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**AT THE  
ISIS MALAYSIA'S PRAXIS SEMINAR**

**THURSDAY, 4<sup>TH</sup> OCTOBER 2018; TIME: 10.00AM  
VENUE: SHERATON IMPERIAL HOTEL, KUALA LUMPUR**

***'A Time for Transitions: The Malaysian Economy to 2020'***

1. It is a pleasure to be here this morning, and I would like to thank Tan Sri Rastam Mohd Isa and his team at ISIS Malaysia for inviting me to share some thoughts and officiate today's seminar. As some of you know, I have been a student of the politics and economics of development for many years, and continue to be a keen observer.
2. The theme of this year's Praxis Seminar—*GameChangers2019*—is an apt one. Since May 9th of this year there has been a lot of discussion about the need for change. Malaysia is a country of different ethnic groups, cultures, religions and lifestyles. It is not surprising, therefore, that our values and worldviews also vary widely. On certain matters at least, these differences can appear deep, polarising, and even irreconcilable. But despite these differences, what unites us all is a common desire to make tangible progress in relation to good governance and to social justice. We want our lives, and those of our children and grandchildren, to improve not just materially, but also morally. The significance of this uniting factor to our nation-building endeavours cannot be overstated.
3. We are all well aware of how far Malaysia has progressed, and in so many ways, since Independence. We have transformed our economy from being predominantly rural and commodity-based, to become far more diversified, with services and manufacturing now accounting for the bulk of national income. The economy has grown steadily, with per capita incomes now some eight and a half times as high by 2016 as they were back in 1960, while our human development index scores show our laudable achievements in this area. We have all but eliminated extreme poverty, and many Malaysians now live in well-serviced, modern urban communities. Through a combination of solid institution-building, and pragmatic economic policies, we have built a country that is the envy of our peers. As the only ASEAN nation besides Singapore to achieve upper middle-income status, there is no doubt that we have done well. But in navigating our future course towards high-income status, Malaysia faces many challenges, which must be carefully considered and discussed if they are to be faced effectively.
4. In the past, our economic growth was largely the result of the successful exploitation of natural resources, and the accumulation and application of capital and labour. But this approach has its limits. It places a strain on the carrying capacity of our precious environment, denuding our natural capital, and requiring increasingly greater sacrifices of consumption today to generate set gains in output tomorrow. It is just not advisable to base our future development on this same path, and our future therefore cannot be a replay of our past. The path to sustainable prosperity lies rather in other directions, including intensifying and better focusing our investments in human capital; improving efficiency and boosting productivity; and stimulating innovation and facilitating technological advance. We must also seek a better balance between competing demands on the environment and on our natural resources, for the benefit of this and all future generations.
5. In order to move forward to the next level and achieve high-income status in line with our potential, I believe that Malaysia must make, and persist with, three key structural transitions. The first of these is to take the tough decisions that are necessary to develop a more open and resilient society and economy. While many Malaysians can understand and would agree with this goal, few realise the full extent of the changes needed to make it a reality. The second transition is to establish a truly just and equitable society, as set out

three decades ago in Vision 2020. This is an essential part of nation-building for all countries, but is particularly important here with our different communities and cultures. The third transition that we must make is to take full advantage of the current wave of technological transformation, and become a leader in the adoption and application of these new technologies in all fields.

### The First Transition

6. The first structural transition that we must undergo is to make our economy and society resilient, competitive and performance-based. The most advanced countries in the world are not necessarily those that have the most, but those that make the most of what they have.

7. For all Malaysia's significant natural endowments and other advantages, our economy is still relatively small and very open, and therefore vulnerable to the vagaries of international trade and patterns of globalisation. According to the Heritage Foundation's *2018 Economic Freedom Index*, Malaysia is currently the world's 22nd freest economy. This reflects our attractiveness as a destination for inward investment, as well as the central role of trade in our economy. But this position is by no means assured, as many other countries are engaging in the rapid removal of domestic barriers to trade to attract investment, in furtherance of their national interests. At the same time, the growing restrictions on trade that are being implemented by some high-income countries - to protect domestic industries and jobs - adds to the urgency for smaller open economies such as our own to take active steps to secure wider market access.

8. It is widely accepted that Malaysia must seek to increase the role of technology and innovation, and to promote productivity gains. But there appears to be resistance to the achievement of any significant improvements in the performance of labour and capital. As a result, the economy remains unduly reliant on sectors at the lower-end of the value-added spectrum. This is thus one key area that we must focus on, in order to ensure that we do remain competitive in such a challenging global context.

