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Yes, Hong Kong CAN!

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Foreword

First of all, the authors wish to thank Mr. C. H. Tung for his encouragement and support and Dr. Lillian Cheung, Professor Terence Chong, Mr. Frederick Ho, Mrs. Ayesha Macpherson Lau, Mr. Gary Liu, Professor Pak-Wai Liu, Dr. Mingchun Sun and Mr. Stephen Wong for their invaluable advice, comments and suggestions. However, all errors contained herein are the authors' sole responsibility. Moreover, all opinions expressed are the authors' own and do not necessarily reflect the views of any of the organizations with which the authors are affiliated.

As stated in Section 11, "Concluding Remarks", the purpose of "Yes, Hong Kong CAN!" is epitomized by the Chinese saying, "tossing a brick to attract the jade (抛磚引玉)". Given what has been occurring in the economies of the Mainland and the world, the economy of Hong Kong is now at a turning point. It must embark on new directions in order to continue to grow and prosper. The report is a catalog, a menu of the available possibilities.

"Yes, Hong Kong CAN!" is a very long report. There is a total of eleven Sections. This foreword serves as a reader's guide, so that a reader can choose to read the Sections of most interest to him or her. Section 1 is an Introduction. Sections 2, "The State of the World and Chinese Economies", and Section 3, "The Economy of Hong Kong at a Turning Point", provide the backdrop for this report. A reader already familiar with the world and Mainland economies can start directly with Sections 4, "How Does Hong Kong Compare with New York and London?" and 5 "Hong Kong as a Leading International Financial Center". These two Sections sketch out what Hong Kong can do to overtake both New York and London eventually as the leading international financial center of the world. They include the development of a bond market, an East-Asia-wide securities market, an international asset management center, the premiere offshore Renminbi center and an East Asian re-insurance market in Hong Kong.

Section 6, "Hong Kong as East Asia's International Innovation and Venture Capital Center," looks at what Hong Kong can and should do to try to become the Silicon Valley cum (the early) NASDAQ of East Asia. Section 7, "Hong Kong as an International Center for Creative Arts," and Section 8, "Hong Kong as an International Professional Services Center", examines Hong Kong's potential as an international services center for creative arts, tertiary education, health care, and legal services in East Asia. Section 9, "Pearl River

Delta (PRD) Economic Cooperation", describes the potential and promise of Hong Kong being the vanguard of a huge metropolis that includes not only Hong Kong but also Guangdong, Shenzhen and Macau. Section 10, "The Role of Hong Kong in the 'Belt and Road' National Initiative", discusses how Hong Kong can take advantage of and benefit from the "Belt and Road" initiative.

Abstract

The real GDP of Hong Kong, a city with no natural resources, grew more than fourfold, from US$12.6 billion in 1961 to US$63.7 billion in 1980 (in 2015 prices), within a short period of just twenty years, at an average annual rate of growth of 8.5 percent, to the great surprise of the world at the time. Hong Kong achieved developed economy status in 1980, with a GDP per capita of US$12,605 (in 2015 prices). Between 1980 and 2015, the real GDP of Hong Kong grew further to US$310 billion, at an average annual rate of 4.6 percent, surpassing the best performance of the developed economies during the same period. Hong Kong was also indispensable to the success of the Chinese economic reform and opening to the world, which began in 1978. However, with the almost miraculous Chinese economic success over the past 38 years, the economy of Hong Kong has now become significantly dependent on the Mainland economy. What are the prospects of further economic growth for Hong Kong in the future? Various feasible options and strategies are explored in this study. Hong Kong is compared to both New York and London in terms of its relative advantages and disadvantages in serving as the premiere international financial center of the world. Other possible roles for Hong Kong are also explored. The overall conclusion is that Hong Kong still has great potential for further economic growth. It is up to the people of Hong Kong to adopt a long-term view and implement the right plans and strategies.

Introduction

Introduction

The real GDP of Hong Kong, a city with no natural resources, grew more than fourfold, from US$12.6 billion in 1961 to US$63.7 billion in 1980 (in 2015 prices), within a short period of just twenty years, at an average annual rate of growth of 8.5 percent, to the great surprise of the world at the time. Between 1980 and 2015, the real GDP of Hong Kong grew further to US$310 billion (in 2015 prices), at an average annual rate of 4.6 percent, surpassing the best performance of the developed economies during the same period [1]. However, the economy of Hong Kong has been facing some downdrafts recently. The rate of growth of its entrepot trade has been falling; retail sales have been declining; and tourist arrivals have stopped growing. The growth of the Mainland Chinese economy, Hong Kong's most important trading partner, has slowed since 2013, in its transition to a "new normal" with a greater emphasis on the domestic market. Foreign direct investment into the Mainland, much of which traditionally goes through Hong Kong, has also slowed down. Nevertheless, there are a couple of bright spots: outbound direct investment from the Mainland to the rest of the world has increased significantly, with much of it through Hong Kong, and the "Belt and Road" initiative recently launched by the Mainland also holds significant promises of new economic opportunities for Hong Kong.

The economy of Hong Kong has always demonstrated its adaptiveness, flexibility and resiliency in the face of adverse developments. The establishment of the People's Republic of China in 1949 and the outbreak of the Korean War in 1950, which resulted in the Mainland being put under an embargo by the Western countries, closed off the traditional entrepot trade, which had been the bread and butter of the economy of Hong Kong. At the same time, the population of Hong Kong swelled from the influx of refugees from the Mainland. Hong Kong responded with the establishment of light manufacturing industries–plastic flowers, wigs, knitting, spinning, weaving and dyeing, and garments–relying on the inflow of human and financial capital from the Mainland and the encouragement and support of the then Government of Hong Kong, which made land available for the factories at Kwun Tong and elsewhere. In the early 1970s,

1. The average annual real rates of economic growth during the same period were 1.8% for France, 1.9% for Japan, 2.3% for the U.K. and 2.7% for the U.S.

when the rising wage rate, the shortage of workers and the textile quota system imposed by the U.S. began to affect the light manufacturing industries in Hong Kong, they began to move away to lower-cost locations such as Taiwan and other Southeast Asian economies. Then the Mainland began its economic reform and opened to the world in 1978, and Hong Kong's entrepreneurs got a second wind by moving their manufacturing operations to the Mainland but continuing to conduct their marketing and exporting in Hong Kong. The once prosperous entrepot trade resumed and grew by leaps and bounds with the Mainland economy. The return of sovereignty to China in 1997 turned out to be exceptionally smooth and economically speaking a non-event, despite many dire predictions in the Western press. However, the economy of Hong Kong was negatively impacted by the East Asian currency crisis in 1997-1998 and the "severe acute respiratory syndrome (SARS)" crisis in 2003, from which it was able to recover, partly through the introduction of the "individual visit scheme" for Mainland residents. As the income and wealth of the Mainland continued to grow, it became the most important source, direct and indirect, of the growth of aggregate demand in Hong Kong, providing the demands for its financial, legal, logistics and port services, office and residential real estate, retail, and tourism services–especially after the global financial crisis of 2008. However, since 2013, the Mainland economy has been undergoing a process of transition to a "new normal", but at the same time it has also launched the "Belt and Road" initiative. The economy of Hong Kong has to make the corresponding adjustments, to its own "new normal". Hong Kong has always shown itself to be able to re-invent itself, with the encouragement and support of its government. And this time should be no exception.

The objective of this study is to show that the economy of Hong Kong still has great opportunities and significant unrealized potential for further growth. It is entirely possible for Hong Kong to eventually surpass New York and London, its two more established competitors, to become the leading international financial center of the whole world. This is particularly true in the case of London, which is likely to diminish in importance as an international financial center when the United Kingdom finally leaves the European Union as a result of the recent affirmative "Brexit" vote. It is definitely possible for Hong Kong to continue to be the premiere offshore Renminbi center in the world. It is also possible for Hong Kong to become an international center of innovation and venture capital (the Silicon Valley of East Asia[2]), an international center of creative arts and film making (the Hollywood of East Asia), and an international educational, health care and legal services center in the East Asian region, serving not only Hong Kong and the Mainland, but also the rest of East Asia and the world.

The principal potential driver for the economy of Hong Kong is the continuing rapid growth of not only the Mainland Chinese economy[3], which

2. East Asia as used in this study is meant to include the ten Association of Southeast Asian Nations (ASEAN) countries (Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam) plus three countries (China (including the regions of Hong Kong, Macau and Taiwan), Japan and the Republic of Korea).

3. Even though the average annual real rate of growth of the Mainland economy has declined to around 6.5%, it is still among the highest rates of economic growth in the world. It is also important to bear in mind that because of a much expanded base, a 6.5% rate of growth today is in absolute value terms equivalent to a 13% rate of growth ten years ago.

is projected to surpass the U.S. economy to become the largest economy in the world by 2030, but also the ten Association of Southeast Asian Nations (ASEAN) economies[4], supported in part by the "Belt and Road" (also known as "One Belt, One Road") initiative of China, over the next several decades. The Thirteenth Five-Year (2016-2020) Plan for Economic and Social Development of China, while not mandatory for Hong Kong in any way, expresses support for Hong Kong to continue to develop as an international financial center (and the leading offshore Renminbi center), a center for innovation, and an international legal, arbitration and mediation services center. Moreover, it also supports Hong Kong playing an active role in the "Belt and Road" national initiative as well as the economic development of the Pearl River Delta (PRD) region. It is, however, up to Hong Kong itself to devise a concrete plan and an implementable strategy to take advantage of these opportunities, which can be win-win for both the Mainland and Hong Kong.

It was nothing short of an economic miracle for the real GDP of Hong Kong to grow from US$12.6 billion (in 2015 prices) in 1961 to US$310 billion in 2015, at an annual compound rate of growth of 6.1 percent. Correspondingly, the real GDP per capita of Hong Kong grew from US$3,974 in 1961 to US$12,605 in 1980, achieving developed economy status. Between 1980 and 2015, real GDP per capita of Hong Kong grew at an average annual rate of 3.5 percent to US$42,430, a level comparable to many developed economies[5]. Going forward, the people of Hong Kong can and should work collectively to create yet another economic miracle.

It is also vitally important for the economy of Hong Kong to continue to grow in order to enable the gradual, smooth and harmonious reduction of its degree of income disparity. At the present time, Hong Kong has one of the highest degree of income inequality among the world's developed economies. With a stagnant economy, any change in the distribution of income, through, for example, increases in the income tax rate and transfer payments, is at best a zero-sum game by necessity–one person's gain must come from another person's loss. With a growing economy, however, it is possible for the distribution of income to become more equitable over time without creating losers–for example, the lower-income groups can be allocated a relatively greater share of the increase in GDP. Thus, everyone can be better off simultaneously, albeit with a bias in favor of the lower-income groups, thereby helping to preserve and promote social harmony.

However, Hong Kong's economic future lies in its continuing to be simultaneously both a Chinese city and an international city, serving the Mainland, especially the southern part, East Asia and the rest of the world. Hong Kong cannot afford to become either isolationist or protectionist--its economy cannot possibly prosper if it turns inward because it is simply too small. It must make full use of its comparative advantages, taking into account its current and potential competition, to pursue strategies that

4. See footnote 2 above for the constituent nations of ASEAN.

5. For example, the real GDP per capita's of France, Germany, Japan, the U.K. and the U.S. in 2015 are respectively US$36,248, US$41,219, US$32,477, US$43,734 and US$55,759 (in 2015 prices). The data are collected from the World Development Indicators of the World Bank, except for the U.S., which is taken from the Bureau of Economic Analysis.

add long-term value to not only Hong Kong but also the Mainland and East Asia as well. In the long run, only mutually beneficial win-win strategies are viable and sustainable.

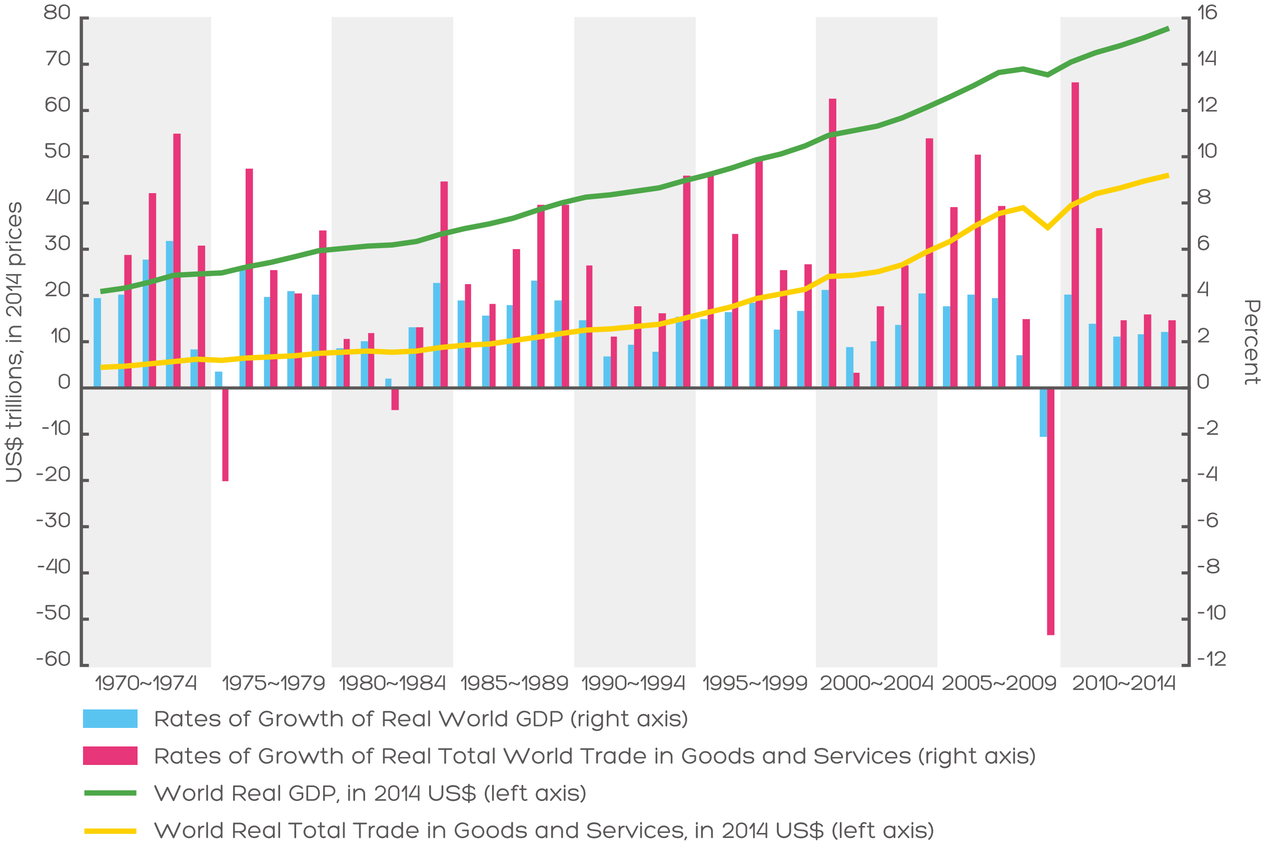
The State of the World and Chinese Economies

The State of the World and Chinese Economies

The economy of Hong Kong has always been dependent on the developments in the world and on the Mainland. Over the past three decades, the economic center of gravity of the world has been gradually shifting to East Asia from the United States and Western Europe and within East Asia from Japan to the Mainland. In 1960, East Asian GDP was approximately 10 percent of world GDP. Today, East Asian GDP accounts for approximately a quarter of world GDP, comparable in size to the economies of the U.S. and the Euro Zone. In the next five to ten years, the East Asian share of world GDP can only grow bigger, given the extremely slow economic growth in North America, Europe and elsewhere (with the exception of India). East Asian shares of world exports, imports, and international trade have also grown from approximately 10 percent in 1960 to more than a quarter in 2015, paralleling the growth of the East Asian share of world GDP. Because of the rapid economic growth of the Mainland and the rest of East Asia outside of Japan, and the demand and supply that such economic growth has generated, the East Asian economies now trade more with one another than with economies outside of East Asia. Approximately half of East Asian trade today is among East Asian economies. This is a sea change compared to say thirty years ago when most of the East Asian trade was between East Asia and the United States and Western Europe. Interdependence of the East Asian economies has been rising sharply over the years and will rise even further within the next five to ten years as East Asia becomes one of the few regions of the world with significant economic growth.

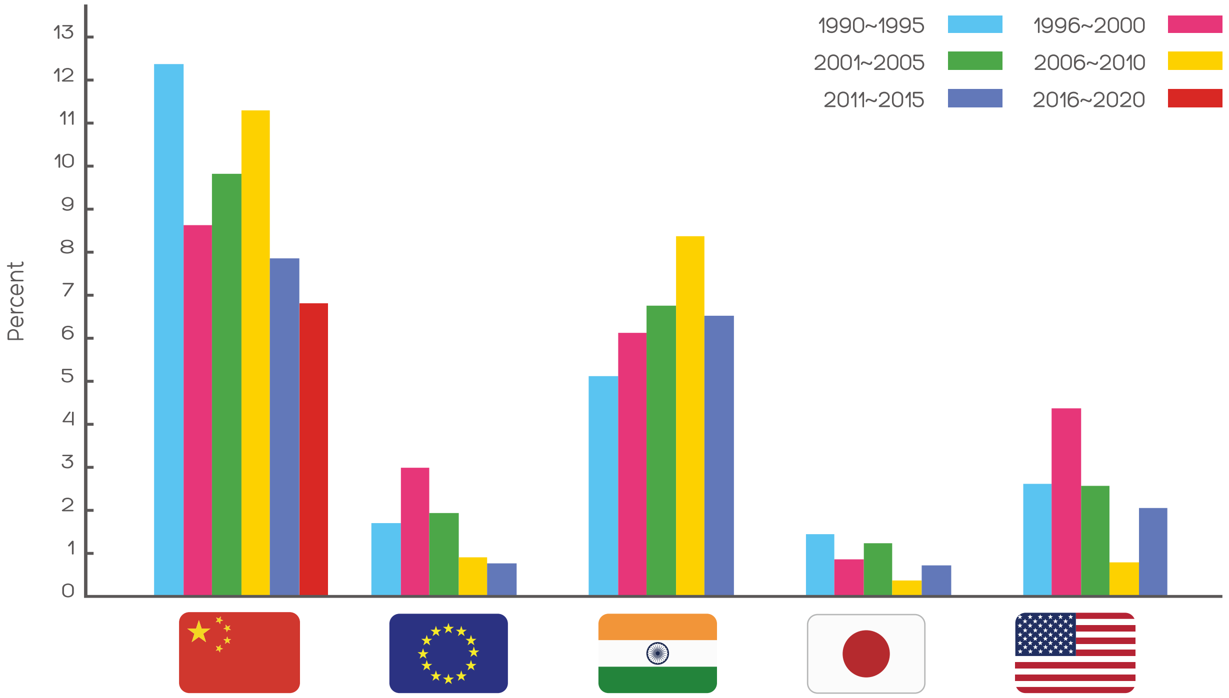
The world economy today is also very different from what it was a decade ago. Real GDP and real international trade of the world as a whole have been growing at their lowest rates in decades (see **Chart 1**, in which the green and yellow lines represent the annual levels and the blue and red columns represent the annual rates of growth of world real GDP and world real international trade respectively). The rate of growth of world real GDP has fallen below 3% and the rate of growth of real world trade has been only slightly above 3% since 2012. Gone are the days when the growth of world trade can be a major driver of the growth of world GDP. Moreover, during the past quarter of a century, the developed economies, represented by the United States, the European Union and Japan, have had low and falling rates of growth, especially since the global financial crisis triggered by the collapse of Lehman Brothers in the United States in 2008. In contrast, the developing economies, as represented by Mainland China and India, have shown very robust growth during the same period, notwithstanding the East Asian currency crisis, the global financial crisis and the subsequent European sovereign debt crisis (see **Chart 2**).

Chart 1: World Real GDP and Real Trade in Goods and Services and Their Growth Rates (2014 US$)



Source: The World Bank

Chart 2: Average Annual Rates of Growth of Selected Economies in Five-Year Intervals since 1990



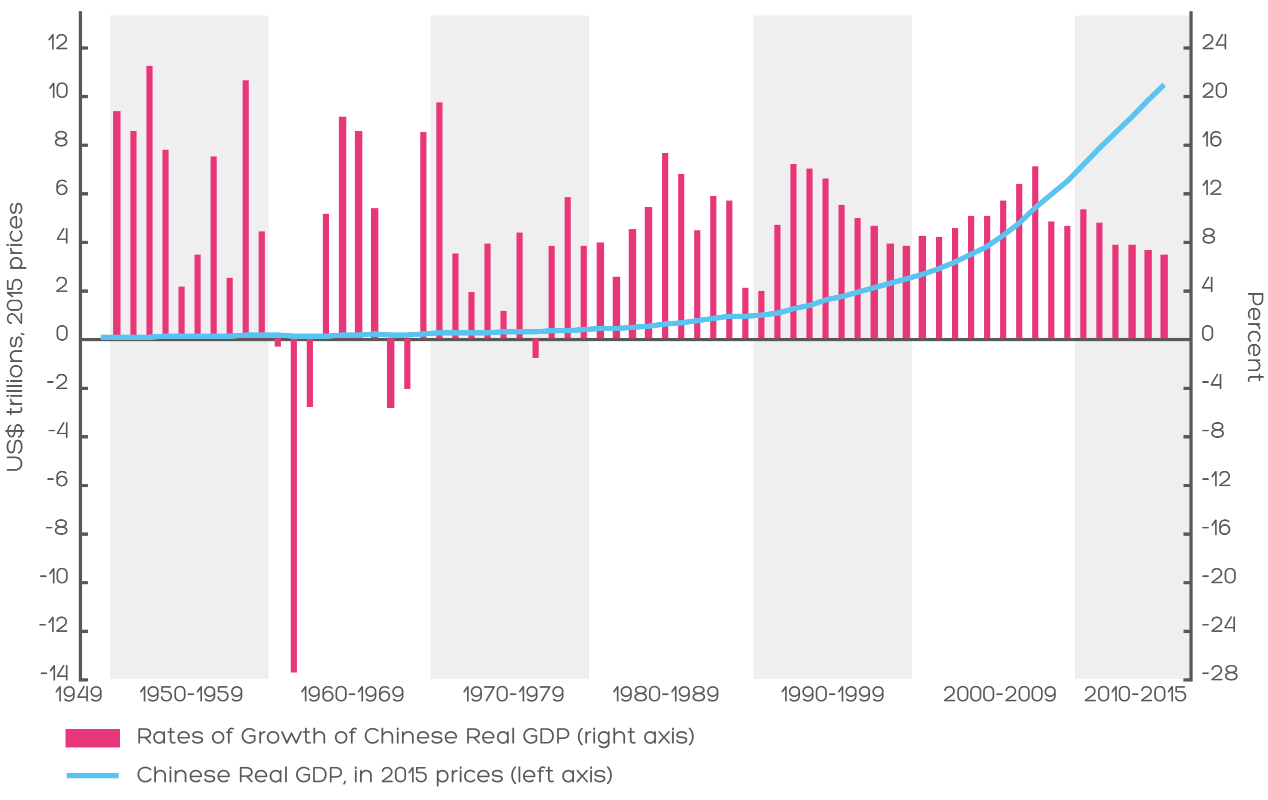
Note: Since the latest GDP data available for the European Union, India and Japan are for 2014, the average annual rates of growth of these economies for the 2010-2015 period are set equal to those for 2010-2014. The rate of growth of the Chinese economy during 2016-2020 is the average target rate in its Thirteenth Five-Year Plan.
Sources: National Bureau of Statistics of China, The World Bank, U.S. Bureau of Economic Analysis

The past decade has also been marked by a significant decline in the long-term real rates of interest in the developed economies, leading to an outflow of short-term capital from the developed economies to the developing and emerging economies, seeking higher yields. However, the low-interest-rate era for the world since 2009 will soon be over. The rise in measured profitability of many enterprises worldwide was largely linked to the historically low rates of interest, which cannot be expected to continue for too much longer. The developing economies will be facing net capital outflows, rising rates of interest, falling exchange rates as well as declining asset prices.

In the meantime, the Mainland economy has also changed, after having grown at almost 10 percent per annum for thirty-eight years. It is in the process of adjusting to a "new normal". What does the "new normal" imply for the Mainland economy?

