Welcome Speech: Singapore Economic Policy Forum 2019, Vice President David Lee Kuo Chuen

Guest-of-Honour, Senior Minister of State Chee Hong Tat, His Excellency Patrick Bourne, Rukhsana Afzaal, Agustin Garcia Lopez Loaeza, TaoThi Thanh Huong, the Provost of SUSS, Prof Tsui Kai Chong, Distinguished Guests, Friends & Colleagues, Ladies & Gentlemen, I extend my warmest welcome to all of you to the Singapore Economic Policy Forum 2019.

The Economic Society of Singapore (or ESS) was established on July 28, 1956 by the Economics Department of the University of Malaya in Singapore (now known as the National University of Singapore). ESS is a non-profit organization that aims to encourage economic thought and brings together members from academia, government and business sector to discuss current economic issues related to Singapore and the region. ESS publishes the Singapore Economic Review, conducts independent research, and holds conferences and networking sessions.

The Singapore Economic Policy Forum is the leading platform in Singapore that promotes economic thought and discussion of economic policy. The forum is organized annually by the ESS with NUS, NTU and SMU in rotation. We have invited our new sister university SUSS to join us in co-organising the forum in the immediate future.

The theme today is on the external challenges to the Singapore Economy and Possible Responses. The topics cover value chain, international competitiveness, economic nationalism, crowdfunding, FinTech, and technology disruption.

Allow me to say a few words about my understanding of the current challenges, and hopefully raise a few issues for today's discussion. In the 1980s, the focus of industrialization was on minimizing production costs. This was achieved through automation and precision engineering. When Internet was introduced to the public in the early 1990s, industrialists were quick to respond by minimizing information cost. Today, few people are willing to pay for information acquisition and that has disrupted the media industry. In the early 2000s, we saw a proliferation of electronic and high-frequency trading, accelerating the speed of financial transactions and the focus was on minimizing the cost of transactions. As a consequence, many trading firms and exchanges have to take on additional risks of proprietary position and other businesses to make up for their squeeze in profit margins. Doing business in a fast-moving digital world was all about minimization of production cost, information costs, and transaction costs. With the convergence of technology, where are we going from here? What else can we minimize to achieve higher economic efficiency?

Distrust among individuals, corporates, and countries has become an issue due to the indiscriminate pursuit of cost minimization in production, information and transaction through digitalization. We are paying the price in the form of higher structural unemployment, fake news, money laundering, climate change, privacy invasion, hacking, as well as divisive and nationalistic sentiments. Untrusted parties find it extremely difficult to negotiate with each other, let along collaborate. Trust has become a rare and valuable commodity in this new and digital world. How do we rebuild trust in order to work together again? In the open digital environment of distrust, where we may not even know who is on the other side, how do we collaborate? This is an economic question of minimization of the cost of trust among untrusted parties in an open and decentralized world.

"Dunbar's number, proposed in the 1990s by British anthropologist, Robin Dunbar, is a suggested cognitive limit to the number of people with whom one can maintain stable social relationships—relationships in which an individual knows who each person is and how each person relates to every other person." Dunbar found a correlation between primate brain size and average social group size, and conjectured that humans comfortably maintain 150 stable trusted relationships. Collaboration requires trust and stable relationships, and without the help of centralized third party trust or technology, we cannot go beyond 150 people. While trusted third parties such as financial institutions command high values, it has created a fair share of the problems that ended in the Global Financial Crisis in 2008. This is a challenge and it turns out with new technology, the right combination of technologies with good governance can solve many existing problems. This challenge has become a great opportunity for Singapore.

For Singapore, three questions come to mind when trying to take advantage of this new trend of convergence of technology and governance:

- 1. What are the characteristics and strengths of Singapore?
- 2. What combination of technology and governance brings down the cost of trust?
- 3. Where is the future sustainable demand?

There are facts that we know:

- 1. Singapore is the most innovative nation in terms of public policy with execution and enforcement efficiency making it desirable for Tech Startups and Giants.
- 2. The needy always pay higher charges than those who are well endowed and therefore serving the needy is a profitable model if the cost of trust is contained.
- 3. Half the population in ASEAN are underserved in communication, finance, insurance, education and other essential services, thus making services to them a sustainable and profitable business model.
- 4. To understand languages and culture is key to building trust and natural language processing in ASEAN has an important role to play in improving trust via clearer communication.
- 5. Structured microdata and infrequent macro data may not be as effective as unstructured data and realtime data from digital devices, especially for developing economies.
- 6. The combination of open-source software, hardware, data and inclusive technology that builds and distributes trust can ensure privacy protection, thus reducing distrust.