9. Education and skills training are a key aspect of this process, and have a direct impact on the welfare of the *Rakyat*. These must be brought up to international standards. There has been much high-level attention to public education, and detailed and credible policies have been developed. But our education system, from primary to tertiary, still remains far behind in international terms, especially in the critical areas of science and mathematics. Seven of the top ten countries in the 2015 OECD Programme for International Student Assessment or PISA in maths and science were Malaysia's East and South-east Asian neighbours, led by Singapore. But we ranked only 45<sup>th</sup> and 47<sup>th</sup> respectively. PISA measures the comparative performance of 15-year olds, 540,000 of them, across 70 countries.

10. Fast approaching on the horizon are technological developments that promise to revolutionise not just particular industries and services, but human civilisation itself. While developing countries are concerned about the effects of automation displacing their lower-skilled workers, advanced countries are equally worried about the likely impacts of Artificial Intelligence (AI) on more highly-skilled professionals, such as doctors and lawyers.

11. Whatever the future path of technological advance, the key takeaway is that Malaysians need to be as prepared as they can be, in terms of what they learn and how they think. We need to promote and not stifle social and cultural flexibility and adaptation. Old mindsets and rigid traditions will inhibit us from becoming the learning society that we need to survive and thrive in the future. We cannot continue with closed 'business-as-usual' mindsets. So our development thinking needs to go beyond traditional factors of production, such as labour and capital, and take into account issues arising from open borders and labour mobility; to innovation, technology and information networks; to other more intangible assets.

### The Second Transition

12. The second transition that is necessary is to establish a truly just and equitable society. In many countries, there is growing and well-documented reaction by those who feel they have been marginalised and left out of economic growth and prosperity. Some commentators attribute this to unfettered globalisation, especially in relation to global financial capital. Others see an even more deeply-rooted crisis of capitalism.

Whatever the causes and dynamics at play, the effects can be seen in levels of income and wealth inequality that have not been experienced since the so-called Belle Epoque at the start of the last century.

13. Politicians in some countries have been quick to capitalise on the growing resentments by rejecting the global liberal economic order and adopting populist 'go it alone' development strategies. But these have been tried unsuccessfully in the past, and recent experience indicates that they are faring no better today. Other countries are trying to be more inclusive, by strengthening their social protection systems, but are often constrained in these efforts by a limited ability to increase tax revenues.

14. While Malaysia has successfully addressed the issue of absolute poverty, the challenge has now evolved from total to relative deprivation, with distribution clearly still a key issue. Some numbers serve to illustrate this fact. From 2014-2016, average household incomes grew by about six per cent a year, a very reasonable achievement. But the bottom 40 per cent received less than 15 per cent of this increase. While the middle 40 per cent obtained around 35 per cent, the top 20 per cent of households accounted for the remaining 50 per cent or half of the increase.

15. In 2017, the median monthly salary and wage of employees, who accounted for 70 per cent of the workforce, was RM2,160. But for the 62 per cent of employees without any tertiary education, their median wage was only RM1,170. Given these figures, it is perhaps not surprising that there are frequent complaints about the rising cost of living.

16. With such low earning capacity, the average employee is unable to accumulate enough savings to fund their housing needs, children's education, or retirement. How this challenge will be met is something that calls for in-depth and objective study. Without adequate economic security, it is difficult to develop the social cohesion that is the foundation of a functioning economy.

17. Many scholars have called for a more comprehensive measure of national and societal well-being than the current one of gross domestic product or GDP, in order to capture some of these other crucial elements, and help move us beyond the pursuit of economic growth alone. The limitations of GDP, which tells us nothing about distribution, or productivity, or sustainability, are well-known. This shift in focus has yet to happen however, apart from in a very few cases, while the growing discontent with rising inequality is increasingly evident. While this will remain a significant global challenge, here in Malaysia, we must now start to make this important second structural transition, and to address directly these questions of social justice and equality. This will involve strengthening existing social safety nets, while conducting further research into the nature and causes of our income and wealth distribution, and into the most effective solutions.