First, there will be a slowdown in the average annual rate of growth of real GDP, from almost 10% to around 6.5% (see **Chart 3**). In 2015, the Mainland economy grew 6.9%, an otherwise very respectable performance, except that it was the lowest annual rate of growth since 1991. According to the Thirteenth Five-Year (2016-2020) Plan of China, the average annual real rate of growth of the Mainland economy will slow down from 7.8% in the Twelfth Five-Year (2011-2015) Plan period to over 6.5%, and that of per capita disposable income from 7.7% to also over 6.5%. For 2016, the target rate of growth for Mainland real GDP is between 6.5% and 7%. There will be a greater emphasis on the "quality" of the economic growth, including the

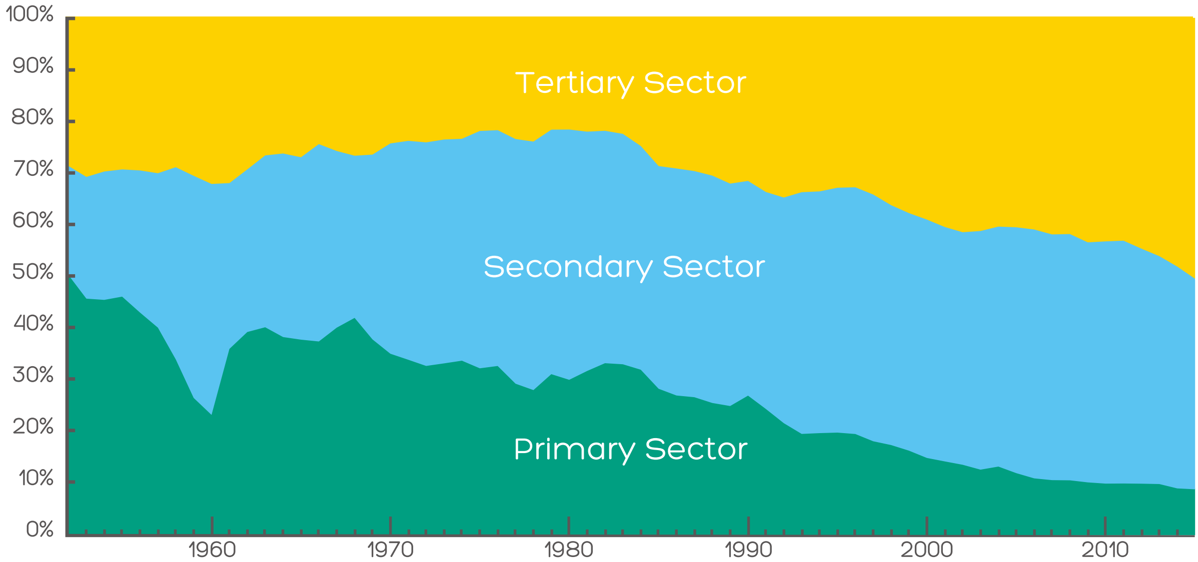
Chart 3: The Level and Annual Rate of Growth of Mainland Real GDP (trillion 2015 US$)



Sources: U.S. Bureau of Economic Analysis, Authors' estimation preservation, protection, restoration and enhancement of the environment and improvement of access to education, health care and elderly care, which are not necessarily reflected in the GDP as conventionally measured.

Second, there will be a transformation in the composition of the Mainland GDP by production sectors (see **Chart 4**). The tertiary (service) sector has already overtaken the secondary (industrial) sector, which consists of construction, manufacturing and mining, as the most important originating sector of GDP, accounting for 50.5% in 2015. The GDP originating from the primary (agricultural) sector fell to 9.0% in 2015. This shift in the sectoral composition has led to corresponding reductions in the demands for energy (including electricity), transportation (including railroad freight), and gross fixed investment and hence their relations to real GDP[6].

Chart 4: The Composition of Chinese GDP by Production Sectors



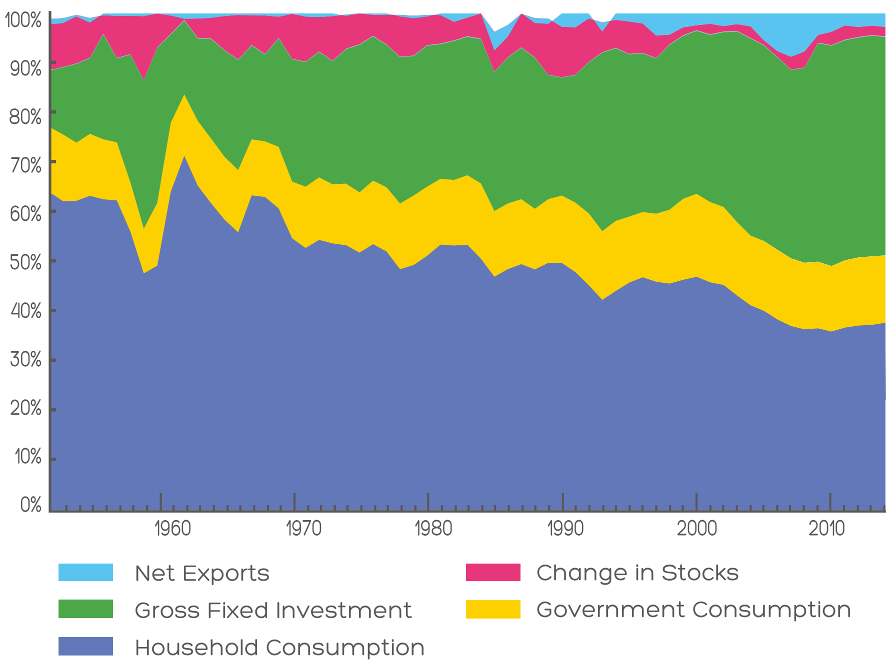
Source: National Bureau of Statistics of China

6, This is why the "Keqiang Index", named after Premier LI Keqiang of the People's Republic of China, consisting of a weighted average of the rate of growth in electricity consumption, railroad freight volume, and the volume of credit and loans, has not been a good predictor of Chinese real GDP in recent years.

Third, there will be a transformation in the composition of aggregate final demand (see **Chart 5**). Net exports, gross fixed investment in manufacturing and residential real estate, and gross fixed investment in public infrastructure, used to be the three most important sources of growth of aggregate final demand on the Mainland. However, going forward, the first two sources will cease to be major drivers of Mainland economic growth. The rate of growth of exports has declined to a single digit, with exports of light manufactured goods such as shoes, textiles and toys taking a big hit because of the rising domestic wage rate and the appreciated Renminbi. As a result, the global supply chains have also begun to migrate away from the Mainland and hence also Hong Kong. There is, moreover, for the first time, no explicit numerical growth target for total international trade in the Plan. The stated goal is to try to achieve approximately balanced international trade. Little or no growth in the value of total exports is expected and a decline in the trade surplus is likely going forward, after the effects of the decline in the world price of oil and other natural resources are fully reflected. In fact, total Mainland international trade in goods alone declined 10.4% from US$4.15 trillion in 2014 to US$3.72 trillion in 2015, even though total trade in goods and services remained essentially unchanged at US$4.67 trillion (see **Chart 6**). There is also a commitment in the Plan to making orderly progress towards full convertibility of the Renminbi, but without a specific date.

Under the "new normal", Mainland economic growth will be principally driven by the growth of its own domestic demand. The share of gross fixed investment, which is still the largest component of domestic aggregate final demand, can only be reduced gradually. However, with so much excess capacity in almost every industry, such as coal, steel, cement, flat glass, aluminum, ship-building, solar panel, and in residential real estate, which is vastly overbuilt except possibly in the few first-tier cities such as Beijing, Shanghai, Guangzhou and Shenzhen, gross fixed investment in either industry or residential housing is more likely to contract than to

Chart 5: The Composition of Chinese GDP by Expenditure

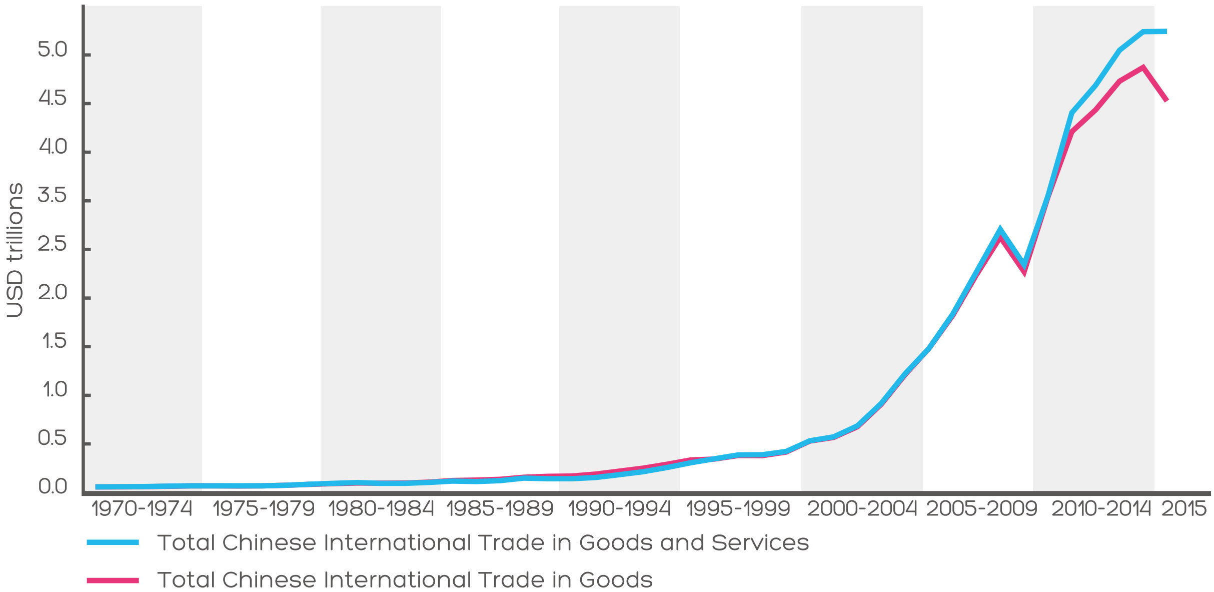


Source: China Data Online

grow; hence the other components of gross fixed investment will need to expand to take their places. Gross fixed investment will continue to play a significant role but will be focused on public infrastructural investment[7] and investment in the provision of public goods[8]. Consumption, both government and household, will continue to increase in importance as a source of domestic aggregate final demand[9], especially the consumption of public goods such as a cleaner environment. Consumption of services will also constitute a rising proportion of total consumption. However, even though real household consumption has been growing at one and a half times the rate of growth of real GDP, it will take a while before it grows from its current slightly over 40 percent of GDP to between 60 and 70 percent of GDP as in most developed economies.

Fourth, there will be a gradual transformation of the sources of growth, from the growth of tangible inputs such as tangible capital (structure, equipment and basic infrastructure) and labor to technical progress (or equivalently growth of total factor productivity (TFP)), which is basically brought about by investment in intangible inputs such as human capital and research and development (R&D). According to the analysis in Lau (2015), Chinese economic growth since 1978 may be attributed to the following sources: (1) The realization of the surplus potential output resulting from the initial economic slack under the mandatory central planning prior to 1978 (12%); (2) The growth of tangible capital (56%) and labor (10%) inputs; (3) Technical progress (or equivalently TFP) (8%); and (4) Economies of scale (14%)[10]

Chart 6: Total Mainland Cross-Border Trade in Goods and Services and in Goods Alone, US$ trillions



Sources: National Bureau of Statistics of China, State Administration of Foreign Exchange

7. For example, high-speed railroads, urban mass transit systems and other urban public works such as public Wi-Fi towers and affordable housing, clean energy, and perhaps even mass residential heating in winter in cities south of the Yangzi River (which traditionally have not been supplied with heat) and high-speed broadband access in rural areas.

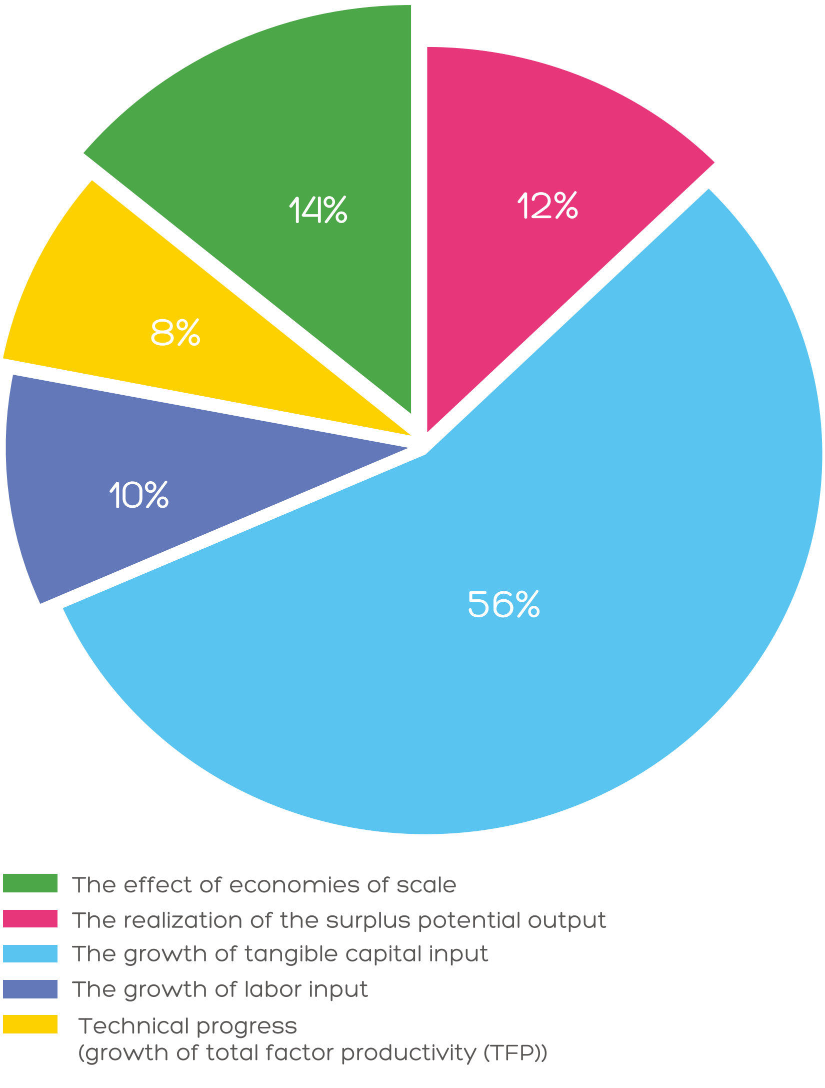
8. Such as education, health care, elderly care, and environmental protection, preservation and restoration–ensuring clean air, clean water and clean soil.

9. As of 2015, government and household consumption combined account for slightly more than 60 percent of Mainland GDP.

10. There are economists who claim that the growth of total factor productivity (TFP) accounted for more than half of the growth in real output of the Mainland in recent years. However, this is not plausible in the light of the considerable over-capacity in the industrial sector and in residential real estate.

(see Chart 7). The growth of tangible inputs, capital and labor, accounted for almost two-thirds of Chinese economic growth since 1978, with technical progress accounting for only 8 percent. However, technical progress may be expected to play a greater role as a source of economic growth in the future as investment in human capital and R&D capital continues to grow rapidly and innovation is actively encouraged and promoted by the Central Government on the Mainland.

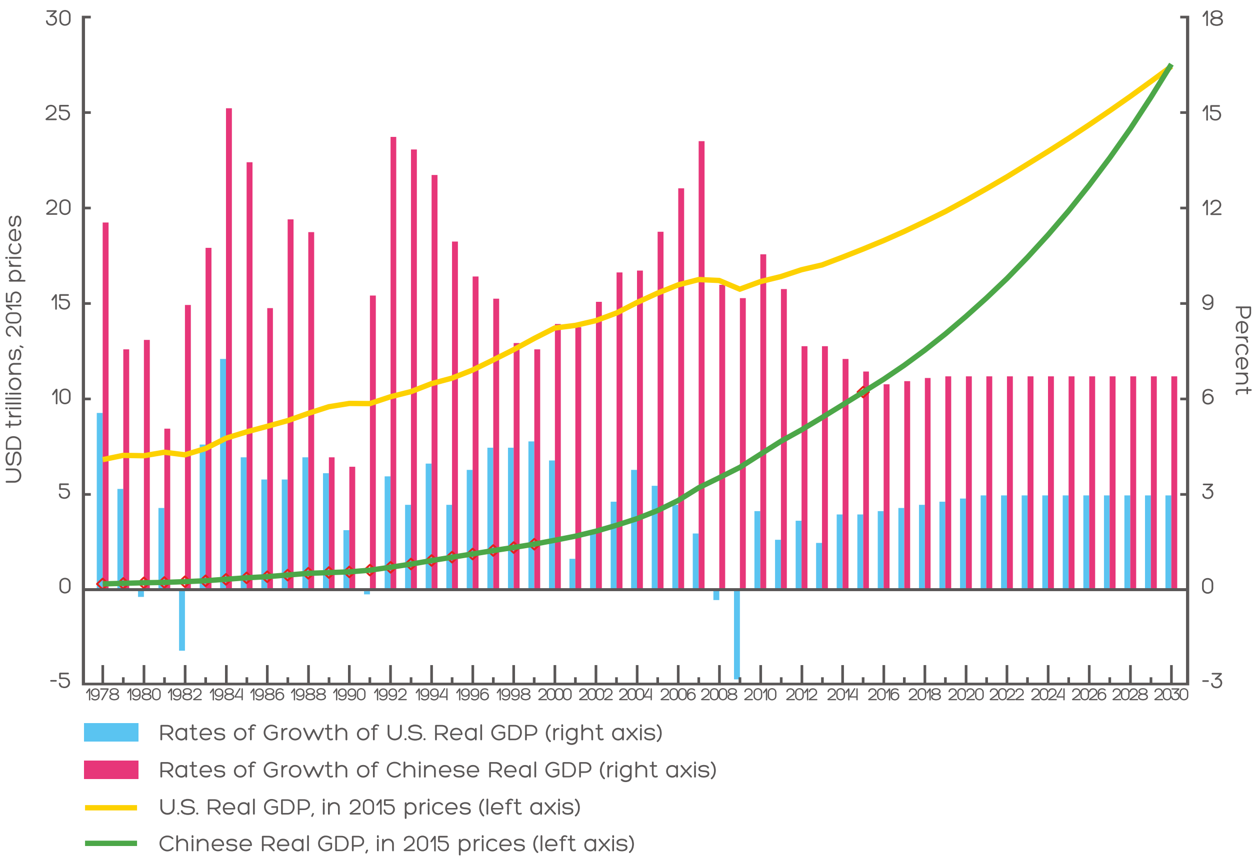
Chart 7: The Sources of Chinese Economic Growth Since 1978



Source: Lawrence J. Lau (2015), "The Sources of Chinese Economic Cirawth Since 1978, " Paper presented at the Conference, "A Just Society: Honoring Joseph Stiglitz", The Columbia Business School, Colmbia University, New York, 16-17 Octber 2015.

Even with the slowdown in the average annual real rate of growth to 6.5 percent, the Mainland is still among the fastest growing economies in the world. It is also expected to catch up with the U.S. economy in terms of aggregate GDP by 2030 (see **Chart 8**)[11]. By comparison, the rate of growth of real GDP of Hong Kong has also been falling, from 3.1% in 2013, to 2.5% in 2014 and 2.4% in 2015. The growth forecast for 2016, made by the Government of the Hong Kong Special Administrative Region (HKSAR), is within the range of 1% to 2%[12]. In the foreseeable future, the Mainland economy is likely to grow at more than three times the rate of growth of the economy of Hong Kong.

Chart 8: The Actual and Projected Level and Annual Rate of Growth of Chinese and U. S. Real GDP (trillion 2015 US$)



Sources: U.S. Bureau of Economic Analysis, Authors' estimation

11. These long-term projections of the real GDPs of China and the U.S. are based on the assumptions that the Chinese and the U.S. economies will grow at average annual real rates of between 6.5% and 7% and between 2.5% and 3% respectively from 2015 to 2030. Chinese real GDP is projected to catch up to U.S. real GDP in approximately 14 years' time, around 2030, at which time both Chinese and U.S. real GDP are expected to exceed US$27.5 trillion (in 2015 prices). This is more than two and a half times the Chinese GDP and more than one and a half times the U.S. GDP in 2015.

12. The real GDP of Hong Kong is likely to do better than the forecast of its Government as the Government of Hong Kong Special Administrative Region has always proved to be too conservative.

The Economy of Hong Kong at a Turning Point

The Economy of Hong Kong at a Turning Point

As is well known, Hong Kong has no natural resources. Its geographical location has been and still is one of its most important comparative advantages. Before 1949, Hong Kong's major economic activity was serving as an entrepot port for the Mainland, especially for southern China. There was little industry. Moreover, Shanghai was much more prosperous than Hong Kong at the time. After 1950, Hong Kong lost its entrepot trade with the Mainland. In part out of necessity, beginning in the mid-1950s, Hong Kong began to develop light manufacturing industries–plastic flowers, wigs, toys, textiles, electronics and other products–followed by real estate development and re-development to meet the booming housing demand. Together, light industry and real estate development made Hong Kong a fairly prosperous city. In the meantime, the Great Leap Forward (1958) and the Great Proletarian Cultural Revolution (1966-1976) on the Mainland interrupted its economic development and preoccupied the Mainland Government for almost two decades, but also provided Hong Kong an opportunity to develop and grow[13]. When the Mainland began its economic reform and opened to the world in 1978, Hong Kong was effectively the only gateway for international trade and inbound foreign direct investment for the Mainland at the time[14]. Hong Kong enterprises and entrepreneurs were among the very first direct investors into the Mainland, and particularly in Guangdong and Shenzhen. They were given a second wind by the economic reform and opening of the Mainland, and relocated their light manufacturing operations there to take advantage of the abundant labor and inexpensive land. They also acted as intermediaries facilitating Mainland exports and imports as well as foreign direct investment into the Mainland, making use of the communication, financial and transportation infrastructure of Hong Kong. It is not an exaggeration to say that Hong Kong's role was indispensable in the successful rise of the Mainland economy during the couple of decades since 1978. Without Hong Kong, the Shenzhen Special Economic Zone would not have been such a success. Nor would the development of the light manufacturing industry in Dongguan have been possible. Hong Kong, in turn, has also benefitted greatly from the huge economic success of the Mainland.

13. With the exception of the years 1966-67, during which Hong Kong was also affected by the Cultural Revolution on the Mainland.

14. Shanghai, which was not allowed by the Central Government to develop until 1992, was but a shadow of its former self during this initial period of Mainland economic reform.

In 1980, the real GDP of Hong Kong was one-seventh of that of the Mainland. Such was the economic success of the Mainland that the GDP of Hong Kong fell to less than 3 percent of the Mainland GDP by 2015 (US$310 billion versus US$10.4 trillion in 2015 prices). In 1980, the real GDP per capita of Hong Kong was more than 30 times that of the Mainland. In 2015, the real GDP per capita of Hong Kong was still ahead, but only by 5.6 times (US$42,430 versus US$7,584). Even as late as 2003, the number of known U.S. Dollar billionaires on the Mainland was estimated to be around ten, compared to perhaps not quite thirty in Hong Kong. By 2013, the number of known U.S. Dollar billionaires on the Mainland was estimated to be over 600, compared to around 500 in the U.S. Of course, the distribution of income has also become much more unequal on the Mainland in the meantime, but the enormous progress that the Mainland economy has been able to make is unmistakable.

Today, the fate of the Hong Kong economy is inextricably intertwined with and dependent on that of the Mainland. The Mainland has thus far been a consistent and unwavering supporter of the Hong Kong economy, enabling Hong Kong to survive the 1997-1998 East Asian currency crisis, the 2003 "Severe Acute Respiratory Syndrome (SARS)" crisis, the 2007-2009 global financial crisis, and the ensuing European sovereign debt crisis. The Mainland has always tried to be supportive of the economic well-being of the people of Hong Kong: from the sale of fresh water from the East River (Dong Jiang), to delaying the Shanghai Disneyland project and the International Board of the Shanghai Stock Exchange, to the launch of the "Individual Visit Scheme", the establishment of the first offshore Renminbi center, and more recently the Shanghai-Hong Kong and the forthcoming Shenzhen-Hong Kong Stock Connects. The Hong Kong economy benefits significantly from being part of China, but Hong Kong is exempt from paying any tax to the Central Government. It does not even have to pay for the Chinese garrison in Hong Kong, as it had to do for the British garrison prior to the reversion of sovereignty in 1997.

The close economic interdependence between the two economies can be seen in **Chart 9**, in which the quarterly rate of growth of the real GDP of Hong Kong is plotted against the quarterly rate of growth of the real GDP of the Mainland of the previous quarter. **Chart 9** shows that there is a positive correlation between two rates of growth--the higher the rate of growth of the Mainland real GDP of the previous quarter is, the higher the rate of growth of the real GDP of Hong Kong, even though there is also a great deal of variance. The blue line in **Chart 9** represents the best-fitting (least-squares) straight line relating the quarterly rate of growth of Hong Kong to the quarterly rate of growth of the Mainland in the previous quarter.

Looking ahead, the Mainland economy is expected to grow at an average annual rate of around 6.5 percent over at least the next five to ten years. If the blue line in **Chart 9** is any guide, the average annual rate of growth of the Hong Kong economy can be expected to be no more than 1 percent in a "business as usual" scenario. Hong Kong must also try to diversify its sources of aggregate demand and explore new directions in order to do better.

Increasingly, Hong Kong is no longer the only gateway to the Mainland economy, especially after Shanghai took off economically in the early 1990s. Foreign direct investors can now enter the Mainland directly without Hong Kong intermediaries. The growth of Mainland exports and imports will slow as the Mainland economy further reorients itself to its own huge domestic market and Mainland international trade will increasingly go through Mainland ports instead of Hong Kong. Hong Kong can no longer be only a passive conduit but must also add real value.

