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KHAZANAH GLOBAL LECTURE,
KUALA LUMPUR, 29 NOVEMBER 2012

“THE EVOLUTION OF GLOBAL SUPPLY CHAINS: CHALLENGES FOR ASIA”

Good evening. It is an honour and privilege to deliver the 10th Khazanah Global Lecture to such a distinguished audience. I note that the speakers before me include Presidents, Prime Ministers, Nobel Laureates and global leaders who have made outstanding contributions to economic, corporate and social development and to nation building. I certainly do not belong to such company, but will try my best not to disappoint you with my remarks tonight.

2012 has been a year of monumental change globally and regionally, in which the US and Chinese leadership has been confirmed only last month, whilst the Korean and Japanese elections will be held before the end of year. Each government comes into office while recognizing the enormity of economic challenges to be addressed. So, it may be fitting, as the year draws to a close, to talk about how the global economy is evolving. Specifically, I would like to talk about an area that I have studied and experienced, which has a great impact on the global economy: The Evolution of Global Supply Chains and the Challenges for Asia.

I would like to address four points tonight:

- The new global order;
- The evolution of global supply chains;
- The impact of these changes on Asia; and
- Meeting the challenges ahead.

I. The New Global Order

Firstly, on the new global order. The global financial crisis of 2007-09 signaled a major turning point in the world global order, moving away from the G-7 domination towards a more balanced representative leadership under the G-20. Most people think that this re-balancing is due to the emergence of China, but we must take the longer view – not far behind 1.3 billion Chinese are 1.2 billion Indians, 1.6 billion Muslims and by the end of this century, 2 billion Africans. The new global order will see the emerging markets moving into middle class incomes, becoming highly urbanized and benefiting from a remarkable technological revolution.

The UN predicts that the population of advanced economies is likely to shrink and age rapidly in the second half of this century, accompanied by heavy healthcare and pension burdens and rising government deficits. On the other hand, a recent ADB study on Asia 2050 suggested that Asia will grow to account for half of world GDP, and possess half of global financial wealth by 2050.

This optimistic view of Asian prospects must be tempered with a view of the many risks: competition for scarce natural resources, growing social inequalities, natural disasters, terrorism and geopolitical conflicts. Indeed, the global order is changing very rapidly. Put simply, we are on a journey with no

precedents and for which the moral and intellectual compasses that we have used to date may not be the best ones for the tasks ahead.

As Asia plays a greater role in global growth and transformation, it will be called upon to shoulder more responsibility for our global commons: peace, prosperity and environmental sustainability. These responsibilities and issues are more complex than we can imagine. So, last year my brother William and I founded the Fung Global Institute, an independent, non-profit think-tank, based in Hong Kong, to bring together thought leaders, industry experts and researchers to study these key global issues from Asian perspectives. Notice that I use the word “perspectives”, because Asia is not a unitary whole, but a mosaic of cultural, historical and even civilizational diversity. The Fung Global Institute, or FGI, aims both to bring diverse Asian voices into the global debate, but also to bring business perspectives into the policy dialogue, because we firmly believe that sound economics is a critical support to social stability.

Our four areas of initial study are: Global Supply Chains, the Future of Finance in Asia, the Evolving Growth Models, and Asia’s Sustainable Development. Simply put, global supply chains represent the real economy, finance the virtual economy, managed by the governance model, and aligned with the principles of environmental sustainability and social inclusion.

As the New Economic Model of Malaysia has articulated, we need to take care of prosperity for our people, social justice and equity, and our natural environment. Our methodology is to study these four projects in parts and then integrate them into a holistic framework that helps frame the issues by which Asia can develop in the 21st century with stability, sustainability and social inclusiveness.

I would now like to discuss the evolution of global supply chains to show how profoundly the real sector is evolving and how challenging it has become to adapt to these new challenges. Lord Nicholas Stern, a member of the FGI Academic Council, said recently, there is a New Industrial Revolution going on as a result of advances in green technology and greater social awareness of the environment. These new social trends and technology have also revolutionized the development options and business models for countries like Malaysia.