### The Third Transition

18. The third key structural transition relates to technological advance. We are already living in the age of the fourth industrial revolution, or IR 4.0. The first revolution, of the late 18th and early 19th centuries, took us from manual to machine-based production; the second to electrically-powered mass production; and the third to electronically and IT-powered production automation. Today, some 200 years after the first revolution, production is now about the digitalisation of automation, involving both cyber and physical systems. We are entering the age of the Internet of Things, 5G, 3D printing, cloud-computing, advanced robotics, self-driving vehicles, and so on.

19. Asia is in the vanguard of this process. According to the IMF, the region uses two thirds of the world's industrial robots, while seven of the top ten economies with the largest ICT to GDP ratio globally are in Asia. China now accounts for 40% of global e-commerce retail transactions, compared to less than 1% a decade ago, and mobile payments there are eleven times higher than in the U.S. It is also taking the lead in the development and deployment of AI.

20. One area receiving much attention currently is advances in so-called enabling technologies, that facilitate the application of innovation across the economy, thus boosting economic growth. These include advanced manufacturing technologies, life-science technologies, materials and nanotechnology, photonics and micro/nano-electronics, AI, security and speed of connectivity, and many others. All of these have the potential to drive tremendous economic and social progress, and promote sustainable development. The

U.S, Japan, the Republic of Korea and Singapore are among the countries prioritising enabling technologies in their industrial policies.

21. For Malaysia, these are exciting times. Being in a technology-centric region provides many opportunities for knowledge-sharing, and for learning from regional best practices. We can benefit greatly from the knowledge and insights of countries that are ahead of us. With the country's youthful population, existing expertise in ICT, and established manufacturing and services sectors, Malaysia has the potential to take on Smart Manufacturing or Industry 4.0, and to thrive. Although our manufacturing sector still straddles Industry 2.0 (mass production) and 3.0 (automation), the E&E, aerospace and automotive sectors are already moving into Industry 4.0, and others will follow.

22. But this application and adoption of advanced technology is not without major challenges. The essential enabling technologies are capital-intensive and costly, have long gestation periods from conception to commercialisation, and are also prone to failure, in terms of technical viability and market potential. Traditional bank funding for such projects is thus hard to come by, and comes with high interest rates. An estimate by the European Investment Bank suggests that banks would need to charge rates of 20–30 per cent per annum, compared to 4-5 per cent for an average loan, in order to compensate for this higher risk and the lack of collateral.<sup>1</sup> For viable projects, innovative funding through venture capital, crowdfunding and peer-to-peer lending can help to overcome this challenge.

23. Another challenge is the impact of technology on employment or 'technological unemployment'—a term first introduced almost a century ago by John Maynard Keynes. Technological advancements are already displacing employment in some areas. Yet, as has also been the case historically, technological advances are also creating employment in other areas. Japan is an exemplar of this trend. While on the one hand, there is an increase in robot density in manufacturing and even services, amid a shrinking and ageing labour force, on the other hand, productivity is rising, along with employment, and wages have also gone up.

24. While structural adjustments may be painful, they are also temporary. Policy can play an important role in mitigating the difficulties of such adjustments by prioritising investment in human capital, including through support for lifelong learning, so that those who are at the greatest risk of losing their jobs (mainly low-skilled and medium-skilled workers) are able to transition into the new jobs being created through technological change.

Ladies and Gentlemen,

25. Policy initiatives which address such fears and help to support a nationwide Industry 4.0 culture, should be reflected in Malaysia's upcoming National Industry 4.0 Blueprint. History shows how countries around the world have overcome the multiple challenges of the first three industrial revolutions, and how living standards have progressively risen with each. The fourth industrial revolution can continue this trend and lead to greater prosperity and well-being, as well as to a more sustainable future, despite the disruptions it will also bring.

26. The three structural transitions that Malaysia has to make are in common with others around the world. Malaysia's advantage is that it now has an opportunity to approach these challenges with a fresh and unprecedented mandate. The on-going liability of past legacy issues, however, cannot be underestimated. Effecting real change always carries with it tensions, and courage and persistence are called for. In time, many are hoping that the stumbling blocks to economic development can be turned into stepping-stones that will allow Malaysia to prosper in the coming years. I hope that today's PRAXIS seminar will be fruitful and productive for all, and serve as a catalyst to game-changing policies in the years ahead.

27. I wish you all every success in your deliberations and take pleasure in declaring this Seminar open.

Thank you.

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<sup>1</sup> European Investment Bank, Financing the Deep Tech Revolution: How Investors Assess Risks in Key Enabling Technologies, Mar 2018