In the Hong Kong and Macau Chapter (Chapter 54) of the Thirteenth Five-Year Plan, the Central Government reaffirms its general commitment to support Hong Kong and Macau in developing their economies, improving livelihood, advancing democracy and promoting social harmony. More specifically, the Plan indicates support for Hong Kong in: first, consolidating and elevating its position as an international center of finance, transportation and trade; second, developing and nurturing innovation and science and technology; and third, becoming an international legal, arbitration and mediation services center. The Plan also indicates continuing support for Hong Kong as the leading offshore Renminbi center and an international asset management center, and in increasing the value-added in sectors such as finance, trade, logistics and other professional services. Two other ideas that are mentioned are the "Belt and Road" initiative and the development of the Pearl River Delta (PRD) regions[15]. However, tourism from the Mainland to Hong Kong is no longer mentioned in the Chapter.

Chart 9: Quarterly Rates of Growth of the Real GDP of Hong Kong versus Lagged Quarterly Rates of Growth of the Real GDP of the Mainland, 1992-2015

15 This includes the PRD Economic Zone, the Greater PRD region (which includes Guangzhou, Shenzhen, Hong Kong and Macau and all the areas in between), and the Pan PRD region which includes the nine provinces of Fujian, Jiangxi, Hunan, Guangdong, Guangxi, Hainan, Sichuan, Guizhou and Yunnan plus Hong Kong and Macau. The Pan Pearl River Delta region has a combined GDP of US$3.74 trillion and a combined population of 490 million in 2015.

What implications does the Plan have for Hong Kong? The slowdown in the rates of growth of both GDP and international trade means a potential reduction of demands from the Mainland for Hong Kong goods, services such as shipping, transportation, logistics, retail and tourism, and assets including both stocks and real estate. The potential reductions in the Mainland tariff and non-tariff barriers to imports and the progress towards full convertibility of the Renminbi also chip away at the two principal competitive advantages of Hong Kong over the Mainland: namely, essentially zero import tariff rates and free and full convertibility of the Hong Kong Dollar (that is, absence of any form of control on capital flows).

If and when the Renminbi becomes a fully convertible currency[16], likely within the next five to ten years, it may begin to play an important role both as a medium of exchange and as a store of value, for residents of Hong Kong, but especially for residents elsewhere, even as the Hong Kong Dollar remains the sole legal tender in Hong Kong as provided in the Basic Law[17]. Paradoxically, the rising acceptance and use of the Renminbi, including its eventual full convertibility, can be a great opportunity for Hong Kong as an international center not only for the clearing and settlement of Renminbi transactions but also for the arrangement of Renminbi-denominated financing. That is why the ability to conduct, clear and settle Mainland and international transactions in Renminbi locally and to do so efficiently is so important for Hong Kong.

However, when the Renminbi becomes fully convertible, the justification for Mainland enterprises listing on the Hong Kong Stock Exchange and for foreign investors purchasing securities issued by Mainland enterprises here will be significantly weakened, especially given that most Mainland enterprises nowadays need Renminbi rather than foreign exchange for their domestic expansion on the Mainland[18]. The Mainland, with official foreign exchange reserves in excess of US$3.2 trillion as of the end of July 2016, and an annual trade surplus in goods and services estimated at US$450 billion, does not need more net inflows of foreign exchange. Moreover, Mainland international trade is increasingly denominated and settled in Renminbi. Currently almost one quarter (22 percent, or at an annualized rate of more than US$800 billion as of the second quarter of 2016) of total Mainland trade is settled in Renminbi, compared to zero percent at the beginning of 2010[19] (see **Chart 10**). The Renminbi trade settlement transactions handled through Hong Kong banks amounted to 6.63 trillion Yuan or US$1 trillion in 2015, an increase of 9% from 6.26 trillion Yuan in 2014.

16. The Renminbi is certain to become capital accounts convertible during this period (though perhaps with some residual controls over short-term capital inflows and outflows).

17. In the same way that the Pataca, the legal tender in Macau, has been largely supplanted by the Hong Kong Dollar and the Renminbi in Macau today.

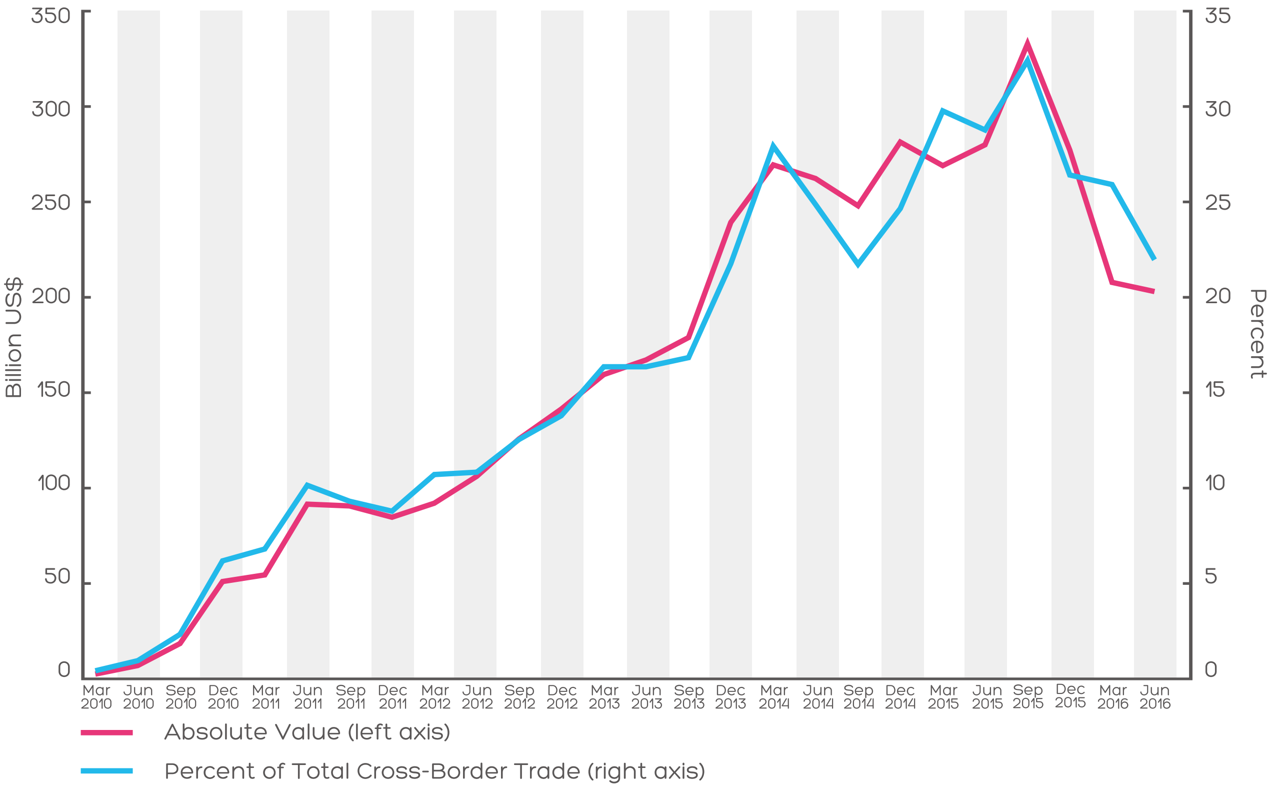
18. Except for enterprises planning to make direct investment overseas, but even then they are much better off borrowing in the local currencies of the destination countries locally.

19. Actually, the proportion of Chinese cross-border trade settled in Renminbi already reached 32.4% in the third quarter of 2015 and would have grown higher were it not for the unexpected Renminbi devaluation of 4% in August 2015 and its subsequent volatility. With the recent stabilization of the Renminbi exchange rate, the proportion of Chinese cross-border trade settled in Renminbi should resume its growth gradually.

For all the above reasons, the overall Chinese need for foreign exchange for transactions purposes is likely to decline over time, albeit gradually, even with rising outbound direct investment[20]. Thus, the Hong Kong Stock Exchange should gradually adapt itself so as to enable capital raising and trading in Renminbi and other currencies such as the U.S. Dollar for the convenience of both the issuers of bonds and stocks and investors worldwide. It should also try to intensify its efforts to broaden its services to other than Mainland and Hong Kong enterprises, for example, enterprises in the ASEAN region, as well as multinational enterprises based in developed economies but with their major markets on the Mainland, encouraging them to raise capital and issue debt in Hong Kong in Hong Kong Dollars, Renminbi, or U.S. Dollars.

Hong Kong should also be prepared for its advantage of a free trade port with zero or low tariff rates being eroded over time on account of Chinese accession to the WTO and its continuing reduction of its tariffs as well as non-tariff trade barriers. Hong Kong may therefore have to rely on the growth of other economic activities than being a conduit for Mainland international trade. Related to this is the gradual decline of Hong Kong's attractiveness as a shopping center to Mainland and other tourists on account of the strong U.S. Dollar (and hence the Hong Kong Dollar) relative

Chart 10: Renminbi Settlement of Chinese Cross-Border Trade, Billion US$ and Percent



Source: CEIC Data

20. In 2015, the inbound direct investment amounted to US$126.3 billion compared to outbound direct investment of US$118 billion. In the first half of 2016, inbound direct investment is US$69.42 billion compared to outbound non-financial direct investment of US$88.86 billion. The net annual outflow due to direct investment may be estimated at less than US$40 billion.

to other currencies, the Mainland tariff reductions and tax reforms, increased availability of imported goods on the Mainland[21] and the increasing ease of Mainland tourists to visit alternative destinations in East Asia, Europe and the U.S.[22]

Tourism is an important pillar industry for the economy of Hong Kong. It generates a large number of low-skilled jobs in entertainment, lodging, restaurants, retail and transportation that cannot be moved away[23]. It is the principal reason why the unemployment rate has remained low in Hong Kong. The Mainland is the most important source of tourists for Hong Kong. The total annual number of Mainland visitors was only 6.83 million in 2002. In 2003, in response to requests from the Government of the HKSAR, which was then suffering from an economic recession caused by the SARS crisis, the "Individual Visit Scheme" was introduced and subsequently expanded. The annual number of Mainland tourists began to rise rapidly to reach 13.6 million in 2006, including same-day visitors. Then in 2009, again in response to requests from the Government of the HKSAR, which was once again suffering from an economic recession caused by the global financial crisis, the rate of growth of the number of Mainland tourists was allowed to accelerate. The total annual number reached a peak of around 47.25 million in 2014. At the same time, the proportion of same-day visitors grew from 31% in 2006 to over 60% in 2015. However, after the anti-corruption campaign was introduced on the Mainland in November 2013, gift-giving to and gift-acceptance by government officials are no longer allowed. This no-gift rule has had a large negative impact on the retail purchases of high-end luxury goods by Mainland tourists to Hong Kong. Mainland tourists nowadays also feel a little unsafe and unwelcome in Hong Kong. The strength of the US$ and hence the HK$ relative to the Euro, the Yen and other currencies makes the other potential destinations more attractive to the Mainland tourists and has probably also contributed to the decline in the annual number of inbound tourists from the Mainland (see **Chart 11**). In the first six months of 2016, tourist arrivals from the Mainland declined 11% year-on-year. Consequently, Hong Kong retail sales to tourists have also begun to decline, leading to significant increases in shop closings and reductions in rents for retail establishments. The average Mainland tourist spending per person has also declined 7% to HK$8,100 in 2016[24].

Today, Hong Kong's most important comparative advantage is probably its human capital. But human capital, like physical capital, also depreciates unless it is continuously replenished and upgraded. Moreover, it is not just the absolute quantity of human capital that matters, but the quantity relative to the current and potential competition. The Mainland is likely to catch up quickly on Hong Kong's comparative advantage in human capital as its economy continues to open further, its institutions of higher

21. Not to mention the relatively higher rental and wage rates in Hong Kong.

22. For example, Chinese tourists can enjoy visa-free entry to many East Asian countries, can take advantage of the Schengen Agreement to visit most of the member countries in the European Union, and can avail themselves of the ten-year multiple-entry visa to the U.S.

23. Any job that can be moved away to a lower-wage location either has been or will be moved away in this age of globalization and instant real-time communication.

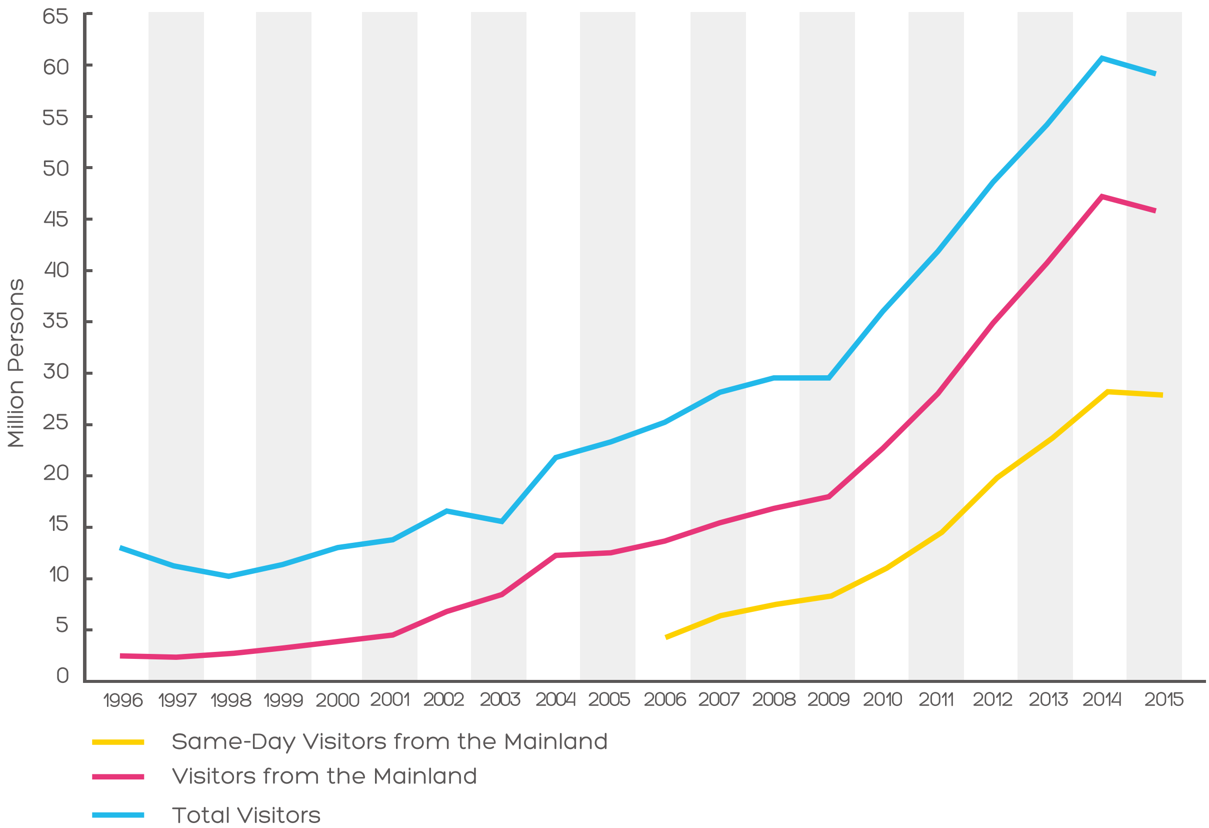
24. International New York Times, 4 May 2016.

learning continue to improve, and the use of the English language becomes more and more widespread, at least in its major cities. Moreover, one needs to bear in mind that in this age of globalization, any job that can be moved away to a lower-cost location will be moved away. Hong Kong must therefore try to create jobs that can and will stay in Hong Kong long-term. This means Hong Kong must try to create niches in which it can have a monopoly, at least a local monopoly, in addition to promoting industries such as tourism which generate jobs that cannot be moved away.

The Mainland economy has been slowing down; the growth of Mainland exports and imports has slowed as Mainland labor costs rise, the Renminbi appreciates, and the Mainland economy further reorients itself to its own huge domestic market and in particular to its service sector, and the rest of the world stagnates. Hong Kong has begun to feel the effects of the Mainland economy adjusting to a "new normal"–its rate of growth of real GDP has begun to decline, and while its rate of unemployment is still at its lowest level since 1997, it is expected to begin to rise (see **Chart 12**). The slowdown in the growth of Mainland exports of light manufactured goods has adversely affected Hong Kong direct investors on the Mainland, especially those in Dongguan, Guangdong. It has also adversely affected the volume of entrepot trade of Hong Kong. All of this means that Hong Kong cannot expect to continue to prosper by simply maintaining "business as usual". The economy of Hong Kong is thus once again at a turning point. Hong Kong must try to find a new role for itself to play in the transformed world and Mainland economies.

Going forward, Hong Kong needs to re-invent itself. The Hong Kong

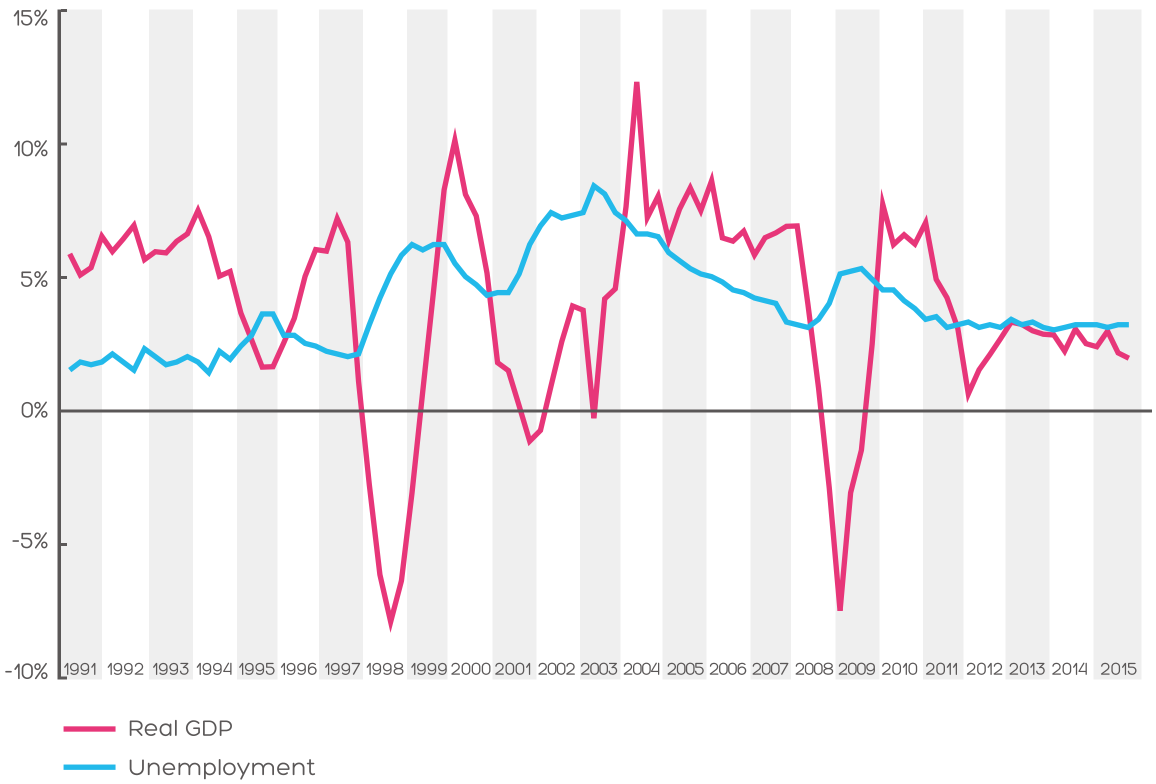
Chart 11: Number of Total and Mainland Visitors to Hong Kong since 1996



Source: Hong Kong Tourism Board

economy needs a new plan and a new strategy. Such a plan can only be drawn up, and such a strategy can only be implemented, by an effective government with a mandate from the public, by a government that can fashion a broad consensus and mobilize the people into action. This will require the close cooperation between the executive and the legislative branches of the Government of HKSAR. It is up to the people of Hong Kong to work together to develop a consensual vision and implementable plan and strategy.

Chart 12: The Quarterly Rate of Growth of Real GDP and Unemployment of Hong Kong



Sources: CEIC Data, Census and Statistics Department

How Does Hong Kong Compare with New York and London ?

How Does Hong Kong Compare with New York and London ?

Hong Kong has the potential of becoming the leading international financial center of not only East Asia but also the world[25]. Geographically, Hong Kong cannot be better located, next to the Mainland, a huge market and a huge source of savings, with a population of 1.37 billion, a GDP of US$10.4 trillion, and rapidly rising income, consumption and wealth. Hong Kong is also right at the junction between Mainland China and the emerging ASEAN region, which is itself also a huge market, with a total population of 0.63 billion and a GDP of US$2.44 trillion, rapidly rising income and demands for capital investments and consumption. Greater China and the ASEAN region combined has a population of 2.03 billion and a GDP of US$14.2 trillion. Hong Kong can and should take full advantage of the opportunities and try to serve both regions actively.

Whenever people talk or write about cities serving as international financial centers today, they invariably mention New York, London and Hong Kong, and in that order. What do these three cities have in common?

First, they each have their own unique local time-zone, geographical and historical advantages. New York is the North (and South) American time-zone financial center; London is the European time-zone financial center[26], and Hong Kong is the East Asian time-zone financial center. Hong Kong is eight hours ahead of London, London is five hours ahead of New York, and New York is thirteen hours behind Hong Kong. They are therefore complementary rather than competitive with one another because they serve geographically different clienteles and at different times of the day.

New York had and still has the advantage of having as its economic hinterland the largest economy of the world, the United States. It is also the home of the largest capital market in the world. Wall Street, in New York, is also the place where most of the modern financial innovations, both good and bad, have originated. London, however, no longer has a significant

25. For various possible reasons, even though Tokyo may have the financial resources, it does not seem to want to become an international financial center serving other economies.

26. However, with the U.K. expected to leave the European Union as a result of the "Brexit" vote, it is not clear whether London can continue to be the leading international financial center in the European time zone. Frankfurt and Paris are likely to compete to replace London as the international financial center for the European Union.

hinterland, as it once did by serving as the political, economic and financial center of the entire British Empire. London's advantage is mostly based on history–with the British currency, the pound sterling, being at one time one of the only two major international reserve currencies in the aftermath of the Second World War (the other one was the U.S. Dollar)–and its extensive economic, political and cultural links to its former colonies, including Australia, Canada, India, New Zealand, South Africa and Hong Kong. It has also been serving as the center for the Euro-Dollar dealings, in part because of its more business-friendly regulations compared to New York. The use of English, the language of business of the world today, also gives London an advantage over other European cities. London also has the advantage that it is where the insurance business first started, in the Eighteenth Century, at Lloyd's, which has continued to prosper and dominate the world casualty and property insurance industry since. London has been able to continue to serve as an international financial center not only for the U.K. but also for the European Union and other European countries, based on geographical proximity, and many other countries in Asia, Africa and elsewhere, based on historical colonial ties. It is, however, not based on the current economic or financial strength of the U. K. [27] With the U. K. expected to leave the European Union, London's role as the international financial center of Europe may be seriously and negatively affected. It will be difficult for London, with the U.K. being neither a member of the European Union nor the Euro Zone, to out-compete Frankfurt or Paris in the provision of financial services for member countries of the European Union.

Hong Kong, being only a city, has even less of a hinterland of its own than London. However, since the reversion of its sovereignty from the U.K. to China in 1997, it has operated under the "One country, two systems" arrangement, which allows Hong Kong to have as its potential economic and financial "hinterland" that of a still rapidly growing Mainland China, the second largest economy in the world. In fact, the Mainland economy is poised to catch up with the U.S. economy in terms of GDP by 2030, in another fourteen years' time. However, Hong Kong will need to compete with Shanghai in order to become the sole or primary international financial center of China. Shanghai is much more centrally located than Hong Kong and much better connected to the Central Government[28]. Nevertheless, Hong Kong is better able to serve southern China, not only because of geographical proximity, but also because many current Hong Kong residents originally hail from that region, including the Pearl River Delta region, the Chaozhou region around Shantou, and the Province of Fujian. Guangdong (including Shenzhen), together with Hong Kong and Macau, have a combined population of 115 million, more than that of Germany (83 million[29]) and only 10 percent less than that of Japan (127 million[30]). In addition, Hong Kong is also well placed to serve the international financial needs of the ASEAN economies. The residents in the ASEAN region,

27. If London were to start from scratch today as an international financial center, it might not be very successful.

28. Shanghai is probably also perceived to be more dependable to do what is in the best national interests of China.

29. German Federal Statistical Office.

30. Statistics Bureau of Japan.

including the overseas Chinese there, have traditionally viewed Hong Kong as a safe haven for their wealth[31]. Hong Kong can certainly leverage up these network connections to become the international financial center for the ASEAN region as well. This can then form the basis for an appropriate division of labor between Hong Kong and Shanghai, with Shanghai serving the Mainland and Hong Kong serving the entire East Asia and the rest of the world. It will also allow the economy of Hong Kong a degree of diversification from its economic dependence on the Mainland. Of course Hong Kong still faces stiff competition from Singapore, which has the advantage of greater geographical and political proximity to the other ASEAN economies. But ultimately, the competition will be decided by relative efficiency, liquidity and pricing, which in turn will depend on the scale and volume of the business conducted at the respective international financial centers.

Second, all three cities are common-law jurisdictions and share their respect for and pride in their embrace and implementation of the rule of law. The courts in these cities are all clean, efficient, equitable and transparent. All three governments concerned support free international trade and have low tariff rates and minimal trade restrictions[32]. None of them have restrictions on the flow of capital, whether inbound or outbound. There are active markets in all major currencies in all of these cities and transactions can be conducted just as easily in a non-local currency as in a local currency.