II. Evolving Global Supply Chains

Supply chains are the interlinked processes which enable the production, distribution and retail of goods to end consumers. Sixty years ago, most consumer products were produced in a single country by a single, vertically integrated company, and then shipped by a single agent to its destination. Over the past three decades, I have witnessed the creation and transformation of global supply chains, particularly here in Asia. Four broad trends are evident:

- In the 1960s and 1970s, multinational companies began to move the labour-intensive parts of manufacturing to low wage countries in Asia, first in the Four Dragons, then the Four Tigers. Malaysia was the prime example of an economy which benefited from outsourcing in the electronics industry. For the recipient countries, off-shoring brought technology transfer, employment creation and upgrading of skills, which would then become building blocks of indigenous industry as well.
- From the mid-1980s, the ICT revolution had made it possible for some production stages, previously performed in close proximity, to be dispersed geographically, before being brought back

together in a single location for final assembly. The whole process was orchestrated by technology and enabled by improvements in logistics and transport.

- From the mid-1990s, Asia's participation in global supply chains rose sharply on the back of China's growth and favorable policy frameworks. Thus we have seen China's share of global manufacturing exports rise from around 2 per cent in year 2000 to 13 per cent in 2011. But let's be clear about China's role. Today's products may have their final assembly in China, but they comprise components and inputs from many different countries. What is commonly called "made in China" is in actuality "made-in-the-world", even if our trade statistics have yet to catch up.
- Finally, in the past few years as wages began to rise in China, and other countries in Southeast Asia became more open to international trade, various parts of the production process were moved to low-wage economies like Vietnam and Cambodia, among others.

In short, the rise of global supply chains has created a very strong sense of global inter-connectedness and interdependence, which are very important for both policy and business perspectives.

Two recent events will highlight how this global inter-dependence has begun to affect business and policy in the real world.

First, the global financial crisis caused banks to cut back their lending, which put severe strains on trade finance. Trade finance was reduced by 10 to 15 per cent even though it was short-term and carried low risk, and accompanied a fall of nearly 20 per cent in the physical trade volume in Asia. While some of this trade decline was due to shrinking demand, the lack of availability of trade finance exacerbated the situation. The lenders may have been headquartered in New York, London or Paris, but the consequences of lending cutbacks were acutely felt in Asia.

Secondly, the catastrophic earthquake, tsunami and nuclear disaster in Fukushima, Japan, in March last year, plus the Bangkok floods in July, disrupted the production of critical components for many global supply chains. We learned that highly efficient, tightly wound supply chains were susceptible to high network risks. Therefore, we need to re-think how we insulate the weakest links, and deal with the possibility of supply chain disruptions.

III. Impact of Evolving Global Supply Chains on Asia

The evolution of global supply chains is a story of changing geography and network orchestration, and I have been lucky to witness this through Hong Kong's own development.

In the pioneering years, between 1949 and 1978, Hong Kong was the main entrepôt, serving the mainland of China. With the influx of refugees, entrepreneurs and bankers from Shanghai, Hong Kong began to develop as a manufacturing base, producing consumer products like plastic flowers.

China's opening up to the outside world in 1979 coincided with Hong Kong's need to reinvent itself as its cost of doing business rose. Hong Kong risked pricing itself out of the market for mass production. When Mr. Deng Xiaoping created the Shenzhen Special Economic Zone next door to Hong Kong, a solution became evident. Hong Kong rationalised its production into southern China. I use the

world “rationalise” because what we did was retain the high value-added front-end and back-end in Hong Kong, and moved the labour-intensive middle portion into southern China.

The front-end included product design, engineering and marketing. The back-end was the logistics, quality control, financing and distribution. This combination was so powerful that the Pearl River Delta became a major manufacturing base that supported China’s development. At its peak, the PRD accounted for 30 per cent of China’s exports, and 11 per cent of China’s GDP. This model was then moved up the coast to the Yangtze River Delta, centered around Shanghai, and to the Northeast Bohai region around Beijing, and also close to Korea and Japan.

What is the next frontier for global supply chains?

In the last four decades, Hong Kong had transformed itself from a manufacturing economy into a services-based economy. Today, manufacturing comprises less than 2.0 per cent of Hong Kong’s GDP while services comprise over 92 per cent. Yet, Hong Kong is also confronting another economic inflexion point, in which it must develop a new growth model that rationalizes its services base, with reference to the rest of China. That story is being written as we speak.

