

**Opening Remarks by**  
**PROFESSOR EUSTON QUAH**  
**PRESIDENT, ECONOMIC SOCIETY OF SINGAPORE**  
**SINGAPORE ECONOMIC POLICY FORUM 2017**  
**“Preparing Singapore for the Future Economy”**

Friday, 20 October 2017, 9 am, the Regent Hotel, Singapore

Guest-of-Honour, Minister S. Iswaran, Minister for Trade and Industry  
(Industry),  
Distinguished Guests,  
Friends and Colleagues,  
Ladies and Gentlemen,

Good morning and a warm welcome to the Singapore Economic Policy Forum 2017. The annual forum is organised by the Economic Society of Singapore with NUS, NTU, and SMU, in rotation. This year’s forum is jointly organised with NUS.

The forum continues to be a leading platform for economic policy discussion in Singapore. This year, the forum will focus on preparing Singapore for the future economy.

The world is experiencing a new era of technological innovation, adaptation, and coalescent – forming an accelerating global network effect of opportunities, risks, and uncertainties. This is something that Singapore, a small and open economy, cannot ignore. Foresight and prudence in policymaking have done us well in the past. These qualities must continue to be at the forefront as policymakers are now challenged to balance the exploitation of this accelerating network effect with the welfare and stability of a liveable city-state.

Who better to exploit innovation, seize opportunities and take risks than the fabled movers of economic growth – the entrepreneurs? One might maintain that there are sound policies in place for entrepreneurship to flourish in Singapore. On the passive side, business-friendly policies are prevalent. On the active side, there is the financing of basic research. Others might caution

that entrepreneurship is constrained in Singapore due to its small size, lack of immediate access to global markets, and societal risk aversion.

Instead of focusing on the supply of entrepreneurs, the late Professor William J. Baumol prescribes that policy can and should influence the allocation of entrepreneurship. Innovative, rather than replicative, entrepreneurship should be encouraged. Baumol recommends that unproductive entrepreneurship like rent-seeking and net-cost-to-society ventures should be discouraged.

Behavioural insights must be garnered to change mindsets across society. Priming potential entrepreneurs to regional opportunities and growth that the network will bring could be a good start.

These entrepreneurs, and continued foreign investments, will need a strong workforce that is future economy ready. This presents a multifold challenge to policymakers. Whether it is a digital, sharing or platform economy, (one would hope) the creativity of the human mind and the dexterity of the human hands will continue to play a part in the economy, albeit with augmentation from automation and robots. The accelerating network effect will require individuals to be open to accelerating disruptions, through lifelong learning and a global mindset.

Policymakers will have to be wary about the pushbacks that such disruptions will bring. This may cause society to detrimentally become more risk-averse and insular. Possible wage disparities arising from winner-takes-all scenarios of the network effect is another factor to consider in policy decisions.

I thought it will be worthwhile to draw upon related observations through my involvement in a research programme on autonomous electromobility, or what is commonly known as self-driving technology in electric vehicles. This programme is a joint-collaboration between NTU and the Technical University of Munich (or T-U-M).

The benefits of autonomous vehicles will not just come solely from their introduction but mainly through the global network effect of adopting the technology into improving existing or creating new products, services, and business models.

We are already seeing global players and start-ups setting themselves up to harvest this network effect in the areas of ride-sharing, retail, and delivery services. Other industries will likely be disrupted. For example, it may

fundamentally change the way we finance transport purchases and insurances, or influence the way we design and build our real estates and energy infrastructures.

Besides transport science, technology, and engineering, the research programme also incorporates design and the social sciences as a core unit. Innovation is not complete without the necessary user and behavioural insights. This requires multidisciplinary researchers collaborating across many parallel research tracks. Ultimately, the research programme hopes to contribute towards the next generation of public transport systems in Singapore.

I spoke about Baumol's views on entrepreneurship earlier. Now, I would like to touch on another of his famous idea, Baumol's cost disease. Baumol famously pointed out that the number of musicians needed to play a Mozart piece has not changed over the years, yet wages have increased for musicians. If not, wouldn't musicians switch to a more productive career with higher wages? Likewise, we would expect to see rising cost in arguably similar industries such as healthcare.

Baumol argues that the real problem is not the cost disease, but the over-reaction to the issue. This can lead to excessive rationing, slowing innovation and development over the long term. This brings to mind a paper that my younger colleague, Tan Teck Yong, presented at a trilateral workshop between NTU and the top universities in Thailand. He proposes that workers given freedom at work will tend to pursue innovation for gains due to asymmetric information between the worker and the firm. It may be wise to note that such a theory, perhaps, can be applied to people-dependent professions that are subject to the Baumol's cost disease. How will such a tension between cost-effectiveness, control, technology, and the human touch play out in an industry such as healthcare?

I look forward to some of these issues being discussed at this forum. Today's forum will bring together speakers and audience from various segments of society and allowing contributions of views and ideas from different areas of expertise. This would no doubt improve upon the stock of information that is so crucial in policy forming and design.

I would also like to take the opportunity to congratulate the winners of the Outstanding Economics Teacher Award and thank Minister Iswaran for

gracing the event and presenting the prizes. My thanks to Professor Chia Ngee Choon from NUS for putting together the forum's programme, and Professor Julian Wright and the department of economics at NUS for co-hosting the event.

It is my hope that the forum will provide a platform for productive and intellectually-engaging discourse. On that note, I wish all participants a fruitful and enjoyable day. Once again, I thank all our eminent speakers for their valuable insights today, and you the audience for attending this event.

Thank you.