Third, all three cities are major hubs for communication and transportation[33].They all offer easy connections to almost everywhere in the world. In all three cities, there is instantaneous and totally unrestricted access to information, whether via the internet or more conventional means. All three cities make good locations for the global or regional corporate headquarters of global financial institutions and multinational corporations. Hong Kong would be the ideal base for multinational corporations desiring to enter into the huge Mainland market and for Mainland enterprises, both state-owned and private, to venture overseas.

Fourth, all three cities have highly educated labor forces and ready supplies of seasoned professionals who can provide first-rate accounting, banking, legal and other professional services[34].They all have excellent universities which can train graduates to provide the needed professional and technical manpower[35].

Fifth, all three cities are cosmopolitan and desirable places to live. They all have beautiful settings (harbors and parks), (relatively) clean environment, convenient transportation, cultural venues such as galleries, museums, and performing art centers, good education and healthcare

31. Especially in the 1950s and 1960s.

32. Although this may change in the future.

33. However, the access of London to the economies of the European Union post "Brexit" may become more limited.3

34. "Brexit" may have some impact on the ability of non-U.K. nationals working in the U.K.

35. In terms of human capital, Hong Kong may be slightly disadvantaged (see **Chart 15** below)

systems, gourmet restaurants, great shopping, low crime rate, and widespread use of English. Professionals of the financial and technology sectors will feel at home in any one of these cities.

Sixth, none of the three cities are a political center of their respective region. The political center of the United States is in Washington, D. C., not New York. London is of course the capital of the U.K., but it is not the political center of Europe (in fact, the U.K. has recently voted to exit from the European Union); today, the political center of Europe is in Berlin (or Brussels)[36]. The political center of China today is Beijing. Hong Kong is nowhere near becoming a political center of anything. But it is actually an advantage for a city not to be the political center, so that it can focus on its own economic and financial development. That is one reason why New York is more prosperous than Washington, D.C., London is more prosperous than Berlin, and both Hong Kong and Shanghai are more prosperous than Beijing.

Seventh, New York, London and more recently Hong Kong have all experienced the out-migration of their manufacturing and service jobs. However, both New York and London have survived and continued to prosper by creating and maintaining their core competences in finance. Hong Kong should be able to do the same by finding and focusing on its core competences.

However, all three cities also share the disadvantage of extremely high costs for office and residential space. This implies a relatively high cost of doing business in Hong Kong in terms of both office rentals and high levels of salaries (including housing allowances) for senior management and professional and technical staff who are mobile worldwide.

Next, we consider the question: What do New York and London have that Hong Kong does not have? First, as already mentioned above, Hong Kong does not have its own economic and financial hinterland, although Hong Kong can and should make use of the Mainland, especially southern China, as its "hinterland", under the "One Country, Two Systems" framework and the Closer Economic Partnership Arrangements (CEPA) with its sovereign, as London used to make use of Europe through its membership in the European Union. Hong Kong-Mainland economic cooperation can and should be win-win because the two economies complement each other in many ways. And now that "Brexit" is coming, Hong Kong should have a good chance of overtaking London as an international financial center.

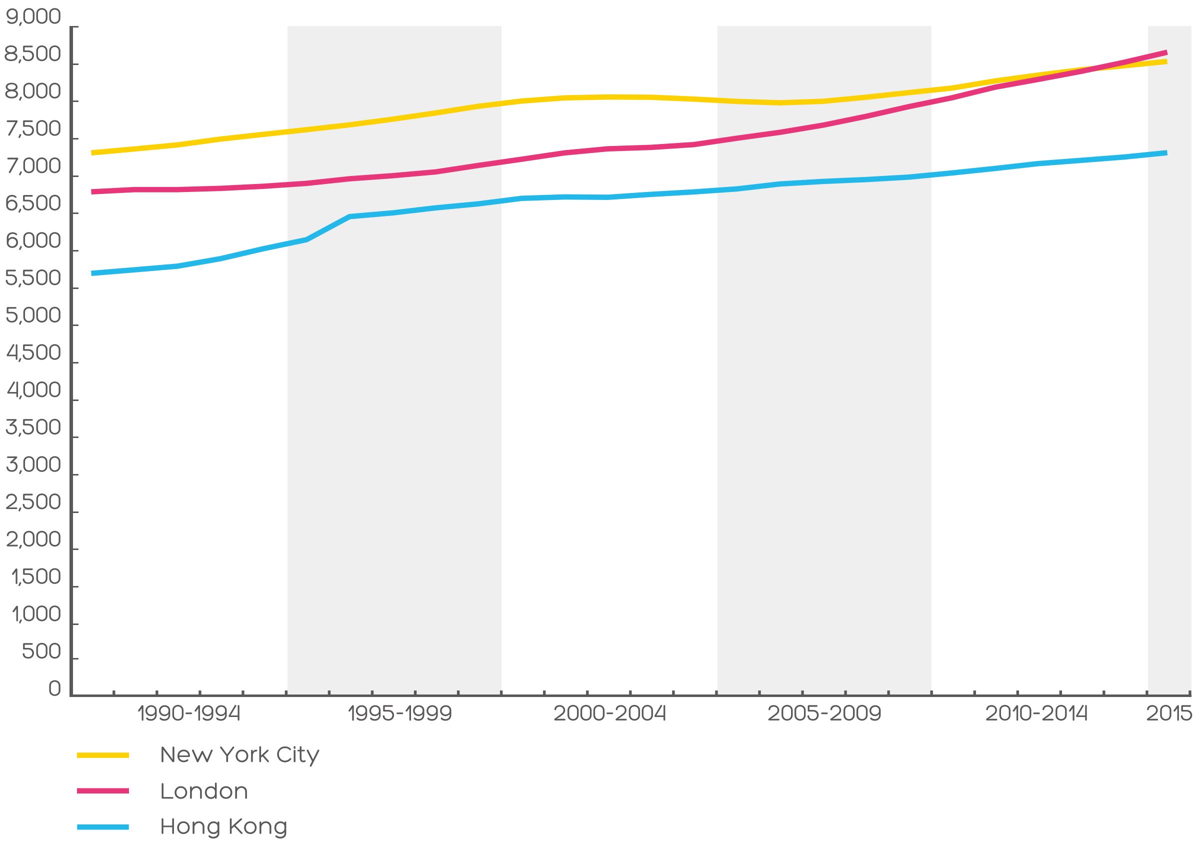
Second, Hong Kong has a somewhat smaller population (7.32 million in 2015) than either New York (8.55 million) or London (8.67 million)

36. Frankfurt, the leading potential replacement for London as the international financial center in the European time-zone in post-"Brexit" Europe, is also not the political center of Germany.

(see **Chart 13**) but at the same time a significantly lower GDP per capita than either New York or London (US$40,000 compared to US$78,000 and US$70,000 respectively in 2014) (see **Chart 14**). Moreover, its adult population has, at the present time, an average of only 10 years of schooling, much lower than those of both the United States (12.9) and the United Kingdom (12.3), even though Hong Kong had a higher average number of years of schooling than the U.K. back in 1990 (see **Chart 15**). Taking into account that New York and London are probably able to attract the best educated people in their respective countries, the gap between Hong Kong and its two competitors is probably even bigger. This is one important reason why the GDP per capita of Hong Kong is significantly lower than those of New York and London. Furthermore, New York and London can readily augment their human-resource pool by attracting talents from the rest of their respective countries and regions[37], but not so Hong Kong. This puts Hong Kong at a potential disadvantage compared to New York (but perhaps not so much compared to London any more). Hong Kong can reduce this disadvantage by expanding its own tertiary education sector and by simplifying the process of recruitment of qualified professionals from both the Mainland and abroad.

Third, Hong Kong does not have an active, deep and liquid sovereign and corporate bond (fixed income) market with both short and long maturities that both New York and London have. In fact, it does not at the present time have much of an active bond market at all. This makes Hong Kong unsuitable as a location for many asset managers, including

Chart 13: The Population of New York, London and Hong Kong, thousands



Sources: CEIC Data, New York City Economic Development Corporation, Bloomberg

37. It is not so easy for London to do so any more now that the U.K. is expected to leave the European Union.

Chart 14: The Real GDP per Capita of New York, London and Hong Kong, US$ (2014 prices)

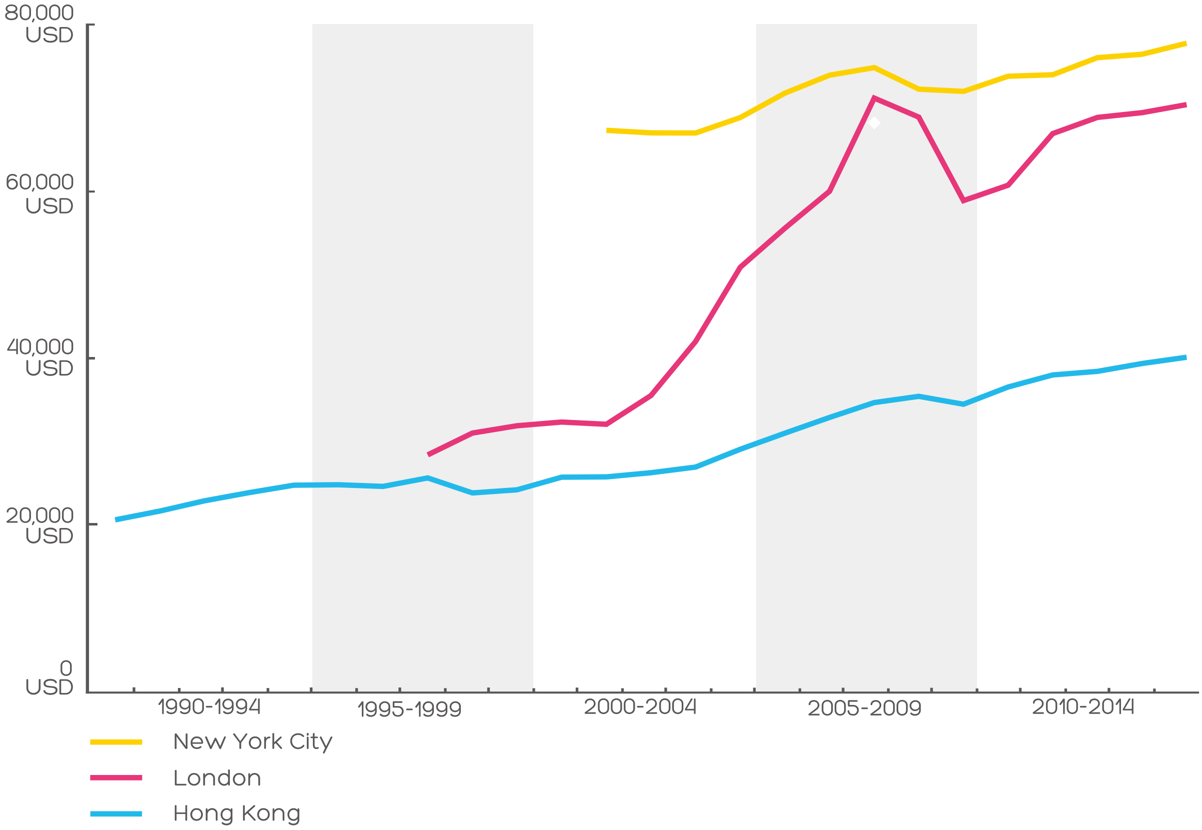
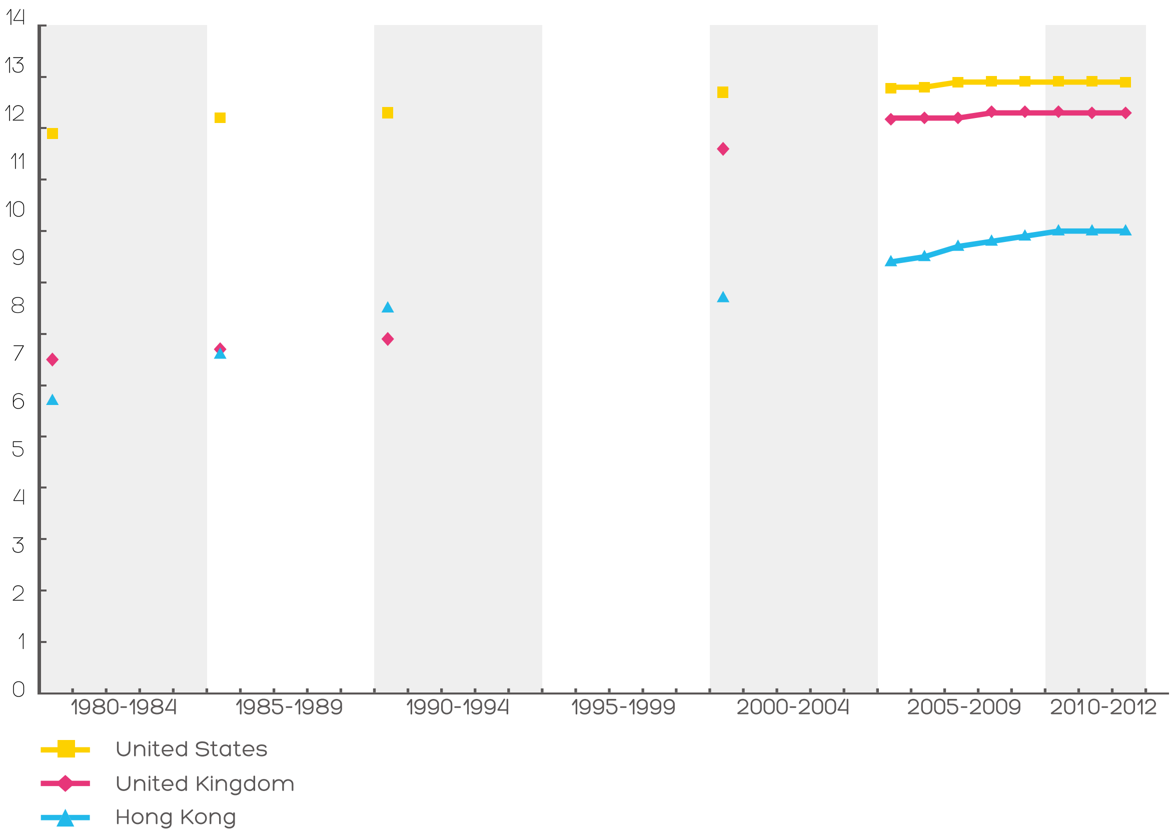


Chart 15: The Average Number of Years of Schooling of Adults in the U.S., the U.K. and Hong Kong



Note: According to United Nations Development Programme, an adult is defined as a person aged 25 or over. The average number of years of schooling is derived from educational attainment levels using the official durations of each level.

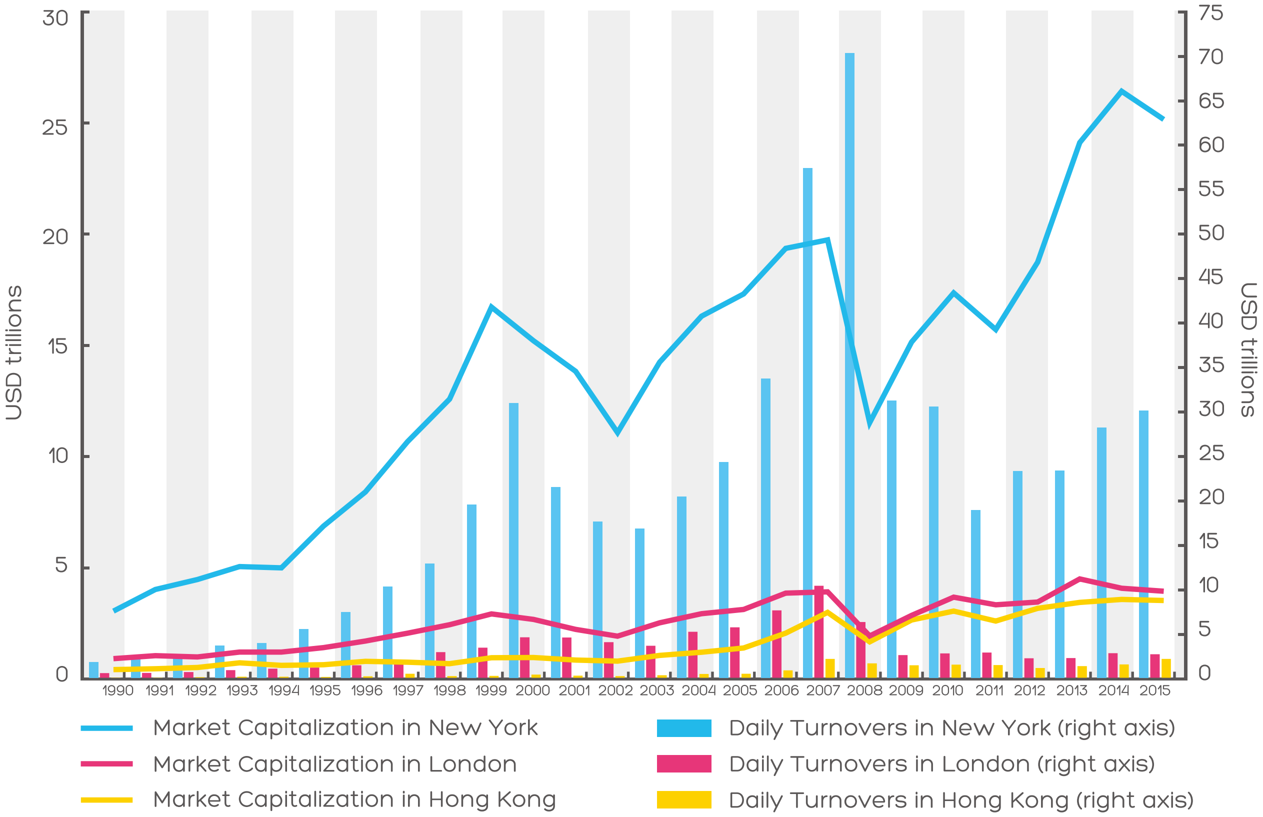
Source: United Nations.

fixed income funds, insurance companies, money market funds, pension funds, sovereign wealth funds and treasury operations of multinational corporations. One reason suggested for the lack of an active bond market in Hong Kong is the fact that the Government of HKSAR habitually runs budget surpluses and hence has no need to borrow from the market through the issuance of bonds. This makes it difficult to establish a (sovereign) benchmark risk-free rate and a yield curve for the Hong Kong bond market.

Fourth, the stock market in Hong Kong is still not large enough or international enough compared to those in New York and London (see **Chart 16**). Hong Kong's market capitalization (US$3.2 trillion in 2015) is the lowest among those of the three cities: It is less than 15 percent of that of New York (US$25 trillion), but is within striking distance of that of London (US$3.9 trillion). In terms of daily turnover, Hong Kong is also the lowest of the three cities, US$2.1 trillion, compared to London's US$2.7 trillion and New York's US$30 trillion (all in 2015).

However, the enormous potential buying power of the Mainland investors and its expected rapid growth over time can provide crucial support for the expansion of the Hong Kong stock market going forward. In 2015, the market capitalizations of both Shanghai and Shenzhen Stock Exchanges were larger than that of the Hong Kong Stock Exchange. The three Chinese stock exchanges combined have a market capitalization of US$11 trillion, compared to the US$25 trillion of the U.S. stock exchanges, New York Stock Exchange and NASDAQ, combined (see **Chart 17**). The

Chart 16: The Total Market Capitalization of the Stock Exchanges in New York, London and Hong Kong and Their Daily Turnovers, US$ trillions

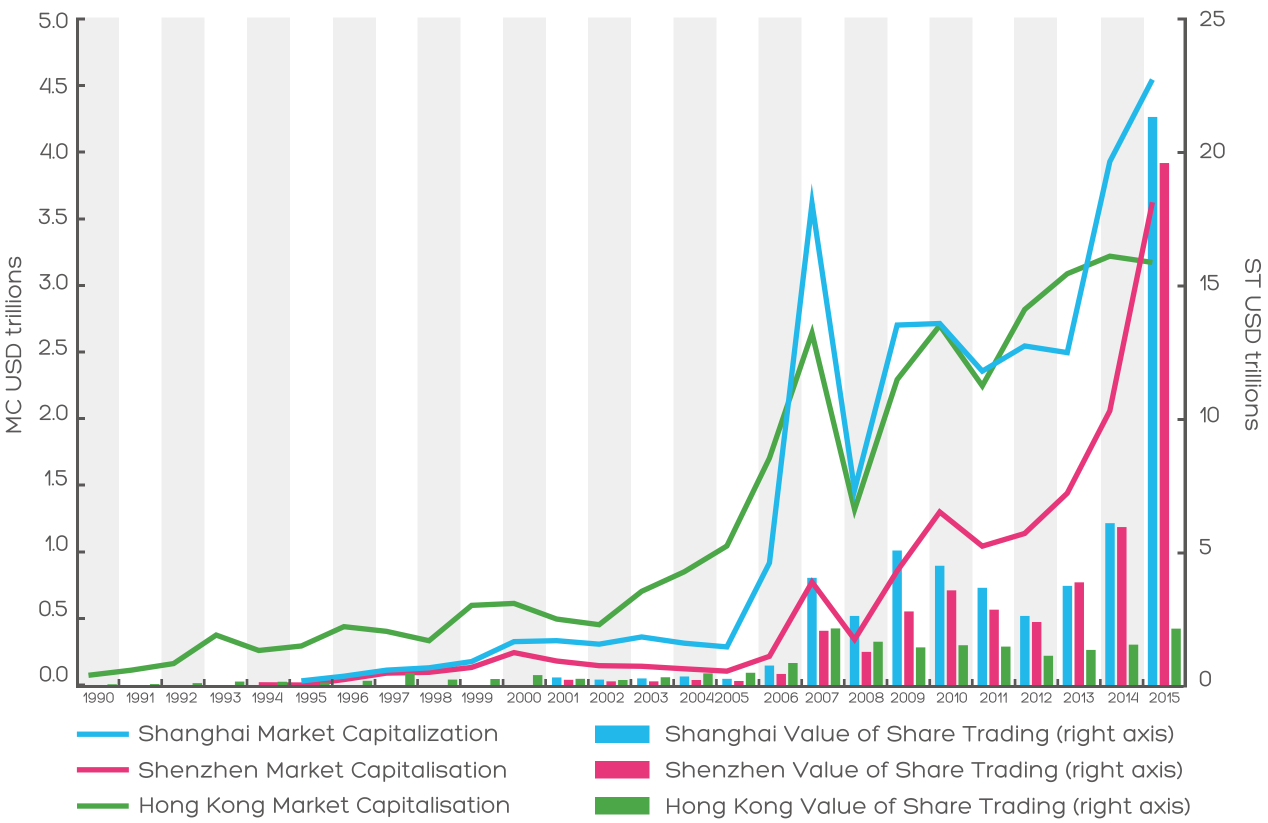


Source: World Federation of Exchanges

values of shares traded on the Shanghai and Shenzhen Stock Exchanges have also been consistently higher than that of the Hong Kong Stock Exchange since 2009. The three Chinese stock exchanges combined have a value of shares traded of US$45 trillion, higher than that of the U.S. stock exchanges combined of US$30 trillion. This testifies to the existence of a huge potential share-buying power from Mainland investors that can provide the driving force for the growth of the Hong Kong stock market, if appropriately harnessed, especially when controls on capital flows are completely lifted on the Mainland. When Mainland capital controls are lifted, the first thing the Mainland investors are likely to do is to rebalance their existing investment portfolios, which do not include enough foreign stocks and bonds at the present time. This will lead to a significant but one-off demand for foreign stocks and bonds, which it is hoped can be mostly supplied through the Hong Kong market. After that initial capital outflow there will be continuing regular Mainland demands for foreign stocks and bonds for portfolio diversification purposes, which can also hopefully be met through the Hong Kong market. It is thus not too difficult for Hong Kong to catch up to London, but it will require significant efforts to catch up to New York.

Hence, the stock market in Hong Kong should be prepared to reach out to other East Asian economies and recruit their listed blue-chip companies to do a secondary listing with newly issued shares in Hong Kong, so as to increase the supply of stocks traded here. For example, this can take the form of Hong Kong Depositary Receipts (HDRs), in the same way as many non-U.S. enterprises are secondarily listed on the New York Stock

Chart 17: The Market Capitalization and Value of Share Trading of Chinese Stock Exchanges, US$ trillions



Source: World Federation of Exchanges

Exchange or NASDAQ in the form of American Depositary Receipts (ADRs). The use of "Depositary Receipts" minimizes the frequency and volume of cross-border capital flows due to the buying and selling of the cross-listed shares. For example, if Samsung Electronics issues depositary receipts on the Hong Kong stock exchange, then a non-Korean investor who wishes to purchase its shares does not need to use Korean Won but can purchase the depositary receipts in Hong Kong directly with Hong Kong Dollars or U.S. Dollars. In fact, all East Asian blue-chip stocks can in principle be traded in the form of depositary receipts in Hong Kong in terms of Hong Kong Dollars or U.S. Dollars. Similarly, Hong Kong should also try to recruit multinational corporations with significant markets or operations on the Mainland or in East Asia to either do a secondary listing as HDRs or to list their East Asian subsidiaries separately in Hong Kong. This will in one fell swoop allow the individual enterprises in the East Asian economies and in the world to raise capital not only on the stock markets in their own economies but also worldwide, and enable the Hong Kong stock market to have a larger and more rapidly growing supply as well as a greater selection of investible instruments. Both individual and institutional Mainland investors wishing to make portfolio investments in other East Asian and world economies can simply do so on the Hong Kong Stock Exchange, increasing the "buy side" demand and total turnover. A large, growing and liquid Hong Kong stock market, catering to the fastest-growing regions of the world, will attract global asset managers to locate in Hong Kong and to trade all East Asian blue-chip stocks here.