We also know that understanding the evolution of manufacturing in the Pearl River Delta is actually very useful for understanding supply chains in the world. In essence, the PRD supply chain serves as a microcosm for global supply chain dynamics – thereby enabling us to evolve a global model.

The core concepts which drove the changes in production in the PRD involve atomization and specialization, which eventually produced what I call the “democratisation” of the supply chain.

The first step was to cut the production process up into stages – with each stage located in places that could produce or fulfill a given stage. The various production stages were joined up using the two enablers of IT and logistics systems. Effectively, this freed the supply chain from a traditional sequencing – so that various components and stages could be double or even triple sourced, and with the whole network converging in a final point of assembly to produce the finished product.

This both sped up the production process, while also opening it up to many players who became specialized in various roles. This process changed the face of manufacturing globally. What began as a move to “radical outsourcing” became an ordinary business practice involving the search for speed, flexibility and the efficiencies of specialisation, across many countries.

Atomisation also resulted in the democratisation of the supply chain – because these individual stages of production were actually filled by small and medium-sized enterprises (SMEs), mainly in the emerging economies. SMEs were able to specialize in a given task or component, tap into global supply chains, and participate in the global economy much earlier than in previous generations, when companies needed a more complete, vertically integrated set of skills to be competitive.

It is both ironic – and incredibly fortunate – that, even as globalization effectively created new forms and levels of competition, SMEs actually flourished in this environment. We can contrast this with a world which might have gone the other way – with fewer and fewer vertically integrated conglomerates controlling production. Clearly in such a world, SMEs would be squeezed out.

In my mind, this democratization of the global supply chain, underpinned by SMEs, has been one of

the key generators of jobs and growth in the world – especially in developing economies. Remember that SMEs are the primary sources of jobs growth in both advanced and emerging economies, as they spawn business partners, start ups, and so on. This is something that must be nurtured and encouraged in the global economy.

Government obviously has an important role. It must ensure a level playing field, and invest in infrastructure – especially IT and logistics – so that local SMEs can “latch on” to the global trade ladder and participate in the global economy. Even those SMEs which start at the “lowest rung” of the ladder will soon be able to move up the ladder by cooperating with others thru supply chains regionally, and then globally.

We have seen this in the PRD, and the process is now taking root in the new frontier economies of Southeast Asia and beyond.

IV. The Future Challenges and Outlook for Global Supply Chains

My re-telling of recent history hopefully impresses upon you that supply chains have undergone great changes. But in my view, the future may be even more interesting. I believe we are at a major inflexion point with regard to supply chains, particularly in Asia.

I see at least four major forces whose convergence sets the stage for a generational transformation of global supply chains.

Firstly, the Asian economies are beginning to shift growth from exports as the key growth driver, towards domestic investment and consumption. Part of this is a natural progression of nations moving towards middle income status. It is further supported by policies from governments who recognize that domestic demand offers a stabilizing complement to the turbulence of global markets. This means that there are huge opportunities for global producers able to supply rising consumer demand from China, as well as India, ASEAN and other emerging markets.

Secondly, through the internet, consumers today have greater access to information about products and how they were made. This has created a new awareness in consumers about the environment, social issues, and sustainability. Sustainability strategies are new dimensions that global companies must now learn to manage.

Thirdly, technology will have a huge impact on the supply chain in terms of jobs. Robots may soon be prominent in the production of consumer goods in China. 3D printing technology is maturing – making it possible to locate production ever closer to the consumer. Such technology will create new jobs and industries, but will also render some jobs and companies redundant. These dislocations should be addressed sooner rather than later, and point to a key role of government.

Fourthly, changes in world trade are also impacting supply chains. As someone who believes that there is no substitute for a strong multilateral system, I have to admit that, in recent years, the world has settled for second best. Here I am referring to more and more bilateral trade agreements, which are already altering the equation of world trade.

The analogy some people use is that every bilateral effectively removes a brick from the multilateral

wall. If you take a few bricks, it is not a big problem. The wall is still there. But if you take away more and more bricks, sooner or later the wall will collapse. Unfortunately, the trend towards bilaterals is likely to increase, given the ebb and flow of international politics.