It is literally true that you can succeed best and quickest by helping others to succeed. The action of working with someone to produce something to serve massive numbers of neglected neighbors with high profit margin via deep technology is a sustainable model for a small economy like Singapore. How effectively individuals, corporates, countries can collaborate, share and analyze data to reduce the cost of trust can determine how agile a country is in responding to future opportunities and threats. Collaboration that crowdsources wisdom and capital in an open innovation environment that diminishes oneself becomes the driver for sustainable growth. Without posing as a threat to others and as a node in a network rather than highlighting a commanding position as a center or a hub reduces friction. But all this

needs trust, and "inclusive technology" that distributes trust reduces the cost of trust and improves collaboration efficiency.

Becoming more proficient collaborators can be transformational, but selecting the right combination of technology and governance can be challenging. Leveraging the experience and lessons learned from experiments such as the tragedy of the commons and cryptocurrency is a good place to start. The late Nobel Laureate Elinor Ostrom and Bitcoin inventor Satoshi Nakamoto have independently devised an almost similar set of rules and incentive systems. They both did pioneering work, one on physical and the other virtual world, in devising self-organized governance mechanisms that can achieve higher economic efficiency than government and private enterprises. This requires the right policy to create an ecosystem of good governance with AI, Blockchain, Cloud, Data Analytics, Environmental Friendly Technology or simply as ABCDE, taking into account availability of human capital, and the source of sustainable demand.

While the external challenges to Singapore are due mainly to technology change, geopolitics, income inequality that reduces consumption, our strength lies in our ability to implement innovative policy. The right combination of inclusive technology encompassing incentive governance can bring down the cost of trust. Finally, the underserved ASEAN markets give us a sustainable growth story. I hope the discussions this afternoon will shed more light on these points.

I would like to congratulate Prof Hoon Hian Tech and his SMU team for successfully gathering many of the thought leaders in Singapore including Prof Chang Pao-Li, Tan Kong Yam, Chia Ngee Choon, Tan Swee Liang, Chow Hwee Kwan, and renown practitioners such as Mr Kelvin Teo from Funding Societies, Ms Tok Yoke Wang from the IMF, Ms Selena Ling from OCBC and Dr Prakash Kanna from the GIC. We thank Vivian and her team from ESS. But most heartening of all, we have the student volunteers from SIM Economics Society that have given their time to serve at this conference. Let us give them a round of applause. Of course, this conference will not be possible without your attendance.

It is now my privilege and honor to introduce our Guest of Honor Mr Chee Hong Tat, Senior Minister of State for Trade and Industry and Education.

Mr Chee Hong Tat was appointed Senior Minister of State for Trade and Industry and Education on 1 May 2018. He was first elected as a Member of Parliament for the Bishan-Toa Payoh Group Representation Constituency (GRC) in the 2015 General Elections, and appointed Minister of State for Health and Communications & Information on 1 October 2015. He was promoted to Senior Minister of State on 1 May 2017.

Mr Chee joined the Civil Service in 1998 and worked at the Ministry of Home Affairs, Ministry of Finance, Ministry of Transport and Ministry of Education. He was appointed Principal Private Secretary to then Minister Mentor Mr Lee Kuan Yew in 2008.

Following that, Mr Chee became Chief Executive of the Energy Market Authority in 2011, and was appointed Second Permanent Secretary at the Ministry of Trade and Industry in 2014.

Mr Chee graduated from the University of California at Berkeley in 1996 with a Bachelor of Science (Highest Honours) in Electrical Engineering and Computer Science and a Bachelor of Arts (Highest Honours) in Economics. He obtained his Masters of Business Administration from Adelaide University in 2006.

Minister Chee believes in healthy eating diets. Your presence, Minister, has reminded all of us at ESS to serve healthy food not only today in this conference, but at all our future conferences. Without further delay, allow me to invite and let us welcome the Minister on stage to deliver his keynote address.