Fifth, Hong Kong does not have an active reinsurance market serving both investors and insurers worldwide, despite the huge and rapidly growing demand for casualty, property and life insurance in the East Asian region and the similarly huge potential supply of risk capital from the newly wealthy on the Mainland and in other East Asian economies. Taking advantage of these developments, Hong Kong can certainly aspire to becoming the London or the Zurich of reinsurance in East Asia.

Sixth, New York is the world headquarters of J. P. Morgan Chase and London is the world headquarters for Barclays and the HSBC Group. However, unlike New York and London, Hong Kong does not have a comparable world-class commercial bank headquartered in the city. Hong Kong, despite serving as the headquarters of many commercial banks, is not the headquarters of any of the top ten commercial bank groups in terms of assets in the world. Having one or more of the top ten commercial banks in the world headquartered in Hong Kong can significantly increase Hong Kong's competitiveness as an international financial center. Perhaps the Bank of China and the HSBC Group, both note-issuing banks of and with deep historical roots in Hong Kong, can consider locating their global headquarters in Hong Kong[38].

Seventh, New York and London are also cities where art and culture

38. The HSBC Group has decided to maintain its headquarters in London some months ago, but perhaps it may reconsider in view of "Brexit".

flourish–galleries, museums, concert halls, opera houses, theaters and artisanal workshops of all kinds. Hong Kong has made a small beginning in this direction–its Government has been encouraging and promoting creative arts in Hong Kong: the annual Art Basel fair thrives in Hong Kong, the West Kowloon Cultural District is gradually taking shape, and recently overseas film-makers have set up shops in Hong Kong. But Hong Kong still has some distance to go to catch up to New York and London.

Finally, we ask: What does Hong Kong have that New York and London do not have? First, Hong Kong has the Mainland as its potential economic and financial hinterland, which, even at an average annual rate of growth of 6.5%, is still growing at more than twice the rate of growth of the U.S. and European economies. Moreover, the Mainland economy is expected to become the world's largest around 2030. Hong Kong also has access to the enormous and rapidly growing pool of savings and wealth on the Mainland which can potentially underpin the demand (buy) side of the capital market in Hong Kong.

Second, the low tax rates of Hong Kong (profits tax rate of 16.5% and maximum individual income tax rate of 15%) are significantly lower than those effective in New York and London, which may also include value-added taxes (VAT), local income and sales taxes in addition to the national income taxes[39]. In addition, there is no tax on capital gains and cash dividends for both residents and non-residents in Hong Kong.

Third, Hong Kong has a unique, close and easy access to the large and growing Chinese and East Asian savings pool because of its geographical proximity and its cultural and linguistic ties. Hong Kong has traditionally served as the "safe haven" for Southeast Asian capital. The overseas Chinese communities in the ASEAN region still maintain strong ties with the Mainland and Hong Kong. The potential demand for capital on the Mainland and in the rest of East Asia, and its mirror image, the potential supply of stocks, bonds and other financial instruments, are similarly large and growing.

Fourth, Hong Kong is blessed by its bilingualism–most of its residents are fluent in both Chinese and English, making it an ideal place as a launch platform for both outbound and inbound Mainland direct and portfolio investment.

Fifth, Hong Kong is by far the largest and most active offshore Renminbi clearing, settlement, trading and financing center in the world today and is likely to remain so in the future. The average daily turnover of Hong Kong's Renminbi "Real-Time Gross Settlement (RTGS) System" reached 947 billion Yuan in 2015, an increase of 29% over 2014. Moreover, Hong Kong has the full support of the People's Bank of China in its Renminbi

39. However, in order to attract global asset managers and treasury operations to locate in Hong Kong and to use the Hong Kong market, it is necessary to refine the Hong Kong tax treatments of both the managers and the ultimate beneficiaries (for example, a U.S. investor buying a corporate bond issued by a Korean company in Hong Kong). In March 2015, the Legislative Council of Hong Kong passed an Inland Revenue Ordinance amendment to allow, under specified conditions, interest deductions under profits tax for corporate treasury centers and profits tax reductions for specified treasury activities by 50 percent.

operations, which gives it an advantage over other offshore Renminbi centers.

Sixth, the "Belt and Road" initiative, the Asian Infrastructural Investment Bank (AIIB), the New Development Bank BRICS (also known as the BRICS Development Bank) and the Silk Road Fund, all long-term projects promoted by the Mainland, present additional unique opportunities for Hong Kong as an international financial center. For example, Hong Kong has begun to develop a market for "Sukuk" or "Sharia (Islamic Law)-compliant" bonds which are the only debt-like instruments that can be used in Islamic countries. Such bonds are currently available in London but not in New York, and in East Asia only in Kuala Lumpur and Singapore. As the "Belt and Road" initiative potentially involves many Islamic countries from Azerbaijan and Bangladesh to Turkey and Uzbekistan, Hong Kong can play a unique and important financial role.

Hong Kong as a Leading International Financial Center

Hong Kong as a Leading International Financial Center

What does it mean for Hong Kong to become a leading international financial center of the world? It means that Hong Kong should become the first place, and if not the first, one of the first places, that come to mind when an investor wishes to buy or sell a financial asset, be it a stock, a bond, a mutual fund or a financial derivative. It also means that it should become the first place, or one of the first places, that an enterprise or a government think of when it wishes to raise capital and issue equity or debt, or a treasurer of a multinational corporation will think of as he or she decides on where to park the idle corporate money balances temporarily. Thus, the capital market must be active, deep, and liquid, with no capital controls, a minimum of red tape, low taxes of all kinds, low transaction costs, speedy and dependable settlement, and full compliance with the rule of law.

The reality is that the center of gravity of the world economy has been moving to East and South Asia over the past several decades and will continue to do so. The share of East Asia in world GDP has surpassed 25 percent and will continue to grow over time. Hong Kong can and should establish itself as the premiere international securities (both bonds and stocks) market for the entire East Asian region, so that all East Asian, not just Chinese, enterprises and governments can come to Hong Kong to raise capital and issue equity and debt, and investors worldwide, including asset managers, insurance companies, investment funds, pension funds, other financial institutions and individuals, only need to come to Hong Kong to invest in all of the East Asian economies, in bonds, stocks and private equity (including venture capital).

Historically, Hong Kong has always been regarded as a "safe haven" for their capital by residents of Southeast Asian countries, especially in times of turmoil. Hong Kong also has strong trade ties with the ASEAN economies. In 2014, Hong Kong ranked amongst the top ten trading partners of seven out of the ten ASEAN economies, and two out of the ten ASEAN economies, Singapore and Thailand, ranked amongst the top ten trading partners of Hong Kong (see **Table 1**). The ASEAN economies had collectively a population of 630 million, a GDP of US$2.44 trillion, a GDP per capita of US$3,874 and total international trade of US$3.27 trillion (all figures refer to 2015)[40].The region has also been growing at an average annual

40. The total international trade excludes that of Myanmar, data for which are not available.

real rate in excess of 5% per annum. These economies are likely to find the idea of an East Asia-wide securities market in Hong Kong hospitable as it will increase demand for their bonds and stocks substantially and thereby increase inbound direct and portfolio investment in their respective economies.

The East-Asian (region-wide) securities market can be operated as a three-currency market–instruments can be denominated in either the Hong Kong Dollar, the U.S. Dollar, or the Renminbi (or even in the local currencies of the individual East Asian economies). Trading does not need to be conducted in only Hong Kong Dollars but can also be conducted in either U.S. Dollars or the Renminbi (just as many financial transactions in London are conducted in U.S. Dollars or the Euro rather than the pound sterling). One important reason for the use of multiple currencies is to enable the issuers of stocks and bonds to avoid currency mismatch. For example, a Mainland enterprise with only Renminbi revenue should only issue bonds in Renminbi to reduce its currency risk; an Indonesian firm with Renminbi revenue earned through exports to the Mainland can also issue bonds in Renminbi; it would be more risky for them to issue bonds in either the U.S. or the H.K. Dollars. But for an enterprise with U.S. Dollar revenue, for example, Foxconn, which assembles i-phones for Apple, it would be less risky to issue U.S. Dollar-denominated bonds. Another important reason is to enable potential investors to avoid currency risk. For example, an investor from the Mainland can buy and trade bonds and stocks denominated in Renminbi, thus avoiding the currency conversion risks; an insurance company in Hong Kong with mostly Hong Kong-based insured clients can buy bonds and stocks denominated in Hong Kong Dollars for its investment portfolio.

Table 1: Ranks of Hong Kong as Trading Partner of Asia-Pacific Economies and Vice Versa, 2014

Economy	Hong Kong's Rank as Trading Partner of Economy	Rank of Economy as Trading Partner of Hong Kong
Mainland	2	1
Australia	20	14
Brunei	20	129
Cambodia	3[(1)]	43
Indonesia	15	24
Japan	12	3
Korea	9	6
Laos	14	114
Macau, China	2	20
Malaysia	10	11
Myanmar	2[(2)]	66
New Zealand	22	38
Philippines	6	17
Singapore	5	5
Taiwan, China	4	4
Thailand	9	9
United States	17	2
Vietnam	10	13

Note: (1) 2013 ranking. (2) 2010 ranking.
Source: International Trade Centre

Hong Kong should aspire to be the first choice whenever Mainland investors (enterprises and households) wish to make portfolio investment overseas and whenever East Asian enterprises and governments want to raise capital, both equity and debt, and in a variety of currencies (HK$, US$ or Yuan, or even local currencies). To reach this goal, Hong Kong needs to develop an active bond market. It also needs to expand its stock market so that it includes not only Mainland but also other East Asian enterprises, possibly as secondary listings. It is still a distance from achieving these aspirations as yet.

The Development of an East-Asia-Wide Bond Market in Hong Kong

A leading international financial center must have an active, deep and liquid bond market for both short and long maturities, which Hong Kong unfortunately has never had up to the present time. It must therefore work hard to develop such a bond market. The very first step is to try to develop a market for HK$-denominated sovereign or quasi-sovereign bonds, so as to establish a full "risk-free" yield curve with benchmark rates, from which other, non-sovereign HK$-denominated debt instruments can be priced. This requires the Government of the HKSAR to issue sovereign bonds of different maturities. But since the Government of the HKSAR does not run budget deficits and hence has no immediate needs for the issuance of general-purpose bonds of any kind, it can only issue bonds related to the financing of large public infrastructural projects. For example, the proposed Third Runway at the Hong Kong International Airport, the only commercial airport in Hong Kong, can be financed with HK$-denominated bonds with staggered maturities ranging from five years to thirty years (up to 2047), secured by the future landing fees and backed by the full faith and credit of the Government of HKSAR. Similarly, the construction of the High-Speed Railroad Link to the Mainland can also be financed or re-financed with such long-term bonds[41]. In addition, the Hong Kong Mortgage Corporation Limited (HKMC), a wholly government-owned financial institution under the Hong Kong Monetary Authority (HKMA), can also be encouraged to issue annually long-term fixed-rate HK$-denominated mortgage bonds (for example, 35-year bonds), the proceeds of which are used by it to purchase qualified[42 43]owner-occupied residential mortgage loans originated by commercial banks in Hong Kong, subject to a maximum ceiling per mortgage loan. This will enable the commercial banks to offer both variable-rate and fixed-rate mortgage loans to their potential borrowers, who will then have a choice between the two types of mortgage loans. If the originating commercial banks sell the fixed-rate mortgage loans to the HKMC, they will be entitled to an origination fee upfront as well as an annual loan service fee for the duration of the mortgage loan, and, in addition, they do not have to tie up

41. This is a little trickier, as it is a project of the MTR Corporation, which has private shareholders. But there are various ways to do it; for example, with Government ownership of the tracks and a long-term lease to the MTR Corporation for the use.

42. The residential property offered as collateral for the mortgage loan should also satisfy certain criteria of quality, safety, and size in addition to being owner-occupied and subject to a ceiling for the loan-to-value ratio as well as a ceiling for the loan itself. For example, it may be limited to a maximum of HK$10 million per loan.

43. These mortgage loans can in principle also be applied to the sale of currently public rental housing (公屋) to the current tenant.

their own capital. Moreover, since the mortgage loans to be purchased by HKMC will have a relatively low maximum loan ceiling, they are unlikely to compete with their existing business of making mortgage loans for relatively high-priced residential real estate. Insurance companies and pension funds based in Hong Kong are dying to buy and to hold such long-term HK$-denominated bonds, especially those issued by organizations with sovereign or quasi-sovereign credit ratings, which are in extremely short supply. Those fortunate enough to buy these bonds typically hold them to maturity and almost never sell them on the secondary market.

Both the Government of the HKSAR and the Hong Kong Mortgage Corporation (HKMC) should be able to receive a sovereign credit rating, given that Hong Kong has so little public debt, and thus should qualify for the lowest possible rate of interest on the bonds they issue, of whatever maturity. While infrastructural project financings may be one-off, the demand for long-term fixed-rate residential mortgage loans from Hong Kong households should be strong and persistent enough to support and sustain an active, deep and liquid market in long-term bonds.

How does the use of long-term fixed-rate bonds to finance residential mortgage loans enhance affordability of owner-occupied housing in Hong Kong? First of all, a fully amortized mortgage loan of a longer maturity will have a lower level monthly payment, other things being equal, and hence will make home-ownership much more affordable to low-income households on a cash flow basis. A thirty-five-year fully amortized mortgage loan can be expected to reduce the amount of the level monthly payment by approximate half relative to a fifteen-year mortgage loan. Secondly, most (potential) low-income home-owners are likely to have rather predictable and relatively slowly increasing (if at all) future income streams and hence are the least able to bear the risks of an unexpected rise in the rate of interest and hence the amount of the monthly mortgage payment that may become due with a variable-rate mortgage loan[44]. Thus, they may prefer the certainty, security and stability of a fixed rate and hence fixed level monthly payments. However, commercial banks in Hong Kong and for that matter anywhere else are unable to offer fixed-rate mortgage loans of long maturity because they do not have fixed-rate deposits of similar maturity. If they offer long-term fixed-rate mortgage loans on their own, it will result in a serious maturity-mismatch between their assets and liabilities, with potentially disastrous consequences[45]. But with the intermediation of the HKMC, long-term fixed-rate mortgage loans can become a reality for low-income Hong Kong home-owners[46] if they prefer fixed-rate to variable-rate mortgage loans.

It should be noted that what is being proposed here is an indirect form of securitization of qualified residential mortgage loans, through

44. The rate of interest on a fixed-rate loan may not always be lower than the rate of interest on a variable-rate loan over certain periods but it will remain fixed and completely predictable over the life of the mortgage loan.

45. Recall the "Savings and Loan Association" fiasco in the U.S. in the 1980s. The entire "Savings and Loan" industry was wiped out because of maturity mismatch between their variable-rate deposits and their fixed-rate loans.

46. The availability of long-term fixed-rate residential mortgage bonds for Hong Kong can thus greatly enhance affordability of owner-occupied housing and thereby lower the cost of living, raise the quality of life and contribute to social harmony across the board.

the sale of bonds issued by the HKMC directly to the public (institutions and individuals), with the proceeds used by HKMC to purchase qualified mortgage loans from the originating commercial banks. Indirect securitization is preferred to direct securitization, which takes the form of bundles of residential mortgage loans sold directly to the public in separate tranches[47]. This is because with indirect securitization, it is possible to pool the loans of the separate tranches and share the risks of defaults across them, and to rely on the quasi-sovereign rating of the HKMC, dispensing with the need for separate ratings by the credit rating agencies for each tranche of mortgage loans. This should result in a lower rate of interest for both the HKMC and the mortgage-loan borrowers and substantial savings on the necessary selling expenses and underwriting fees[48].

Given the "Linked Exchange Rate System (LERS)" of Hong Kong, which pegs the Hong Kong Dollar to the U.S. Dollar at the fixed exchange rate of HK$7.8 per US$, and the free and full convertibility of the Hong Kong Dollar, the yield curve for the US$-denominated bonds issued by Hong Kong entities should be similar to the yield curve for HK$-denominated bonds. The prices of the other US$-denominated bonds issued by other entities in Hong Kong can thus be priced accordingly based on their own individual credit ratings. The World Bank, the Asian Development Bank (ADB), the Asian Infrastructural Investment Bank (AIIB), other multilateral development finance institutions, and government and corporate issuers around the world can also be encouraged to issue their short- and long-term US$-denominated bonds on the Hong Kong market, taking advantage of the large savings pool on the Mainland and in other East Asian economies, once appropriate benchmarks and yield curves can be established and sufficient daily volume is achieved. In fact, there is no reason why the U.S. Treasury should not be allowed to issue its US$-denominated debt in Hong Kong eventually if it wishes to do so.

Finally, the Ministry of Finance (MOF) of the Central Government and quasi-sovereign issuers such as the China Development Bank (CDB), the China Export-Import Bank, the Asian Infrastructural Investment Bank (AIIB) and the New Development Bank BRICS, should also be encouraged to issue Renminbi-denominated bonds of all maturities in Hong Kong to establish the offshore RMB risk-free rate of interest and full yield curve for Renminbi-denominated debt securities. Other countries with dependable Renminbi revenue, such as Russia, which has significant oil and gas sales proceeds from China, and ASEAN countries, which all run significant trade surpluses vis-a-vis the Mainland and hence potentially have Renminbi revenue, can also be encouraged to issue Renminbi-denominated bonds in Hong Kong. Once the risk-free benchmarks and the yield curves for Renminbi-denominated debt securities are established and sufficient

47. Direct securitization is the form commonly used in the U.S.

48. One important proviso is that the HKMC should remain wholly owned by the Government of HKSAR so that it and its senior management are not under any pressure to maximize short-term profits (and repeat the same mistakes made by the Federal National Mortgage Association (FNMA, commonly known as Fannie Mae), and the Federal Home Loan Mortgage Corporation (FHLMC, commonly known as Freddie Mac) in the U.S.) in the late 1990s and early 2000s.

volume of transactions is achieved, Renminbi-denominated government and corporate bond issues of all maturities can follow and be priced in accordance with their own respective credit ratings.

The ultimate goal for Hong Kong should be to have an active, deep and liquid market in bonds of all maturities in all three currencies–the Hong Kong Dollar, the U.S. Dollar and the Renminbi[49]. Eventually, when the Hong Kong bond market become sufficiently large, active, deep and liquid, Hong Kong can also offer to list and trade sovereign and corporate bonds in other currencies, e.g., Singapore Dollars and Malaysian Ringgits, or even inflation-protected bonds denominated in other local currencies. This would not only be good for Hong Kong but should be a most welcome development for the ASEAN economies and for the economies on the Belt and Road.

The Development of an East-Asia-Wide Stock Market in Hong Kong

There is at the present time no single market in which the stocks of all major enterprises in East Asia are traded. The result is that the markets are individually quite small and fragmented. Investors have to invest in separate national markets and in different national currencies, greatly increasing the transactions costs of cross-border investors both inside and out of East Asia. Taking advantage of the huge savings pool on the Mainland and hence the potential buying power, Hong Kong can encourage East Asian enterprises to raise both equity and debt capital in Hong Kong. Hong Kong can then become the single place for international asset managers to purchase blue chip East Asian stocks (e.g., the MSCI Far East Index components) in US$ or HK$ (which is pegged to the US$), without concern about foreign exchange conversions and restrictions on capital inflows and outflows. Hong Kong is also an ideal location for the establishment of an East Asian region-wide stock market not only because of its stable exchange rate vis-a-vis the U.S. Dollar, but also because it taxes neither cash dividends nor capital gains. However, Hong Kong should try to conclude double-tax agreements (DTAs) with countries and regions that are homes of enterprises that may potentially be dually listed in Hong Kong[50] so that the investors in the East-Asia-wide market in Hong Kong will be accorded a tax treatment no less advantageous than investing directly in the national or regional market concerned.

The share of East Asian and South Asian stock exchanges in the market capitalization of the world stock exchanges has also been growing rapidly, powered by the rapid rate of growth of their GDPs and wealth as well as the high saving rates of the regions. Almost all of the East Asian

49. In a way, this is not unlike the present situation of the London market, in which debt instruments denominated in the pound sterling, the Euro and the U.S. Dollar are issued and traded.

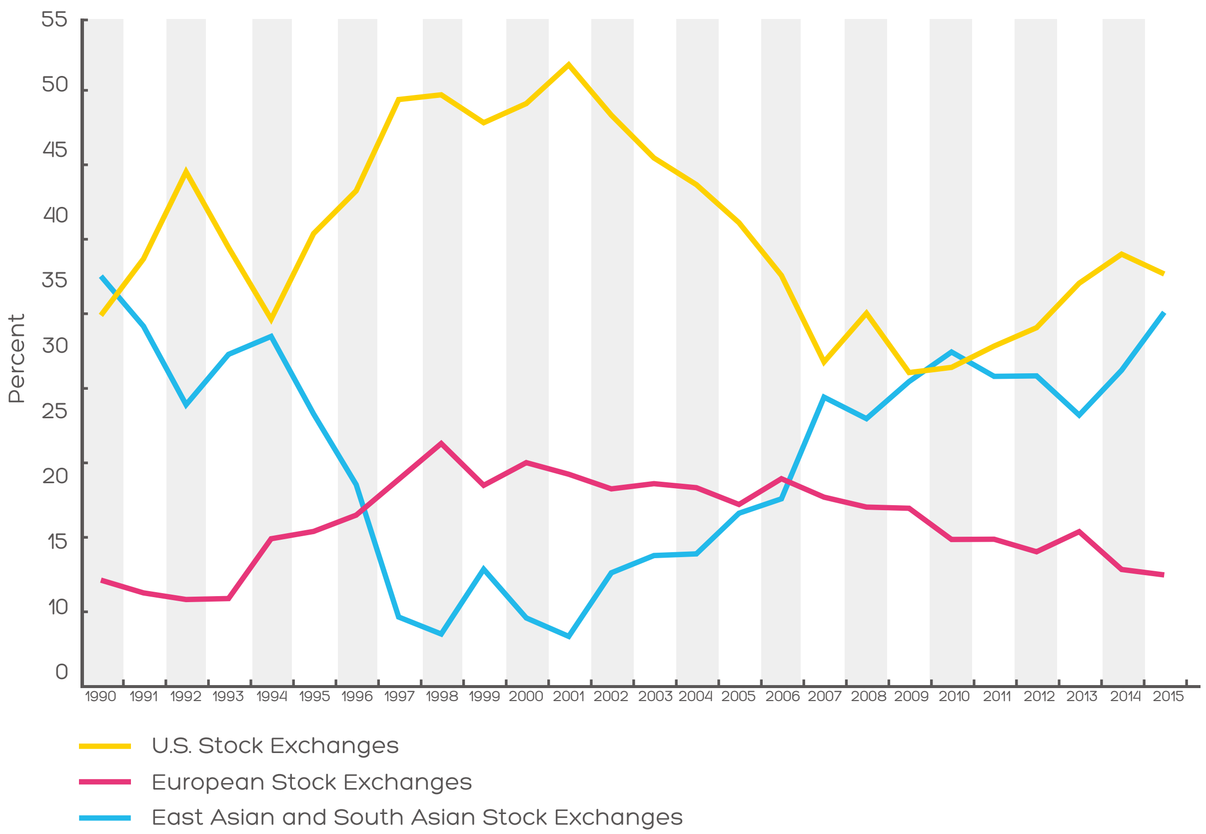
50. Most double tax agreements require the exchange of financial information between the tax jurisdictions. In June 2016, the Legislative Council of Hong Kong passed the Inland Revenue Ordinance amendment to enable Hong Kong to comply with the OECD's international standard for automatic exchange of financial account information. The first financial information exchange is expected to be commenced by end of 2018. Given the fact that most of the rest of the world has adopted measures against money laundering and secrecy of bank accounts, the cost to Hong Kong of agreeing to the exchange of information is low but the cost of non-compliance–being branded as a tax haven–is high.

economies, with the possible exception of the Philippines, have high national savings rates on the order of 25% and above. There are therefore ample savings to support an East-Asia-wide capital market. **Chart 18** shows the relative rise of the East Asian and South Asian stock markets and decline of the U.S. and European stock markets since 2000[51].

A non-Hong Kong stock can be listed and traded in Hong Kong in the form of Hong Kong Depositary Receipts (HDRs) as a secondary listing. The basic idea of an East-Asia-wide stock market in Hong Kong is to have all of the major East Asian blue-chip stocks, such as Baosteel, China Mobile, Petro-China, Sony, Toyota, LG Group, Samsung Electronics, TSMC (Taiwan Semiconductor Manufacturing Corporation), Cheung Kong, San Miguel, Singapore Airline, SCG (Siam Cement Group) and Indofood, list and trade on the Hong Kong Stock Exchange in addition to their own respective domestic stock exchanges.

