore 2065: Leading Insights on Economy and Environment from 50 Singapore Icons and Beyond* is one such key contribution to the endeavour of thinking about what lies ahead. While many forthcoming projects and books take a more retrospective approach reflecting upon Singapore's past, this book adopts a forward-looking perspective, contemplating Singapore's distant future, which is important for posterity. This book is a collection of key insights from 50 iconic individuals of Singapore and beyond, and contains reasoned arguments, speculations and visionary expectations of Singapore's future in 50 years' time.

The book discusses the distant future of Singapore's economy and the environment. What will Singapore's economic and environment landscape be like 50 years from now? Are there trends or scenarios common to the various discussions contained in this book? If there are, how big would be the impact of some of these trends? What and how should the government respond to these projections, expectations and informed visions of tomorrow? In sum, what would Singapore's economy and environment be like in 2065? The book explores a range of possible answers to these questions and more.



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## Handbook of Digital Currency

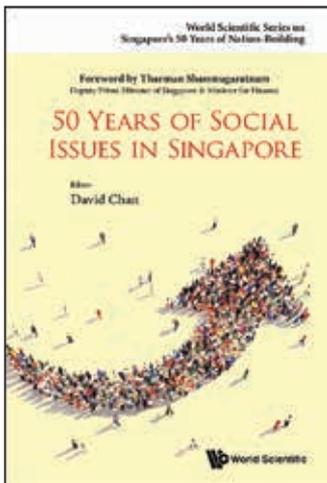
### Bitcoin, Innovation, Financial Instruments, and Big Data

Edited by: **David Lee Kuo Chuen** (Ferrell Asset Management Pte Ltd., Singapore)

Incorporating currencies, payment methods, and protocols that computers use to talk to each other, digital currencies are poised to grow in use and importance. The *Handbook of Digital Currency* gives readers a way to learn about subjects outside their specialties and provides authoritative background and tools for those whose primary source of information is journal articles. The book discusses major strategies and tactics associated with digital currencies, their uses, and their regulations. It also presents future scenarios for the growth of digital currencies.

Taking a cross-country perspective, its comprehensive view of the field includes history, technicality, IT, finance, economics, legal, tax and regulatory environment. The book is written for regulators, crime prevention units, tax authorities, entrepreneurs, micro-financiers, micro-payment businesses, cryptography experts, software developers, venture capitalists, hedge fund managers, hardware manufacturers, credit card providers, money changers, remittance service providers, exchanges, and academics.

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World Scientific Series on Singapore's 50 Years of Nation-Building

## 50 Years of Social Issues in Singapore

Edited by: **David Chan** (*Singapore Management University, Singapore*)

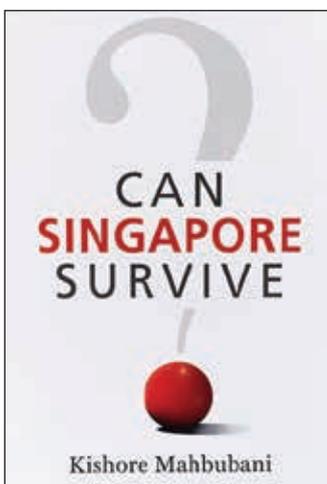
Foreword by: **Tharman Shanmugaratnam** (*Deputy Prime Minister of Singapore & Minister for Finance*)

The social context of Singapore is changing rapidly, and understanding how people think, feel and behave in various situations has become a key driver of effectiveness in addressing social issues. *50 Years of Social Issues in Singapore* provides a comprehensive review and examination of various social issues at multiple levels of analysis including the individual, group and society.

This invaluable book adopts a translational approach to social issues in Singapore by explicitly bridging intellectual and practical perspectives. Contributed by a distinguished team of authors, the chapters examine the critical ideas underlying public debates of social issues and their policy and practical implications.

The book is organized into three parts. Part I examines issues of population and social fundamentals in Singapore such as ageing, marriage, urban planning, healthcare and racial and religious harmony. Part II analyses Singapore's social progress through issues of inclusivity such as social mobility, developing communities and marginal groups that deserve more attention. Part III focuses on core principles and social processes related to social justice, doing good, social media and approaches to understanding and addressing social issues in Singapore.

Most importantly, the chapters in this book clearly identify many of the critical, unresolved and emerging questions on various social issues that will guide the next generation of public discussion and policy deliberations on what matter in Singapore.