I believe this will be a real impediment to the smooth operation of global supply chains. For example, the definition of country of origin is different from one bilateral to another. Rules, operating standards, and paperwork are different. As a result trade becomes much more complex and hence more costly to conduct. I believe this complexity will eventually be a major impediment for SMEs, who lack the large administration required to properly track and follow so many different sets of rules. I do not see how that can be good for the world.

V. Conclusions

What are the policy implications of these major forces on the evolution in global supply chains for countries like Malaysia?

For businesses: companies will have to be nimble, flexible and innovative, given the rapidly changing environment. But even as business seeks to adjust, the global competition in supply chains and networks require governments to respond in terms of reorganizing government structures, streamlining regulations, improving speed of services delivery and responding to business and social needs in terms of faster turn-around time. I understand that the Malaysian Government has twin Economic and Government Transformation Programmes, driven by the Prime Minister's Department through the Performance Management & Delivery Unit (PEMANDU) that is pioneering efforts to re-engineer the systems and processes within government to accelerate services delivery.

Global businesses today locate production where it makes sense, in terms of adding value. Because this equation has tremendous implications in terms of jobs, governments must understand how supply chains operate. This demands a more regional, technical and structured dialogue between business and governments to help ensure alignment of policy with business realities. We need to collectively overcome this gulf of understanding in order that supply chains can operate efficiently and be a source of innovation and job creation wherever they operate.

Specifically, the global supply chain demands far greater stability in regulatory principles and practice, and clear adherence to rules-based operations. Markets and supply chains will move to those economies that demonstrate stability in rule of law and clear protection of property rights.

Just as private sector supply chains need to be orchestrated for efficiency, stability and sustainability, government services are also supply chains that need to be orchestrated between different levels to function in harmony. From the national perspective, economic policy today is really about plugging the domestic economy into the global trading system; SMEs need to be inserted into living, sustainable and profitable global supply chains. Malaysia's national prosperity depends on joining the local supply chains with winning global supply chains.

We must never forget that we live in a global networked economy. Networks now compete against networks on a global basis. The future lies in strengthening our labour force through good education, favourable tax and other incentives that fit the global supply chain, and having government services that support and nurture our supply chains to compete globally. If we don't exploit our comparative

advantages, including strategic geographical location, the global supply chain simply moves to another location.

The orchestration of government supply chains and business supply chains is complex, and it requires much greater national and regional cooperation to progress. We will also need to open up our minds to see things in a new light.

For instance, imports from our neighboring economies are not competition that we should fear. Rather, such imports are part of the vital components and inputs that make the national and regional supply chains stronger and more competitive. This means a completely different approach to regional cooperation in trade and investments and a different approach to calculating trade flows.

We need to understand and measure trade flows in terms of value-added and jobs. If we understand where the jobs and value-added are being created in the global supply chain, we will begin to formulate policies, strategies and business models very differently. This requires different expertise and different areas of cooperation between business and government, that is equal to the challenges of a fast-changing global economy.

To sum up, viewing the world in terms of global supply chains and networks brings forth new perspectives of how to frame our own production, consumption and distribution models. This new understanding will be critically important to meeting one of the major challenges of the road ahead in Asia: that of job creation. Our needs in this area are clear, particularly for countries like Malaysia that have rising populations. This is a challenge not only of quantity, but also of quality.

Job creation is a collaboration between policymakers and the business community. Business identifies its needs in terms of labour and skills along the supply chain; but government has a key role in the supply of skilled labour, and the training of the future workforce. Moreover, this is not a static game; it is a balance that is recalibrated many times as the economy develops. We need to ensure that business and government are actively collaborating to make this happen.

Now as we move further into the twenty-first century, we are seeing that supply chains are becoming more influential, and we are able to understand the links between supply chains and job creation. At the same time, the links between job creation and people's sense of prosperity in the new economic landscape are also becoming evident.

I believe that getting the nexus of supply chains, jobs, and people's sense of prosperity right is one of the great challenges of our time – and one that deserves all our efforts and attention. I will continue to study the issue with great interest, and hope that you will also share your insights, as we join hands to seek the best ways to serve our global community.

Thank you once again to Khazanah for the wonderful hospitality, the chance to see so many friends in Kuala Lumpur, and this valuable forum for sharing my thoughts on global supply chains. I look forward to our continued dialogue.