What should be done with prudential regulation and supervision of these dually listed enterprises? It is proposed that there be a clear division of labor with respect to the functions of regulation and supervision between the regulatory and supervisory agencies of the country/region of the primary listing and the regulatory and supervisory agency for the East-Asia-wide stock market in Hong Kong[52]. The basic principle is that

Chart 18: The Distribution of the Market Capitalization of World Stock Exchanges by Region, percent



Source: World Federation Exchanges

51. The initial high share of the East Asian and South Asian stock markets in 1990 was due to the stock market bubble in Japan at the time.

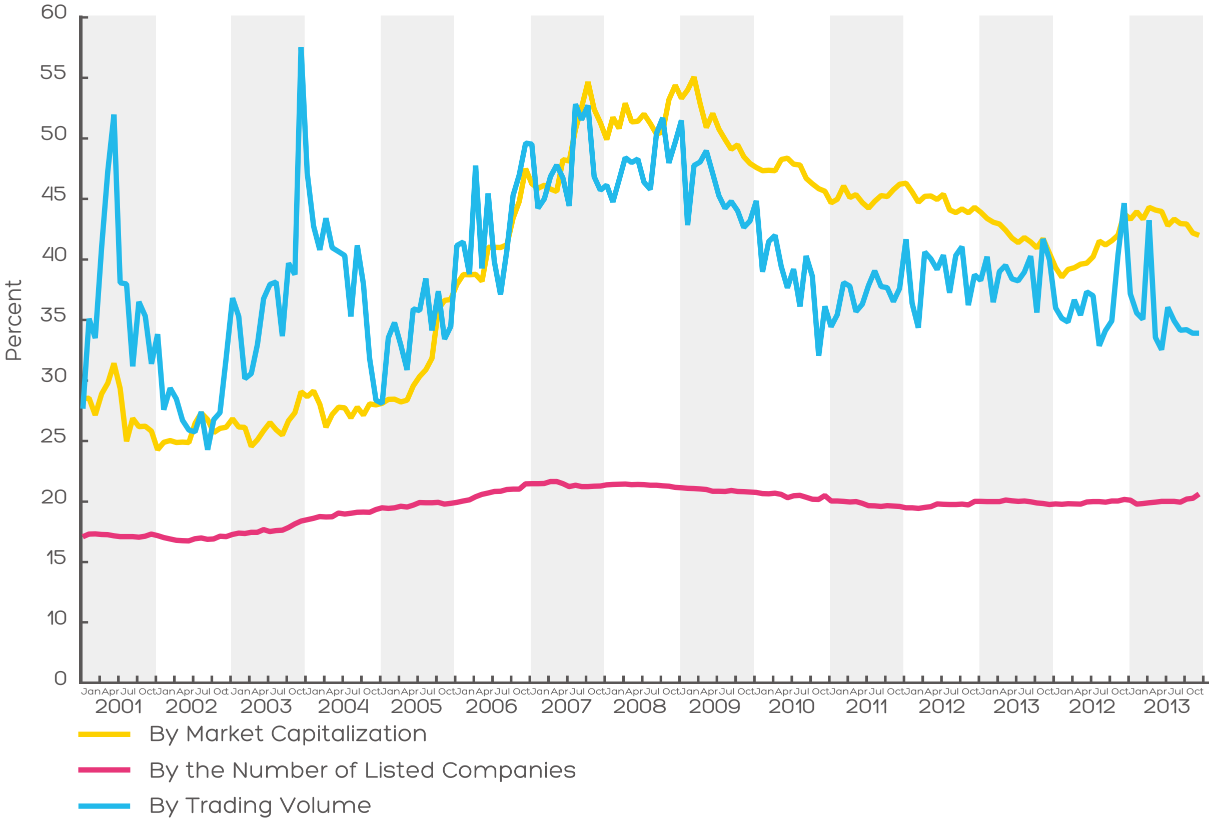
52. Presumably the Securities and Futures Commission of Hong Kong.

one should rely on the home country regulator and supervisor exclusively when it pertains to the operations of the enterprise, such as compliance with the applicable laws and regulations on the accuracy and timeliness of the financial information and required disclosures, the protection of shareholders' rights, especially those of minority shareholders, corporate governance, monitoring and enforcement against trading abuses such as front-running, insider trading and market manipulation in the home market. And one should rely on the regulator and supervisor of the East-Asia-wide market for maintaining a fair and open environment for the trading of the depositary receipts, monitoring market behavior and enforcement against misbehavior such as insider trading and market manipulation. Hong Kong should also modify its legislation and regulation to make it easy for an enterprise such as Samsung to issue Hong Kong Depositary Receipts on the Hong Kong Stock Exchange. This should greatly simplify the listing process and the ensuing regulation and supervision.

An East-Asia-wide stock market will allow East Asian savings to be deployed more efficiently. The existence of trading in a single international market in addition to trading in the national markets will enable the gradual equalization of the Price/Earnings ratios (P/Es) across national markets, enhancing the efficiency in the overall allocation of capital. This is especially true with the possibility of arbitrage within the same or nearly the same time zone.

At the present time, Mainland enterprises constitute more than

Chart 19: The Share of Mainland Enterprises on the Hong Kong Stock Exchange in Terms of Market Capitalization, Trading Volume and the Number of Listed Enterprises

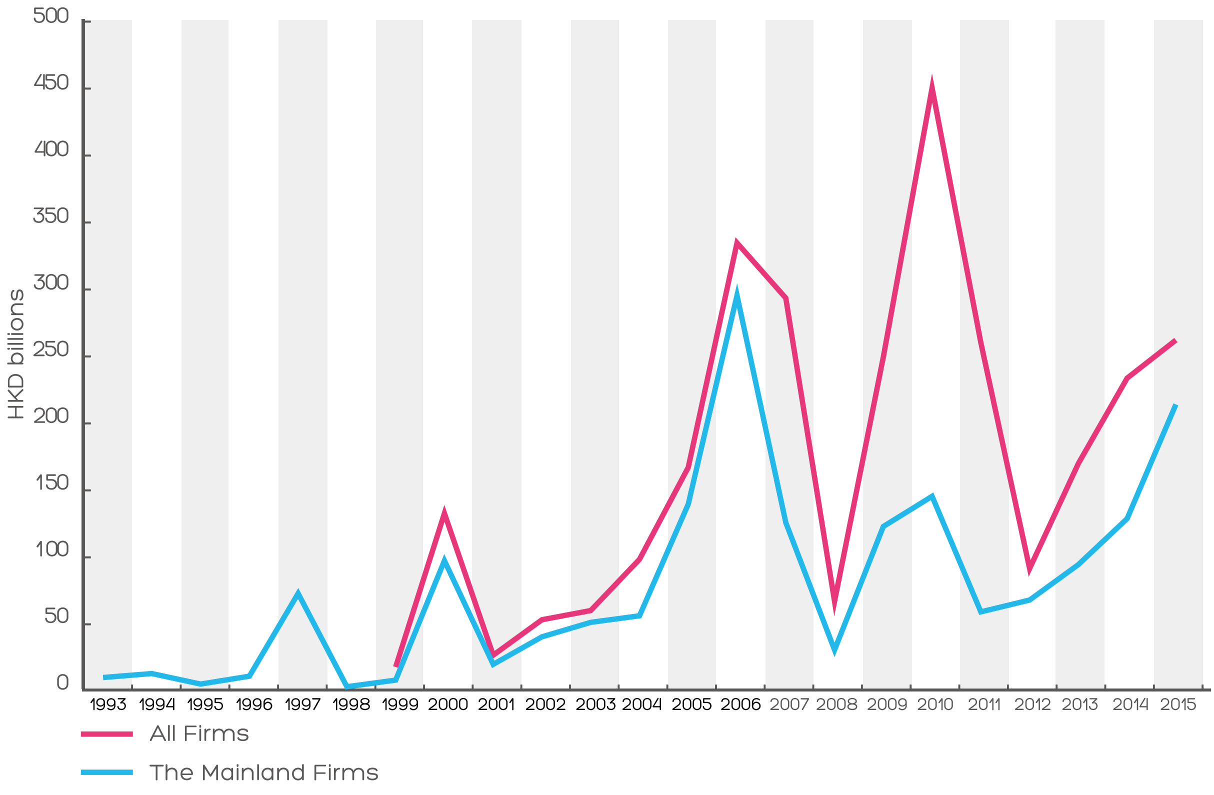


Note: The 2016 market capitalisation and trading volume data were only available quarterly.
Sources: Hong Kong Exchanges and Clearing Limited, Bloomberg

40 percent of the Hong Kong Stock Exchange by market capitalization, 34 percent by trading volume but only less than 20 percent by the number of listed enterprises (see **Chart 19**), which shows that the listed Mainland enterprises are also by far the largest listed enterprises on the Hong Kong Stock Exchange. There is a sprinkling of listing of foreign enterprises, for example, Prada from Italy and Rusal from Russia. However, there is a great deal of room for additional listing of enterprises from other economies, especially from other East Asian economies[53].

For the longest time, the Hong Kong Stock Exchange has been the primary stock market for Mainland enterprises to have their "Initial Public Offerings (IPOs)", because of its perceived better supervision and regulation and hence access to foreign investors and because of the need for foreign exchange on the part of the Mainland enterprises (see **Chart 20**). Mainland enterprises now account for approximately 80 percent of the value of the IPOs on the Hong Kong Stock Exchange annually. However, this situation may change in the future, as the capital need of the Mainland enterprises has shifted from foreign exchange to Renminbi as they reorient themselves to serving the demands of the domestic market and the Mainland itself has become an increasingly important source of investment funds. Moreover, the valuations, as reflected by the Price/Earnings ratios, are also much higher on the Mainland exchanges. Furthermore, Shanghai will in general be a more preferred place for Mainland enterprises to raise Renminbi-denominated capital than Hong Kong because of the much

Chart 20: Annual IPO Value of Mainland and All Firms on the Hong Kong Stock Exchange



Source: Hong Kong Exchange and Clearing Limited

53. There is actually no reason why foreign companies such as Airbus, Apple, Boeing, Disney, Hermes and Microsoft cannot have a secondary listing in Hong Kong. It will make it much easier for Mainland portfolio investors to invest in these companies.

greater availability of Renminbi there. The one important reason for a Mainland enterprise to IPO in Hong Kong or elsewhere is the long queue of enterprises already approved for IPO in Shanghai.

In 2014, the Hong Kong Stock Exchange lost the IPO of Alibaba, the largest global IPO ever, to the New York Stock Exchange, because it would not allow any shareholder for any new enterprise to be listed in Hong Kong to have "super voting rights". This well-intentioned insistence on equal voting rights for all shares is perfectly understandable: it is important for the Hong Kong Stock Exchange to protect the minority and especially the small shareholders. However, many prosperous private Mainland enterprises are still run by their founder-owners, quite a few of whom may wish to continue to control and manage them even after their IPOs. In fact, potential investors may also prefer that these founder-owners continue to manage their enterprises after IPO[54]. One possible compromise is to grant "super-voting rights" to the "controlling shareholder" and at the same time impose additional obligations on him or her, such as the non-transferability of the "super-voting rights", and a required prior notification of any sale of shares by the controlling shareholder for a certain fixed period, say a couple of months, so as to allow the other shareholders an opportunity to exit first if they choose to do so. Then with full pre-IPO disclosure of the super-voting rights and the additional obligations of the "controlling shareholder", as long as the investors are still willing to buy the shares at the IPO, it should not be considered unfair. It may therefore be time to try a different approach to the "super-voting rights" issue and find a solution that is satisfactory to all parties concerned: the potential investors, the "controlling shareholder", and the regulator and supervisor. If such regulatory flexibility is possible, even more IPOs of successful private Mainland enterprises are possible in Hong Kong, augmenting both the market capitalization and the trading volume of the Hong Kong Stock Exchange. (Perhaps Alibaba, which is currently listed on the New York Stock exchange, can eventually have a secondary listing in Hong Kong.) Both the Shanghai-Hong Kong Stock Connect, under which investors in Shanghai can invest directly in the Hong Kong market and vice versa, and the forthcoming similar Shenzhen-Hong Kong Stock Connect, can also help to enhance the trading volume and liquidity of the Hong Kong, Shanghai and Shenzhen Stock Exchanges significantly.

A benchmark index for the performance of listed stocks in the Far East is the MSCI AC Far East Index. The top ten constituent companies of this index are: Toyota Motor Corp., Tencent Holdings Ltd (CN), Samsung Electronics Co., Taiwan Semiconductor Manufacturing Corporation (TSMC), Alibaba Group Holding, AIA Group, China Mobile, KDDI, Mitsubishi UFJ Financial Group, and China Construction Bank H[55]. Their total market capitalization amounted to US$1.443 trillion and accounted for 16% of the market capitalization of all the companies included in the MSCI AC Far East Index in June 2016. Among the ten enterprises, four are from the Mainland, three are from Japan, and one each is from Hong Kong, South Korea and Taiwan. Among the ten enterprises, four (Tencent Holdings Ltd (CN), AIA

54. In fact, one real risk is that some of these founder-owners may decide to leave their companies after their IPOs and then establish new enterprises to compete with their old enterprises.

55. "H" means that the shares are traded on the Hong Kong Stock Exchange.

Group, China Mobile and China Construction Bank H) are traded on the Hong Kong Stock Exchange. The weight, market capitalization and country/region of origin of each of the top ten constituent companies as of June 30 2016 are presented in Table 2.

Hong Kong as East Asia's Leading International Asset Management and Headquarters Center

Once an active and thriving East-Asia-wide capital market in both stocks and bonds is successfully established in Hong Kong, it will greatly enhance the attractiveness of the Hong Kong market to bond and stock issuers and investors worldwide and to treasury operations of major multinational financial and non-financial corporations. Global and regional financial institutions such as banks, insurance companies and asset management companies will be more likely to establish their headquarters in Hong Kong, thus further strengthening Hong Kong's position as East Asia's premiere international financial center.

However, the Hong Kong regulatory and tax frameworks for organizations that manage assets for their clients, including banks, insurance companies, pension funds, other financial institutions and treasury operations of non-financial corporations, must be updated to reflect the global and multinational nature of these operations. In particular, regulatory and tax treatments must take into account the different regulatory requirements and tax burdens of different national jurisdictions in which an enterprise operates so as to avoid disadvantaging an organization that establishes its global or regional headquarters in Hong Kong and/or conducts its treasury operations in Hong Kong. A more sophisticated territorial approach, which avoids doubling the regulatory and tax burdens of multinational enterprises based in Hong Kong, will encourage them to set up global or regional headquarters and treasury operations in Hong Kong.

Table 2: The Weight, Market Capitalization and Country/Rrgion of Origin of the Top Ten Constituent Companies of the MSCI AC Far East Index (June 30 2016)

Name of Enterprise	Weight in MSCI Far East Index, Percent	Marcket Capitalization, US$ billion	Country/Region
Toyota Motor Corp	2.35	147.43	Japan
Tencent Holdings Ltd (CN)	2.29	213.51	Mainland China
Samsung Electronics Co.	2.25	153.31	Republic of Korea
Taiwan Semicoductor Mfg	2.22	130.31	Taiwan, China
Alibaba Group Hldg	1.41	198.45	Mainland China
AIA Group	1.29	70.48	HKSAR, Chian
China Mobile	1.25	233.93	Mainland China
KDDI	1.02	74.82	Japan
Mitsubishi UFJ Fin Grp	1.01	60.00	Japan
China Construction Bank H	0.99	160.65	Mainland China
Total	16.08	1,443.40	

Source: MSCI, Bloomberg

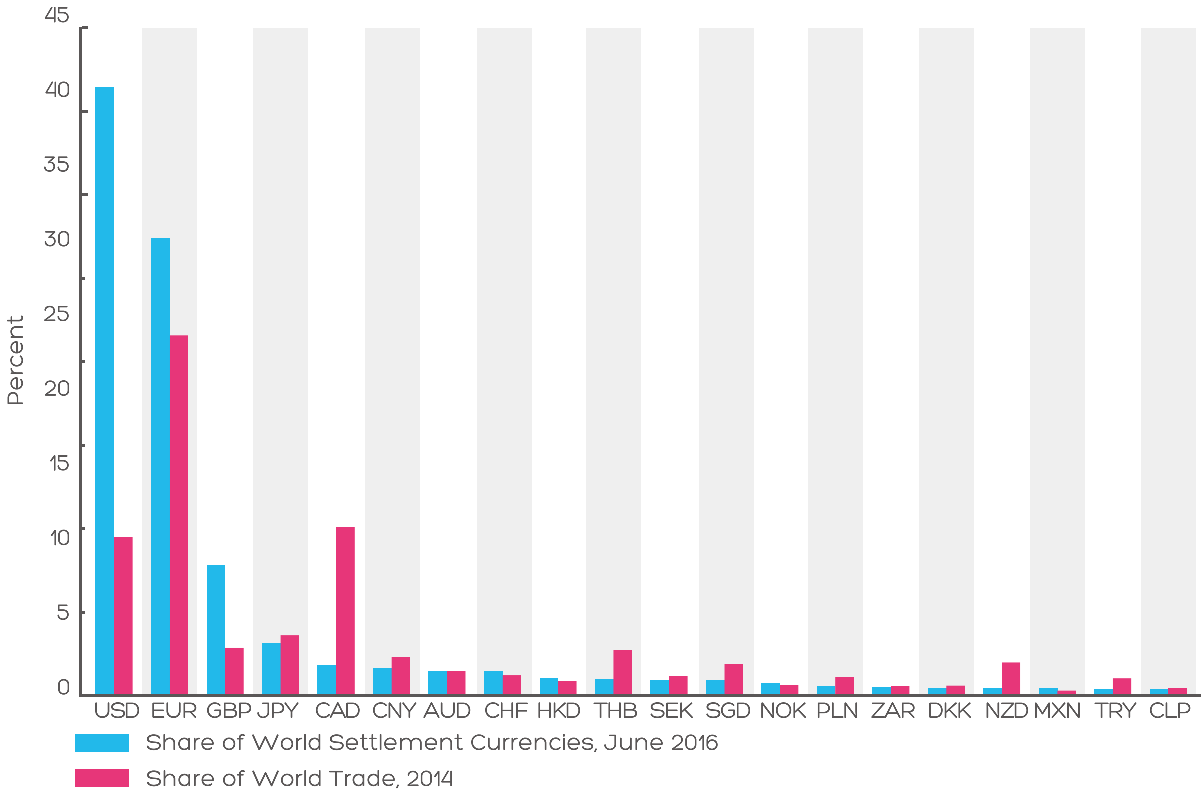
For example, profits derived from the management of assets of non-Hong Kong residents (individuals as well as legal entities) as well as the profits accruing to these accounts themselves can and should be exempt from Hong Kong income and profits taxation.

The Asian Infrastructural Investment Bank (AIIB), the China Development Bank (CDB), and the New Development Bank BRICS can all be encouraged to establish branch operations in Hong Kong to facilitate raising capital for themselves as well as financing activities for their Mainland and foreign borrowers.

Hong Kong as the Premiere Offshore Renminbi Center

Hong Kong is currently by far the largest and most active offshore center for Renminbi clearing, settlement, trading and financing, with an average daily volume of transactions approaching 1 trillion Yuan. It is likely to continue to be the leading offshore Renminbi center. With the Renminbi expected to become increasingly internationalized during the next decade or two, this will turn out to be a huge advantage for Hong Kong. At the present time, the Renminbi is used for the settlement of international transactions to a far lesser extent than warranted by the Mainland share in world trade. In Chart 21, the world currencies that are used for international settlement purposes are ranked from left to right in descending order of the sizes of their respective shares in world settlement as of June 2016. The U.S. Dollar was the undisputed champion, accounting for 41% of world

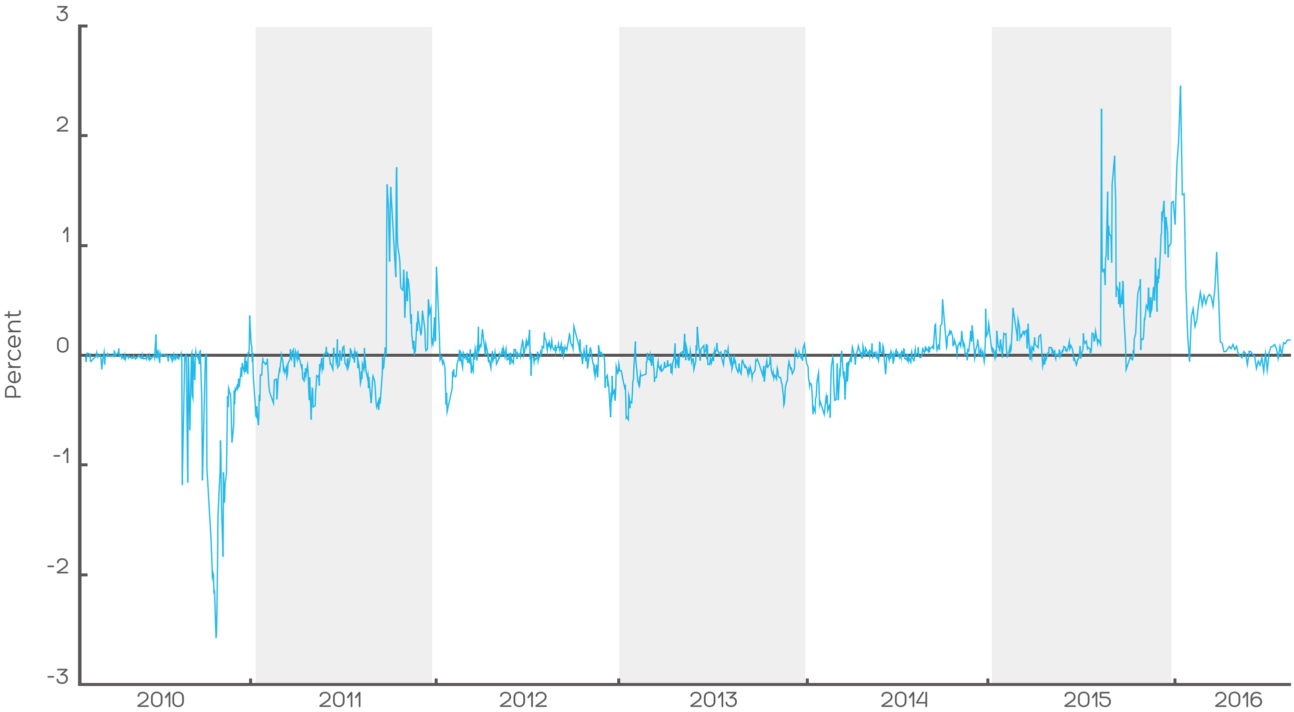
Chart 21: The Share of World Settlement of a Country's Currency and Its Share of World Trade



Source: Society for World Interbank Financial Telecommunication settlement, even though the U.S. itself accounted for not quite 11 percent of world trade in 2014. The U.S. Dollar is followed by the Euro, accounting for 31% of world settlement and with the Euro Zone accounting for more than 24% of world trade. The pound sterling accounted for almost 9% of world settlement while the U.K. accounted for only slightly more than 3% of world trade. The Japanese Yen accounted for more than 3.5% of world settlement while Japan accounted for 4% of world trade. The Chinese Yuan, with not quite 2%, was in the sixth place in terms of world settlement, while the Mainland also accounted for more than 10% of world trade[56]. What **Chart 21** indicates is that there is still a great deal of room for the Renminbi to grow in terms of its share of world settlement. If only 50% of the Mainland international trade can be settled in Renminbi, it would account for more than 5 percent of world settlement, or more than US$2 trillion a year. This would mean even more business for Hong Kong as the leading offshore Renminbi center, and even less need for the People's Bank of China to maintain a high level of official foreign exchange reserves.

However, in order to maintain Hong Kong's leading position as an offshore Renminbi center, its Renminbi market must be deliverable, as opposed to markets elsewhere, such as Singapore, in which the Renminbi is non-deliverable (meaning that the settlement will be done in an alternate currency). As a deliverable market, the offshore Renminbi exchange rate (CNH) in Hong Kong cannot be allowed to deviate too much from the onshore Renminbi exchange rate (CNY) in Beijing (see **Chart 22**), just as the Pound Sterling/US$ and the Euro/US$ exchange rates should not differ much between New York and London[57]. **Chart 22** indicates that on the whole, the differential between the CNY and CNH exchange rates has been small, except when unexpected and unexplained changes occur in the

Chart 22: The Onshore (CNY) and Offshore (CNH) Renminbi Exchange Rate Differential, percent



56. The Renminbi did advance to the fifth place in 2015, but fell back to the sixth place in 2016.

onshore Renminbi exchange rate, such as on 12 August 2015 and 6 January 2016, with the offshore Renminbi significantly weaker than the onshore Renminbi. Large differentials between the two Renminbi exchange rates in either direction are intrinsically destabilizing. The People's Bank of China can authorize qualified financial institutions with access to Renminbi in both Hong Kong and the Mainland, such as the Bank of China, to engage in arbitrage between the onshore and offshore exchange rates so that there is ultimately little difference between the two rates. As the Renminbi-denominated deposits in commercial banks in Hong Kong continue to grow, it may also become necessary for the Hong Kong Monetary Authority to maintain sufficient Renminbi balances in order to meet sudden and unexpected runs on Renminbi deposits at one or more of the commercial banks so as to preserve monetary stability in Hong Kong and in its role as the "lender of last resort".