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## Can Singapore Survive?

**Kishore Mahbubani**

This book poses the question that Singaporeans must wrestle with: can we survive as an independent city-state? Kishore Mahbubani believes that Singaporeans must always ask the question because constant reflection and self-examination should be a part of the core DNA of all Singaporeans. His goal in this book is to create and enhance this culture of reflection among all Singaporeans. He gives three answers in this book: Yes, No & Maybe. With these three answers, he attempts to sketch three different scenarios for Singapore's future.

**There is logic behind this, as we cannot predict the future. we can, however, prepare for the future by telling stories about what the future could be like.**

Besides his substantive Introduction, this book offers some of Kishore's best essays on Singapore, taken from his Think-Tank and Opinion columns in *The Straits Times*, as well as contributions to *Guardian News*, *The New York Times*, *The New York Review of Books*, Davos World Economic Forum's *Forum News Daily*, and the "Innovations for Successful Societies" Oral History Project of Princeton University.

# Brief note on the contributors



## Eileen

Eileen hopes the study of Economics can promote a compassionate outlook to life. This has given her the impetus to humanize the teaching and learning of Economics. Through exploring an interdisciplinary approach, she hopes to bring about a different perspective in the learning of this subject.



## Christabelle

Christabelle's passion lies in Economics and Education. She believes in making the world a better place through raising rational and compassionate students of Economics.



## Tze Koon

Tze Koon is keen to find out how changes in technology, population and population structure will affect the world we live in and the key sectors of the economy. He is currently working with fintech and medtech startups.



## Yeow Hwee

Yeow Hwee is passionate about making Economics accessible to all. An advocate of life-long learning, he has taught Economics to students from all ages and all walks of life. He is currently a teaching faculty member in the Economics Department in NUS, inspiring others in the study of Economics.



## Jonathan

Jonathan cares a lot about issues in international development, especially those revolving around economics and political economy. He is currently reading MSc Development Studies at the London School of Economics.

## Coordinator



## Harold Teng

Harold Teng is Assistant Secretary of the Economic Society of Singapore (ESS). Trained as an economist, he has formerly worked in the private sector in Singapore, China and Vietnam; the Singapore Public Services; and now in academia. He is a volunteer police officer with the Singapore Police Force and actively volunteers in several other areas as well.



# Our Common Spaces

by **Jonathan Neo**

Some months ago, I chanced upon a book by Urban Sketchers Singapore. It was a compilation of sketches which covered everything from our familiar neighbourhoods to the lively ethnic quarters. As I flipped through the pages, a wave of nostalgia swept over me. I felt an unexpected resurgence of my cherished childhood memories which I thought had been neatly tucked away at the far end of my mind. I paused and wondered why.

Browsing through these common spaces was a travel through time. After all, I grew up in a Singapore where the MRT system only had North-South and East-West lines; where East Coast Park's Marina Cove had its famed drive-through McDonalds outlet; and where there was no such thing as integrated resorts. Our urban landscape has changed dramatically over my formative years and there is no doubt the transformation will continue. Although many of these heritage buildings have been conserved and redeveloped, a large number have also given way to modern development.

As a fast developing country with finite land, Singapore will always face challenges in balancing different priorities - environmental constraints, economic challenges and quality-of-life demands of its residents. Heritage conservation is always a trade-off between present and future needs. Beyond our material needs,

we care deeply about our past as we reach into our future. Our heritage tells us about ourselves, our aspirations and our ideals. They are living spaces that safeguard stories through which we can learn more about this place which we call home; and ourselves.

Some people believe debates over our heritage should be best left to the sociologist, anthropologist and geographer. Perhaps another important agent is the economist, who can also contribute to this field. The inclusion of economic perspective can provide a more accurate estimation of the true value of cultural heritage sites and bring about greater efficiency in the allocation of resources. Although currently there may be methodological difficulties in the economics of cultural heritage due to the lack of empirical data and geographical specificity of studies, these can be overcome with time and effort. Development in this area can also re-energise the study of economics as new ideas and perspectives will be brought into the subject.

Alfred Marshall defined economics as "the study of mankind in the ordinary business of life"; the economics of cultural heritage allows us to preserve the many ordinary stories that made us who we are today, and gives us the foundation to live our lives tomorrow.