Hong Kong as East Asia's International Re-Insurance Market

As the demands for casualty, property and life insurance have been increasing by leaps and bounds in the East Asian region, so do the derivative demands for re-insurance–all insurance companies need re-insurance so as to diversify their risks. Re-insurance, like insurance, is a scale business, and the East Asian economies have now grown sufficiently large to realize the economies of scale of re-insurance based on their own demand. In addition, the Mainland and the other East Asian economies, with their high saving rates, are potentially major sources of risk capital for the re-insurance business. Thus, there is no reason to continue to let most of the re-insurance business go to London, Zurich and elsewhere, especially now that the capacity of London and Zurich to raise the capital necessary to support the insurance and re-insurance business has been impaired by the global financial crisis, the European sovereign debt crisis and more recently by "Brexit". An international re-insurance center can be developed right here in East Asia. What is needed is some concerted governmental action to establish one or more East-Asia-wide re-insurance companies that are licensed to do business everywhere in East Asia and which ideally should have multinational ownership. It may also be necessary to rationalize insurance regulations across countries and regions.

Hong Kong is uniquely suited to become an international re-insurance center for the East Asian region. There are four necessary requirements for an international re-insurance center: First, there must be an abundance of investors and capital willing and able to assume risks. Both London, through its highly liquid and freely mobile capital market, and Zurich, through its management of a large proportion of the world's private wealth, have access to such risk capital. Second, there must be a stable currency and complete freedom of capital flows to and from everywhere, so that insurance premia can be received and claims can be paid

57. It is important that there is essentially no difference between the onshore and offshore Renminbi exchange rates because both are deliverable markets. For non-deliverable markets, it is not necessary to close the gap between the onshore and off-shore rates. In fact, the non-deliverable markets are likely to disappear over time as the Renminbi becomes increasingly internationalized.

expeditiously worldwide. Third, there must be political stability, a tradition of adherence to the rule of law, and a credible, efficient, fair and transparent judicial system that is ready to adjudicate and enforce insurance contracts and claims in a timely manner. Finally, there must be a large supply of highly seasoned professional expertise in accounting, actuarial sciences, law and risk assessment.

The risk capital is certainly available here, thanks to Hong Kong's access to the savings pools of the Mainland and Southeast Asia, and the appetite for risks is also clearly demonstrated by the booming casino business in Macau and the A-share markets in Shanghai and Shenzhen. The Hong Kong Dollar is pegged to the U.S. Dollar at the fixed rate of 7.8 HK$ per US$ that has not been changed since 1983. It is freely and fully convertible and there is no capital control of any kind in Hong Kong. Hong Kong has always had an independent judicial system that can be relied on to settle commercial disputes in an efficient and equitable manner, without any favoritism, local or otherwise. Hong Kong already has a large supply of highly seasoned professional manpower that can serve the insurance/re-insurance business and can also attract as well as train locally any additional expertise if necessary.

There is already a sufficiently large volume of business transactions in both Hong Kong and the Mainland–property, shipping, transportation, storage and warehousing–to generate a local and regional demand for insurance and re-insurance. Hong Kong, either alone or together with Shenzhen (Qianhai), can have a good shot on becoming the international re-insurance center for the East Asian region, including the Mainland.

With the "Belt and Road" initiative, the establishment of the Asian Infrastructural Investment Bank, the BRICS Development Bank and the Silk Road Fund, infrastructural investment projects are likely to proliferate in East, South and Central Asia in the next couple of decades. The Asian Development Bank in its 2009 report estimated that within the next decade there could be a demand for US$8 trillion worth of infrastructural investment projects in Asia alone. All of these projects would require casualty insurance, liability insurance, risk insurance as well as re-insurance.

Large Mainland insurance companies already operate in Hong Kong. Some are already listed on the Hong Kong Stock Exchange. AIA Group Limited, a life insurance company headquartered in Hong Kong, is among the world's largest life insurance companies, if not the largest. A possible first step for Hong Kong to become the international re-insurance market in East Asia is to try to attract the largest Mainland re-insurance companies to establish its regional or overseas headquarters in Hong Kong. There should be sufficient demand for re-insurance from Mainland insurance companies to lower the re-insurance rates to a level attractive to other East Asian insurance companies. Once a track record of equitable and fast settlements by re-insurance companies in Hong Kong can be established, insurance companies worldwide will also come to Hong Kong for part of their re-insurance as part of their efforts to diversify their risks.

However, Hong Kong must make it easy for foreign insurers and re-insurers to use Hong Kong as their global or regional headquarters. It must work to harmonize its regulatory requirements with those of other jurisdictions so as not to unnecessarily disadvantage international insurance and re-insurance companies if they establish their global or regional headquarters in Hong Kong.

Hong Kong as East Asia's Leading International Financial Center

In order for Hong Kong to succeed in becoming the leading international financial center for East Asia, a pro-active HKSAR Government is needed to plan a long-term strategy and to rally everyone in Hong Kong, including its major enterprises, to work together to make it happen. It will also need the support of the Central Government, not only because the Mainland investors will be expected to be a major source of demand for securities and other financial assets on the Hong Kong market but also because the Central Government can help to encourage Mainland enterprises, both state-owned and private, to use Hong Kong as the base of their international operations, and Mainland financial institutions, including banks, insurance companies, and re-insurance companies, to relocate their international operations in Hong Kong, and to persuade the governments of other East Asian countries and regions that an East Asian region-wide securities market can benefit all the economies in East Asia. Once Hong Kong is established as the home of the East Asian region-wide securities market, it will be almost impossible for it to be displaced or replaced.

Hong Kong can also become a springboard for outbound Mainland direct investment because of its close links to the international banking and financial network and its highly developed professional service sector. It can provide the necessary accounting, financial, legal, logistic and other services and the infrastructural support for Mainland enterprises investing abroad (through their Hong Kong subsidiaries). The Hong Kong capital market can also enable the Mainland enterprises to use "natural" hedges for their outbound foreign direct investments, for example, by borrowing the foreign currency in Hong Kong to fund the outbound investment and thus matching their foreign-currency-denominated assets with foreign-currency-denominated liabilities. However, appropriate policy support from the Government of HKSAR is crucial for Hong Kong to play this "super-connector" role successfully[58].

58. For example, Hong Kong should try to conclude more double-tax agreements with foreign tax jurisdictions such as the U.S.

Hong Kong as East Asia's International Innovation and Venture Capital Center

Hong Kong as East Asia's International Innovation and Venture Capital Center

Hong Kong can also develop into an international center for innovation and venture capital, a "Silicon Valley/Route 128[59]" cum NASDAQ for the entire East Asian region, specializing in the creation of intangible capital (human capital, R&D capital, goodwill, intellectual property, and knowledge capital) and the capitalization of its commercial value through "Initial Public Offerings (IPOs)" and "Mergers and Acquisitions (M&As)". This will involve a four-pronged complementary approach: increasing investment in human capital, specifically in tertiary and post-graduate education; increasing investment in research and development (R&D); creating a nurturing eco-system for venture capital; and facilitating the IPO and M&A markets for successful start-up firms so that they can raise the additional capital needed.

However, as **Chart 15** above shows, Hong Kong lags significantly behind New York and London in terms of human capital. It also lags behind other developed and developing economies. In **Chart 23**, the average number of years of schooling per person of the working-age population is compared across selected economies[60]. In 2010, the average number of years of schooling in Hong Kong was 10.7 years, behind those of the other East Asian NIEs of South Korea, Taiwan and Singapore, and still substantially below those of the U.S. and Japan. The average number of years of schooling changes very slowly over time because for the overwhelming majority of the working-age population, additional formal education essentially stops after age 30, but they remain in the labor force until they turn 60 or 65. It will take decades for Hong Kong and the Mainland to achieve the same level of human capital as a developed economy like the U.S.

The low average level of human capital is also an important contributory factor to the rising degree of income inequality found in Hong Kong– globally, the wage rate of unskilled labor has fallen significantly behind that of skilled labor in this high-technology age. To augment its human capital, Hong Kong must try to increase its own tertiary education (bachelor-degree) enrolment rate substantially from its current 20 percent

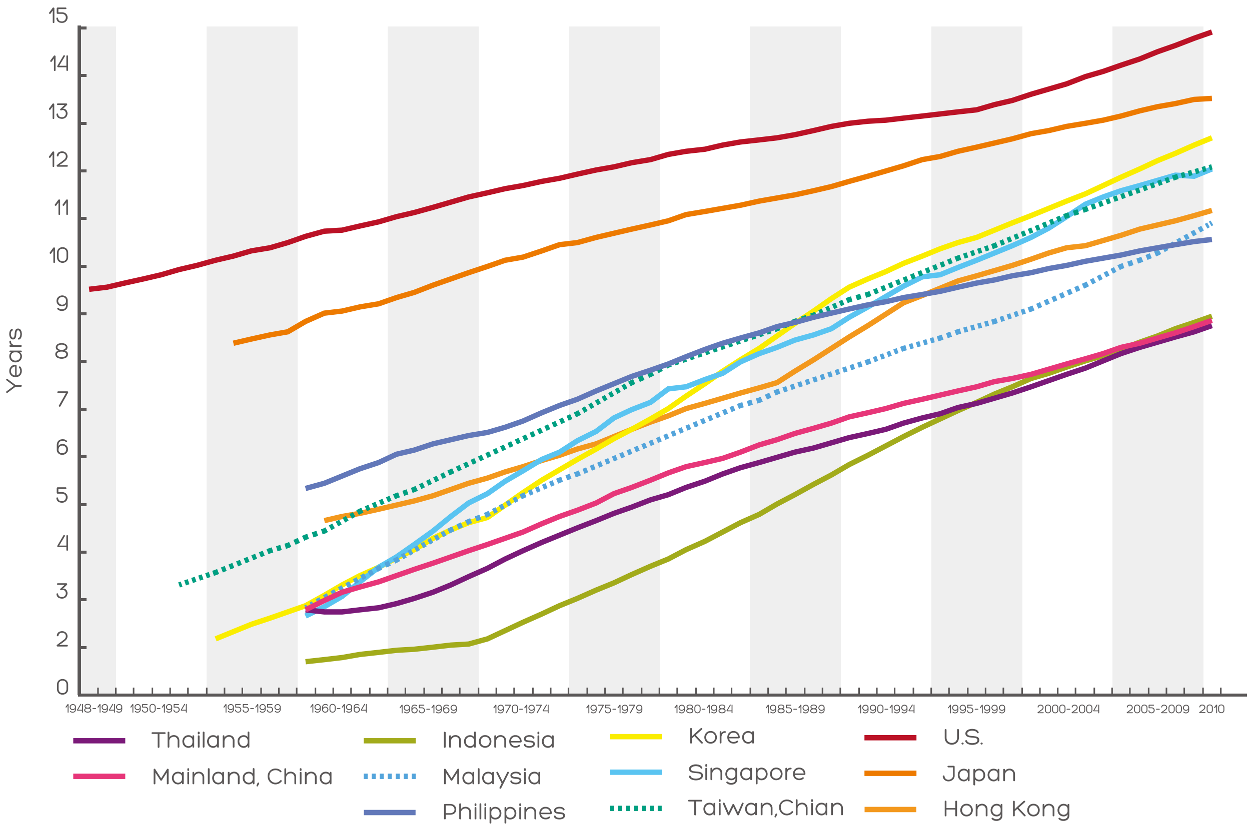
59. Route 128 is a ring-freeway surrounding the Greater Boston area along which many new high-technology companies are continually founded as in the Silicon Valley in northern California.

60. Note that the definition of "working age population" in **Chart 23** is different from the definition of "an adult" in **Chart 15**.

or so. By comparison, the corresponding tertiary education enrolment rate is over 30 percent on the Mainland, over 90 percent in South Korea, and over 100 percent[61] in Taiwan. Hong Kong must also at the same time try to attract the best students from the entire East Asian region, indeed, the whole world, to come to Hong Kong to study at its universities. These students can eventually augment the educated labor force in Hong Kong if they choose to stay after the completion of their studies, or become goodwill ambassadors for Hong Kong if they choose to return to their respective home countries and regions.

The low enrolment rate in the bachelor-degree programs in Hong Kong masks the fact that many graduates of secondary schools are actually enrolled in two-year associate-degree programs in Hong Kong. These associate-degree programs are similar to those offered by junior colleges or community colleges in the U.S. and essentially cover the first two years of a conventional bachelor-degree curriculum. They are socially desirable because they provide students who for one reason or another have not done well in secondary schools a second chance. However, as implemented in Hong Kong, they have two basic problems. First, they are too expensive. In Hong Kong, the annual full-time tuition for an associate-degree program can be much higher than the annual full-time tuition in a bachelor-degree program at a comprehensive public university such as the University of Hong Kong, even for a citizen or permanent resident of Hong Kong. In contrast, in the U.S., junior colleges or community colleges

Chart 23: Average Number of Years of Schooling per Person in the Working Age Population, Selected Economies (1948-2010)



Note: The working-age population is defined as the number of persons aged 16-64 years, inclusive.

61. It is over 100 percent because some students take a second bachelor-degree course after receiving their first bachelor degrees.

are typically operated by public high-school districts and are virtually free. Secondly, the graduates from the associate-degree programs do not have a ready career or education advancement path in Hong Kong. Unlike their counterparts in the U.S.[62], there are very few opportunities for these graduates to articulate to (the third year of) a bachelor-degree program. Moreover, their associate degrees do not qualify them to apply for government civil-service jobs or even government-funded public-service jobs. In short, the associate degree does not enable the degree-holder, even after investing a great deal of money and time, to have a significantly better career prospect, which is a huge disappointment as well as a waste of resources. This lack of opportunities for associate-degree holders also accounts for a great deal of the current dissatisfaction among the youth in Hong Kong.

The obvious solution to these problems is for the Government of the HKSAR to subsidize partially the tuition fees of Hong Kong citizens or permanent residents enrolled in qualified associate-degree programs in the same way that public primary and secondary education are subsidized and for the public universities in Hong Kong to allocate more places for entry in the third year by applicants with associate degrees. The latter can be accomplished by the University Grants Committee (UGC) allocating to each of the public universities directly funded by it an additional number of government-funded student places, say, equal to 10 percent of the existing number of regular bachelor-degree student places, to be used specifically and exclusively for the admission of applicants with associate degrees. Since these articulated students require only two more years to obtain their bachelor degrees (as opposed to four years for students admitted in the freshman year), the actual increase in the annual UGC budget required is not more than 5 percent. However, this number of places is not likely to be sufficient to accommodate all of the annual associate-degree graduates. As there are more than two thousand tertiary educational institutions on the Mainland, the Government of the Hong Kong SAR can negotiate with the Ministry of Education of the Central Government to allow selected universities on the Mainland to each allocate 50 or 100 student places annually to be open to application by associate-degree holders from Hong Kong for admission to the third year. The Government of HKSAR should also provide a tuition grant to any such Hong Kong citizen or permanent resident admitted[63]. An important necessary government commitment is that the graduates from these Mainland universities under this articulation program will be eligible to apply for government civil-service or government-funded public-service positions after receiving their bachelor degrees and returning to Hong Kong.

Investment in R&D capital is also important for promoting innovation (technical progress) in an economy over time[64]. Hong Kong's R&D

62. Graduates from junior colleges and community colleges in the U.S. can apply to over 2,000 public or private bachelor-degree granting universities and colleges for admission as transfer students into their junior (third) year and if successful can obtain a bachelor degree after two additional years of study.

63. Tuition fees at Mainland universities are generally quite low, typically less than 10,000 Yuan per year. Even if a higher non-resident tuition were charged a Hong Kong student, it would still be much lower than the subsidy per student provided by the University Grants Committee to the public universities in Hong Kong.

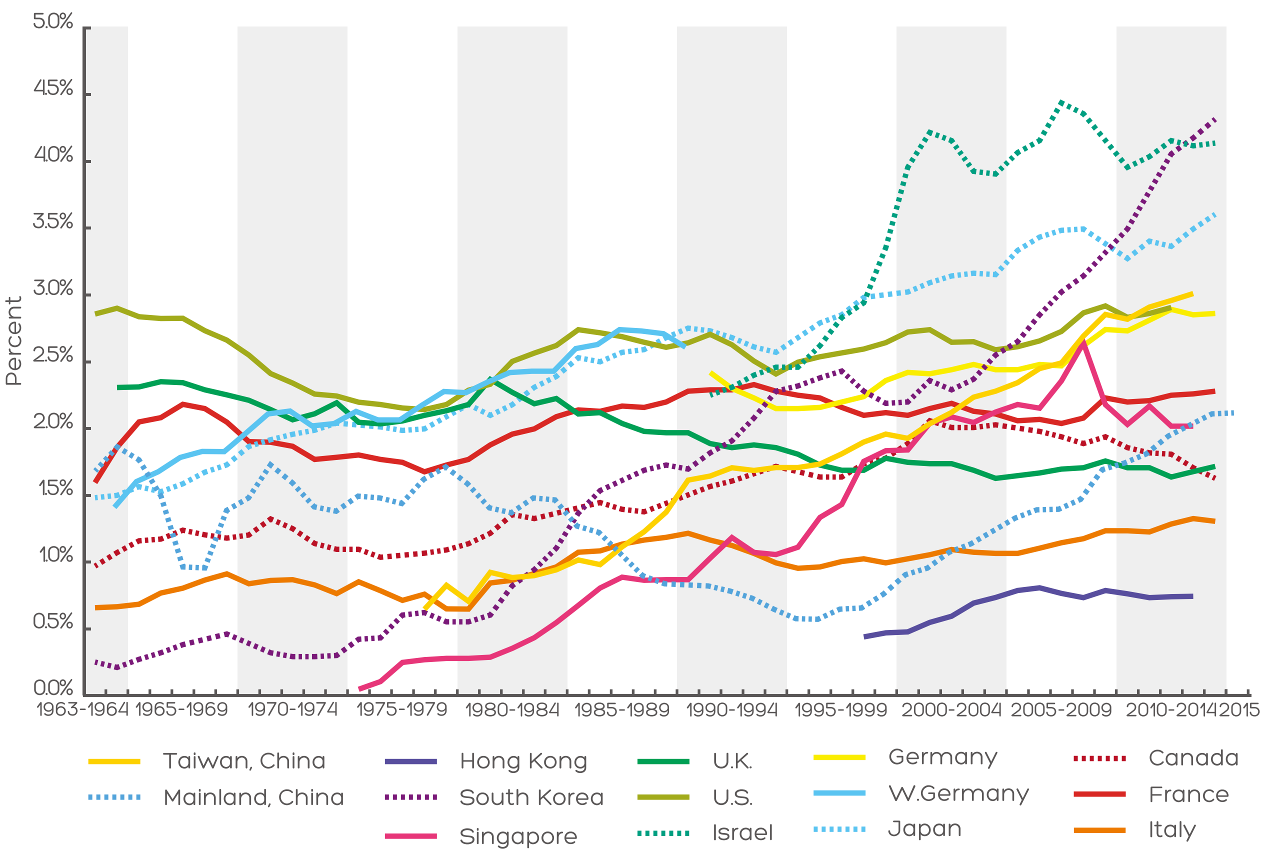
64. The discussion of R&D expenditure and patents below draws on Lau and Xiong (2015).

expenditure as a percent of GDP has been persistently and pitifully low–it is significantly lower than those of not only the developed economies but also the fellow East Asian "Newly Industrialized Economies (NIEs)" of South Korea, Singapore and Taiwan (see **Chart 24**). Hong Kong invested only 0.73% of its GDP in R&D in 2015. By comparison, the R&D Expenditure-GDP ratio was around 2% for Singapore, 3% for Taiwan and over 4% for South Korea. Hong Kong's ratio is also significantly below the historical averages of 2.5% for the U.S. and 3% for Japan, and the 4% of Hong Kong's closest neighbor, Shenzhen, and 6% of Beijing. The ratio for the Mainland as a whole was 2.1% in 2015, slightly short of its goal of 2.2%, and is targeted to reach 2.5% in 2020 in the Thirteenth Five-Year Plan.

Of the 0.73% of GDP worth of R&D expenditure in Hong Kong, public expenditure (comprising the expenditures in government and other public institutions such as universities) accounted for 55% while the private sector accounted for 45%. This is in contrast with other economies in which the greater part of the R&D expenditure is made by the private sector. The percentage of public expenditure in R&D is 16.7% in Israel, 19.5% in South Korea, 22.9% in Japan, 23.8% on the Mainland, 25% in the U.S. and 38% in Singapore.

Hong Kong must also try increase its expenditure on R&D very significantly. Tsui, Lun and Cheung (2015), in their report "The Ecosystem of Innovation and Technology in Hong Kong", prepared for Our Hong Kong Foundation, recommend an increase in government-financed R&D to 1%

Chart 24: R&D Expenditures as a Ratio of GDP: G-7 Countries, 4 East Asian NIES, China & Israel



Source: OECD Data

of GDP over the next decade, from its current 0.4% (55% times 0.73%). We recommend that the Government of HKSAR should set a long-term target for overall expenditure on R&D at 4% of GDP over the next decade or two, comparable to the current ratios of Israel, South Korea and Shenzhen. This target of 4% represents a huge increase over the current level of 0.73%, but we consider this target to be necessary to maintain Hong Kong's competitiveness with its rivals both on the Mainland and in the rest of the world and evolve into an innovation-driven economy. It is only through continuous innovation that Hong Kong can create more higher-paying jobs and thus increase both the level and the rate of growth of real disposable income per capita in Hong Kong in a sustainable manner.

If the long-term target for the R&D expenditure of Hong Kong is to reach 4% of its GDP, then the government's share should probably be on a par with Singapore, that is, around 40%, which implies that the government-funded R&D should increase to approximately 1.6% of GDP from its current 0.4%. This should not be too difficult to achieve–just by including the full salary and related costs of the principal investigators on government-funded research projects, government-funded R&D expenditure will easily double to 0.8% of GDP overnight, with little actual increase in the scope of the R&D[65]. If, in addition, the scope of the R&D is also doubled, say over the next ten years, government-funded R&D expenditure should be able to reach 1.6% of GDP.

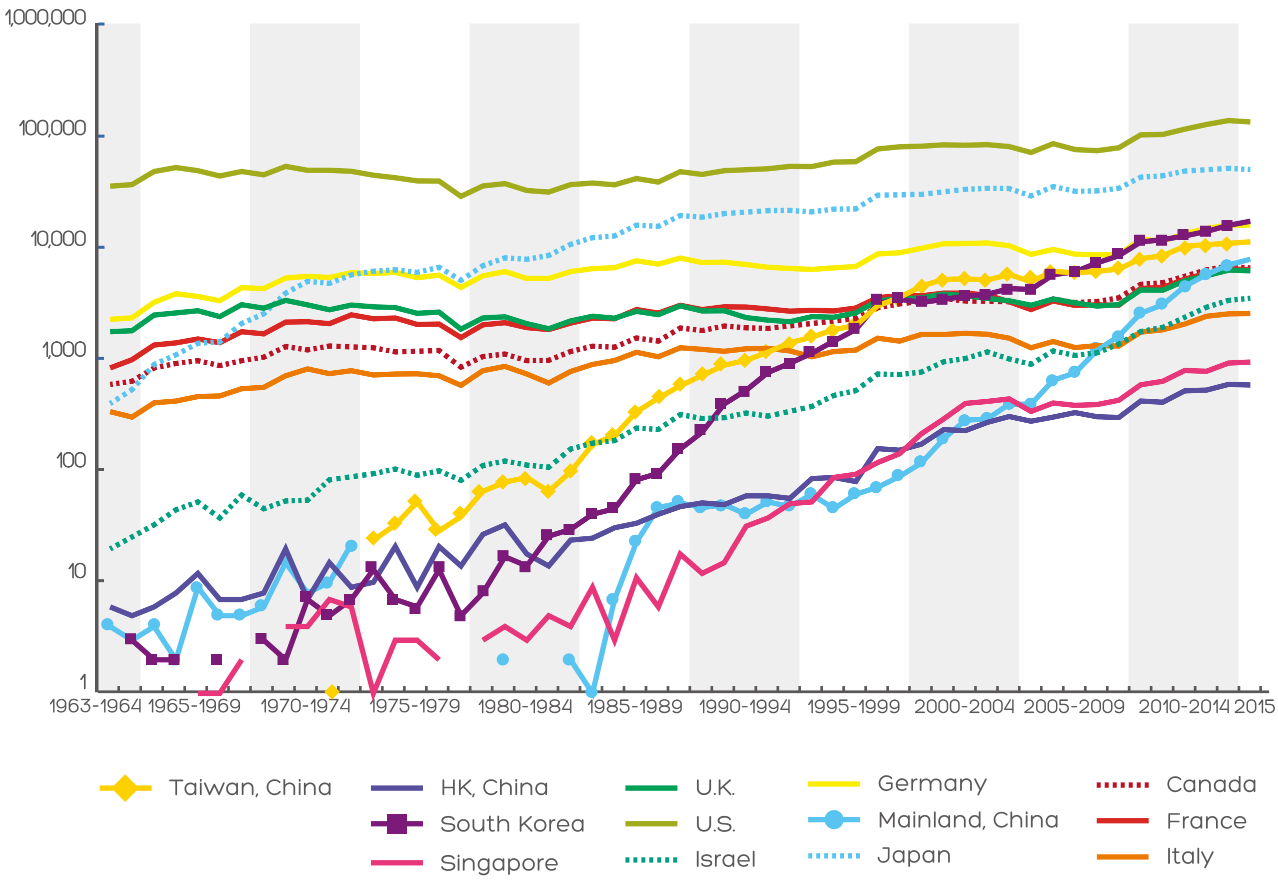
However, this also means that the non-Hong Kong government-funded R&D expenditure should increase from 0.33% of GDP to 2.4% of GDP over the next couple of decades. Meeting this ambitious target requires an aggressively pro-active policy on the part of the Government of the HKSAR. It is possible that some Hong Kong research institutions may be sufficiently competitive to be able to apply for and be awarded grants or contracts from funding agencies or enterprises on the Mainland or in other countries or regions around the world. But the bulk of it will have to come from private sector-financed R&D. It is essential for the Government of the HKSAR to encourage the private sector, which has the flexibility to innovate and is more attuned to market demands, to increase its investment in R&D. Thus, in addition to increasing its own R&D expenditure, the Government of the HKSAR also needs to provide the enabling conditions, environment and incentives to encourage non-Hong Kong government sources, particularly the private sector, to support R&D. It can do so via its land, tax and intellectual property registration and protection policies. In particular, Hong Kong should provide the appropriate tax incentives; for examples, allowing corporations to deduct twice their current R&D expenditure against their revenue for profits tax purposes, and allowing the losses from unsuccessful venture capital investments to be deducted from either the current or future income of the investors. The government can strengthen the protection of intellectual property such as patents, copyrights, trademarks, trade secrets and know-how. The government can also try to provide the

65. This is because under current regulations, no part of the salaries of the principal investigators of government-financed R&D projects at the public universities can be charged to the R&D projects themselves. In practice, the public universities have to absorb these costs in the form of salaries for "substitute teachers" to allow the principal investigators to be relieved of part of their teaching duties so that they can devote their time to research. If the imputed salary costs of the principal investigators were included, the actual R&D expenditure would have been considerably higher. See the discussion in Ayesha Macpherson Lau (2016).

incentives for domestic and foreign private equity and venture capital firms to locate their global or regional headquarters in Hong Kong and to invest in Hong Kong-based start-up enterprises, and facilitate the listing of successful invested enterprises on the Hong Kong (or Shenzhen) stock exchanges or other means of exit for the venture investors.

Another useful comparative indicator of the national potential for innovation (national innovative capacity) is the number of patents granted each year. In **Chart 25**, the annual number of patents granted in the United States each year to the nationals of different countries, including the U.S. itself, over time is presented. It shows that the U.S. has been the undisputed champion over the past forty years, with 140,969 patents awarded in 2015, followed by Japan, with 52,409. (Since these are patents granted in the U.S., the U.S. may have a home advantage; however, for all the other countries and regions, the comparison across them should be fair.) The annual number of patents granted to Mainland applicants by the United States increased from the single-digit levels prior to the mid-1980s to 8,166 in 2015. The economies of South Korea and Taiwan were granted 17,924 and 11,690 U.S. patents respectively in 2015. Hong Kong ranked the

Chart 25: Patents Granted in the United States: G-7 Countries, 4 East Asian NIEs, China & Israel

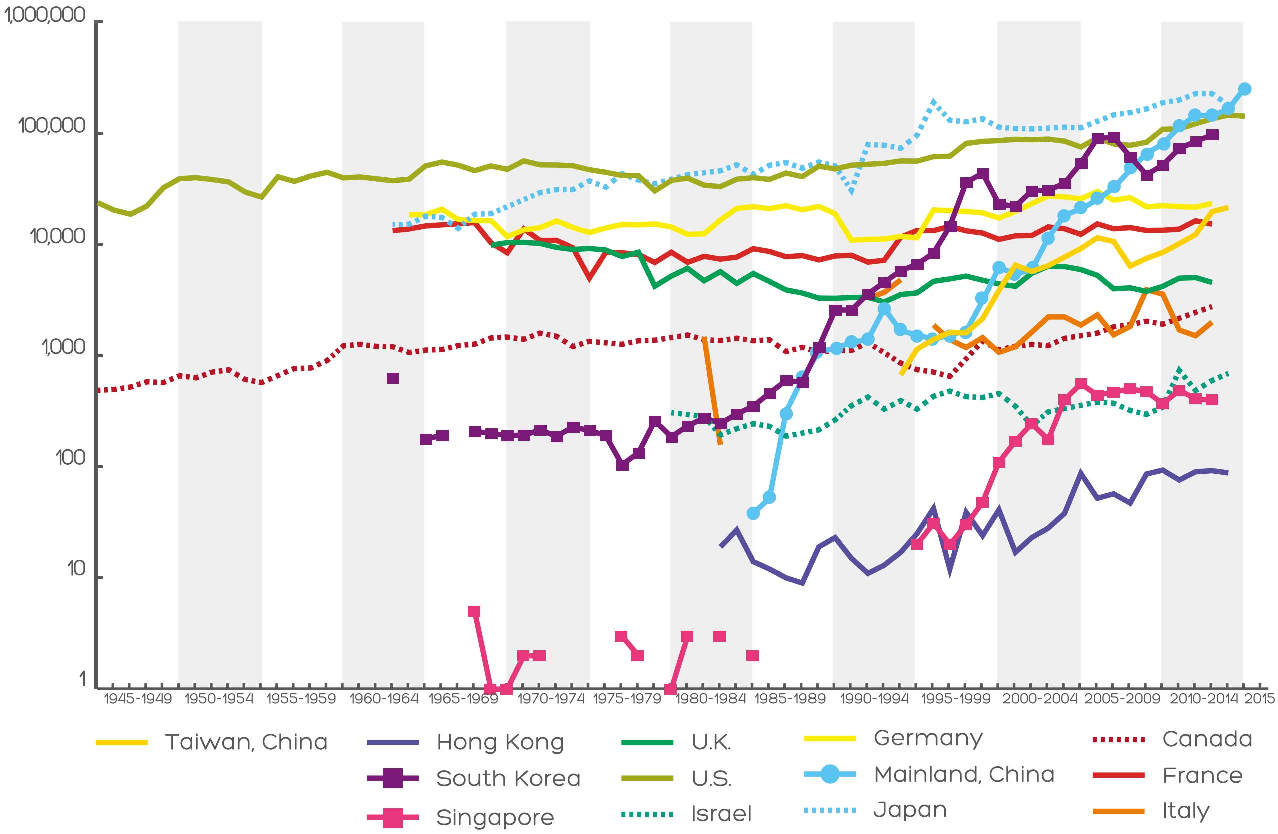


Source: U.S. Patent and Trademark Office lowest among the four East Asian NIEs with 601 patents in 2015.

In 2015, the Mainland granted 256,000 patents for invention to applicants within the Mainland, the highest number of such domestic patents granted in the world, ahead of the U.S., with 140,969 domestic patents (see **Chart 26**). Hong Kong once again ranked the lowest with 88 domestic patents in 2014[66]. The Mainland has begun to protect intellectual property seriously and established special national intellectual property courts in Beijing, Shanghai and Guangzhou to deal exclusively with such cases.

Investment in R&D generally take years to yield any concrete useable results and should quite properly be treated as capital. The stock of R&D capital of a country or region may be defined as the cumulative past real expenditure on R&D less depreciation of 10% per year. This R&D capital stock can be shown to have a direct causal relationship to the number of patents generated (see **Chart 27**, in which the annual number of U.S. patents granted to each country or region is plotted against its R&D capital stock of that year). **Chart 27** shows clearly that the higher the stock of R&D capital of an economy, the higher is its number of patent applications approved by the U.S. Both the Hong Kong and the Mainland data exhibit the same behavior.

Chart 26: Domestic Patent Granted to Domestic Applicants Annually: G-7 Countries, 4 East Asian NIEs, China and Israel

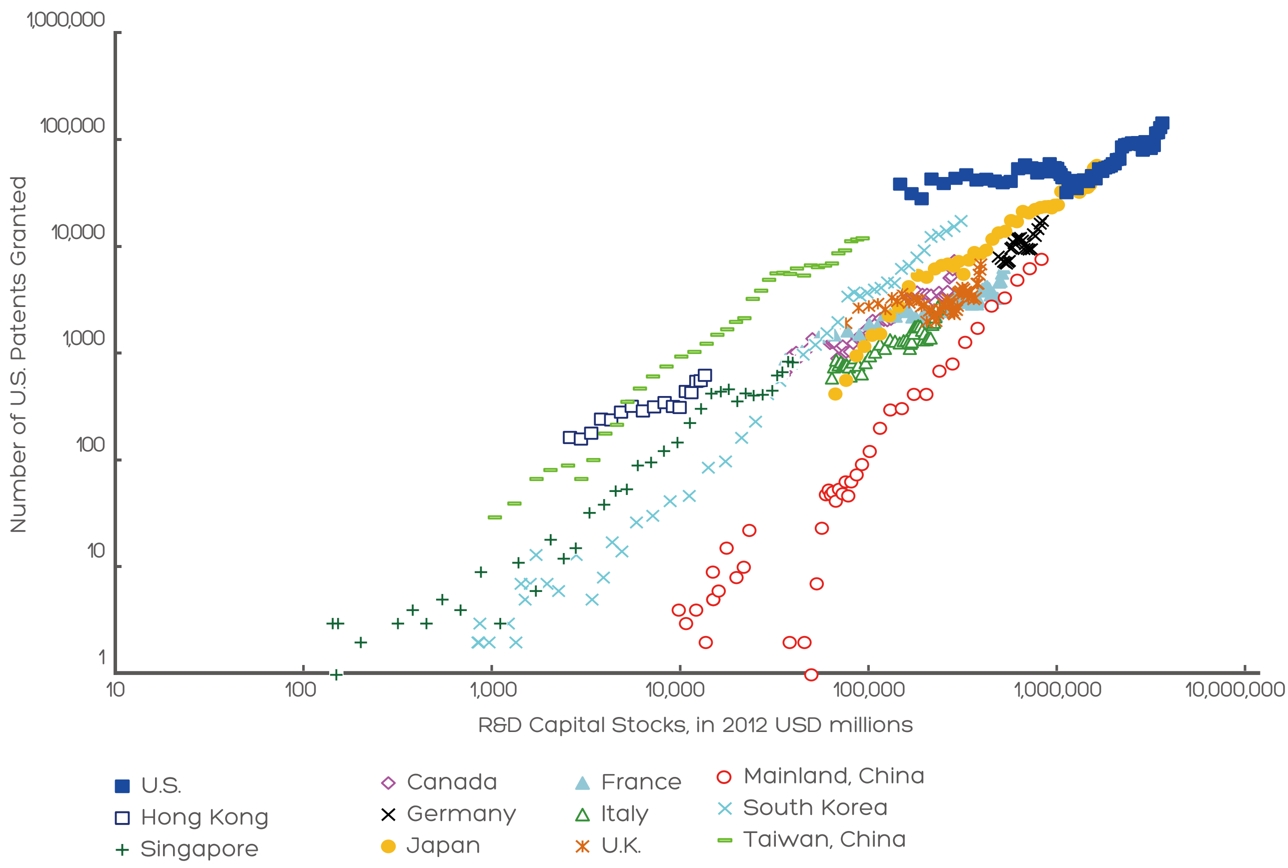


Sources: World Intellectual Property Organisation, U.S. Patent and Trademark Office, State Intellectual Property Office of the P.R.C. Statistical Yearbook

66. However, it should be noted that Hong Kong nationals had 601 U.S. patents granted in the same year. This is because for many inventors, and the companies that sponsor their research, it is commercially much more important to have U.S. patents and, more recently, also Mainland patents, than Hong Kong domestic patents because of the very small potential Hong Kong market.

However, innovation, whether it is the invention of a new product, a new service, or a new process, has significant fixed costs, which can be better and more readily amortized in a large potential market. That is why access to and freedom to operate in and serve the huge Mainland market are so critical to the success of Hong Kong as an East Asian center of innovation. Hong Kong inventions must be patented on the Mainland as well as in the U.S. in order to realize their full commercial value. It behooves the relevant Bureau of the Government of HKSAR to enter into an agreement with the Mainland patent authorities for reciprocal recognition of patents (or failing that, for reciprocal expedited processing of each other's patent applications that have already been approved domestically by each other[67]). Without access to the huge Mainland market, Hong Kong innovations are unlikely to become commercial successes. But access to the Mainland market alone is useless unless there is Mainland patent protection. If Hong Kong can obtain reciprocal recognition for its patents with the Mainland, it will greatly benefit inventors and innovators in Hong Kong by facilitating their commercial entry into the huge Mainland domestic market. It may even be able to attract foreign inventors to apply for patents in Hong Kong so as to secure patent protection on the Mainland. It will also be a boon for the platform for the trading of patent rights developed by the

Chart 27: U.S. Patents Granted and R&D Capital Stocks: G-7 Countries, 4 East Asian NIEs and China



67. One way to accomplish this is for both Hong Kong and the Mainland to accept the underlying work papers already submitted with the respective approved domestic patent applications.

Hong Kong Trade Development Council in Hong Kong.

In addition to providing the huge potential market, the Mainland can also serve as a manufacturing base for Hong Kong inventions. Da-Jiang Innovations Science and Technology Co., Ltd. (DJI), a start-up aerial photography firm founded in 2006, typifies this approach: conducting the R&D for the products in Hong Kong, manufacturing them in Shenzhen, and selling them on the Mainland and the entire world. DJI is now the world's leading designer and manufacturer of drones.

As a center of innovation, Hong Kong must also strengthen its own intellectual property (including copyright) protection, so as to not only protect scientific and technological innovations but also encourage the development and commercialization of creative arts such as books, designs, dramas, fashions, films, music, paintings and sculptures.

Ultimately, human capital, R&D capital and venture capital combined can create great value not only for the Hong Kong economy but also for the Mainland and East Asia as a whole. It is not a coincidence that the Silicon Valley has developed around Stanford University and that many high-technology enterprises have started along the Route 128, which surrounds Harvard University and the Massachusetts Institute of Technology. These research-based institutions of higher learning have been the major sources of the pioneering ideas that have driven innovation in the U.S. since the 1960s. Hong Kong will do well to emulate these places by increasing significantly its investment in human capital and R&D and in particular in R&D in its universities. Hong Kong and Shenzhen together can make full use of their high-quality higher educational institutions to conduct basic and applied research that will spur innovation in the region, taking advantage of the huge Mainland market as well as the high concentration of high-technology industries in Shenzhen.

Venture capital and venture capitalists thrive where there are active innovative research, risk capital, access to a huge market and ease of potential exit. Innovators, inventors and entrepreneurs will congregate where these factors converge. Hong Kong should try to become the destination where people with innovative ideas will come to seek capital, and people with capital with come to seek investments. It is well known that venture capital has a very low success rate, less than one in ten. Thus, it is rarely possible for any government to finance ventures, because it will be held accountable for the failures, even though they are not unexpected. Hong Kong and Shenzhen combined can develop a new combined Silicon Valley and NASDAQ of East Asia, leveraging on their universities, research institutions, high-technology enterprises, financial institutions, and the Hong Kong and Shenzhen stock exchanges.

Hong Kong as an International Center for Creative Arts

Hong Kong as an International Center for Creative Arts

Hong Kong can try to establish itself as an international center of creative arts in East Asia. It can try to attract creative people in all fields, such as architects, artists, designers, film-makers, photographers and writers to locate in Hong Kong. Hong Kong has the advantages of being international and bi-cultural, which give it the unique ability "to combine tradition with modernity; to bring together China and the West."[68]

In the 1970s, Hong Kong was the second most important center of film-making in East Asia, next only to Japan. It has now been surpassed by South Korea. However, the conditions are now ripe for a revival of the film industry in Hong Kong. One important factor is the extremely rapid growth of the box office receipts of cinemas on the Mainland. The Mainland is likely to surpass the United States as the largest movie market in the world. Hong Kong productions can be screened on the Mainland. Moreover, the preferential import treatment accorded by the Mainland to co-productions of films between foreign and Chinese (including Hong Kong) movie studios provides an additional incentive for foreign film-makers to use Hong Kong as a production base. Already, Warner Brothers and others have set up production companies in Hong Kong. In addition, Hong Kong has the advantages of fewer restrictions, greater flexibility and more creative freedom. Hong Kong is also more likely to be able to produce films that appeal to both Chinese and Western audiences. As support for the greater internationalization of its film industry, Hong Kong should try to develop its international film festival into one that can rival the established film festivals at Cannes and Venice, attracting the submissions of the best films from around the world. Hong Kong has a real potential of becoming the Hollywood of East Asia.

Besides film-making, Hong Kong can also encourage the production and distribution of art (for example, painting, sculpture and calligraphy), literature and music. There have been an increasing number of galleries and museums in Hong Kong, including the forthcoming West Kowloon Cultural District. Art Basel has been quite successful and art auctions are thriving in Hong Kong.

68. These are the famous words of Prof. Choh-Ming Li, the late founding Vice-Chancellor of the Chinese University of Hong Kong.

Other areas in which Hong Kong has an advantage include advertising services (Hong Kong is in an ideal position to help foreign vendors to enter the Mainland market and vice versa), translation and simultaneous interpretation services (Hong Kong can become a center for Chinese-English translation and simultaneous interpretation services in both directions) and the hosting of the mobile streaming services for books, music and movies as well as the provision of some of the underlying contents.

Hong Kong as an International Professional Services Center

Hong Kong as an International Professional Services Center

The service sector is one of the strengths of the economy of Hong Kong. Not only financial services, which have been already discussed in Section 5 above, and tourism services, but also educational, health care, and legal services can become much more important to Hong Kong in terms of generating GDP and increasing employment[69].

The service sector should be developed in such a way as to enable Hong Kong to become a "destination" itself rather than simply a transit/trans-shipment point. Jobs will be much easier to retain in Hong Kong if Hong Kong itself is the "destination" or the "hub". A hub is a place where people congregate, with the objective of encountering and potentially transacting with one another, thus creating value in the process. It is a place where potential supply and potential demand meet each other[70].

Expectations are critical to the success of a hub–if potential suppliers expect to find demand at the hub and potential demanders also expect to find supply at the hub, they will both show up at the hub, and transactions will result, making the hub a success. A successful hub also depends on the quantity of traffic, the more the better. And the quantity of traffic depends on the prior expectations, which can be self-fulfilling. Anything that increases the flows of people through Hong Kong is good for Hong Kong.

One of the consequences of globalization is that any job that can be moved away to a lower-cost location will be moved away. Hong Kong is not immune to this phenomenon. It is the responsibility of the Government of the HKSAR to ensure full and stable employment for its permanent residents, irrespective of their skill levels. Most low-skilled jobs have already migrated away from Hong Kong, for example, jobs in light manufacturing industries and in back-offices. The only low-skilled jobs that are left are the jobs needed to provide services to people who are physically in Hong Kong, whether on a permanent or a transient basis, such as tourists. These jobs will not migrate away, as long as tourists keep coming to Hong Kong, but

69. Professional services based on creative arts, such as advertising, marketing and design, have been discussed in Section 7 above.

70. For example, it is a place where a buyer meets a seller, or a teacher meets a student.

they do not pay well enough. The challenge is to create better-paying jobs that are also not so dependent on tourism, which can be quite fickle, and at the same time upgrade the skill levels of the workers so that they can take the new, better-paying jobs.

One advantage of the service sector is that it is almost completely environment-friendly. It does not consume much energy either directly or even indirectly, as it requires a minimum of fixed investment, just human capital and space.

Hong Kong as an International Education Hub

Hong Kong should aspire to develop into an international education (as well as R&D[71]) hub for the East Asian region, like Boston. Boston is an example of a highly successful international education hub. In the Greater Boston area there are two of the very best universities in the world: Harvard University and the Massachusetts Institute of Technology (MIT), which attract the most talented professors and students from all over the world. In addition, there are also many other educational institutions of distinction in the area, such as Tufts University, Wellesley College, Boston University Brandeis University and Boston College, and others such as Northeastern University, Babson College and Berkeley College. All in all, within a 50-mile radius of Boston, there are probably close to a hundred tertiary educational institutions, with most of them private but non-profit. Together they form an international education hub that also attracts accomplished scholars as well as novice students from all over the United States and the world. It is a vibrant intellectual as well as innovation community[72]. The presence of Harvard and MIT naturally attracts the best of both faculty members and students to the area. Moreover, the large number of tertiary educational institutions in the Greater Boston area, with sufficient diversity to suit every ability, preference, taste and budget, greatly enhances the appeal of the area[73]. Both undergraduate and graduate students everywhere aspire to enroll at one of these universities and colleges. Research postgraduate students trained at some of these institutions, including Harvard and MIT, tend to want to stay in the area after receiving their Ph. D. degrees to maintain contact with their advisers and peers. They constitute an important source of supply of faculty members to the tertiary educational institutions in the area. The local demands for both professors and students are sufficiently large that potential professors and students from all over will converge to the Greater Boston area, looking for opportunities to teach and research or to learn. The tertiary educational (and R&D) institutions as a group are major employers in the area, as are the high-technology companies that they help to spawn, generating many jobs that cannot move away.

71. The development of Hong Kong into an international "R&D" center has been discussed in Section 6 above.

72. See the discussion on Route 128 in Section 6 above.

73. In particular, there are ample student places to satisfy the local demand for tertiary education...

Is it possible for Hong Kong to emulate Boston's success as an international education hub? It is definitely possible, but it will take perhaps a decade or longer, as well as persistent and dedicated efforts[74]. There are two principal factors that account for Boston's success: first, Harvard and MIT, because of their world-class status, act as magnets to talented individuals with academic aspirations everywhere; and second, the large number of diverse tertiary educational institutions in the area allows the realization of the economies of scale (some would say the "economies of agglomeration") in the Greater Boston "market" for tertiary education: a potential professor can always find a position and a potential student can always find a place.

In order to become the Boston of East Asia, Hong Kong will need to try to raise one or two of its comprehensive research-based universities to the highest international standards of academic excellence, by committing additional long-term resources to it, so that Hong Kong can be put on the world tertiary education map. This will help to attract the best professors and students to Hong Kong from around the world. The Government of the HKSAR should put into practice the concept of "role differentiation", and focus its support for basic and applied research and research postgraduate students on one or two leading tertiary educational institutions, and encourage the private sector to do the same, for example, through matching grants. "Role differentiation" implies that not every university or college, and certainly not every public university or college, should be treated in the same way in terms of mission, responsibility and budget. For example, some can be research-based, some can be specialized in certain fields, whereas others can be focused primarily on teaching. They cannot all be allowed to aspire to become a comprehensive research-based university of world-class excellence. Students with different abilities, aspirations and interests need different types of tertiary educational institutions to meet their needs. Nor is it necessary for all public universities and colleges to be provided the same degree of public subsidies, that is, the same subvention per student in the same discipline across institutions. However, "role differentiation" may not be welcome by everyone, as it implies preferential treatment for some institutions over the others. But if all institutions are to be treated equally, no one will ever be able to achieve world-class status—there simply aren't enough resources.

The public higher education system in the State of California (with a population of almost 40 million) provides a good example of sensible role differentiation. At the top, there is the University of California system of comprehensive research-based universities, with campuses at Berkeley, Los Angeles, San Diego, Santa Barbara, and other cities. In the middle, there is the California State University System, with campuses in San Francisco, San Jose, Los Angeles, etc., which has its principal focus on undergraduate education and provides only limited research support. Finally, there is the City and Community College System, supported locally, offering Associate and sometimes full Bachelor degrees, but demanding almost no research on the part of the teachers. The system adopted in California makes a great deal of sense as the tertiary educational needs of the public are

74. Yes. It will be a long-term effort, but it will be worthwhile, and a start must be made some time.

diverse and the available resources are limited. Tertiary educational institutions that primarily do teaching can have a much lower cost structure than comprehensive research-based universities.

However, only a very strong government can manage to direct additional research resources to only one or two public universities. Another possible way to achieve "role differentiation" is to try to privatize one or more of the existing public tertiary educational institutions by converting them into non-profit organizations with their own independent governing bodies. Then they can have the freedom and flexibility to develop on their own. The government can continue to provide basic funding by giving the equivalent subsidy per student to each enrolled Hong Kong permanent resident in this privatized institution as a tuition grant. The cost to the government is essentially the same as before, but the institution will be free to set its own tuition fee, raise its own funds, grant scholarships to its own needy students, focus its research, and do whatever else is necessary to achieve world-class status. An education hub should allow different types of tertiary educational institutions, public and private (including non-profit), to develop, each with its own cost structure, revenue needs, tuition fees, and academic focus.

If Hong Kong were to become an international education hub, it must, in addition, also expand significantly the total number of available student places in the tertiary education sector in Hong Kong. The expansion can come from both an increase in the enrolment per existing tertiary educational institution and an increase in the number of such institutions[75]. However, it is not possible for the entire expansion of tertiary enrolment to be financed by the Government of the HKSAR alone. The expansion in the number of tertiary educational institutions in Hong Kong can be more easily accomplished through the establishment of new private, non-profit universities and colleges. Potential sources of financing can include private individuals, foundations, religious institutions, and even non-local academic institutions. The government should encourage and support these initiatives and also explore high-technology alternatives for the tertiary education sector that makes use of distance-learning and the internet, such as the operations of the Open University here in Hong Kong and the University of Phoenix in the U.S., as well as "massive open online courses (MOOCs)". One must also try to dispel the notion that a private educational institution is in it only for profit or for the benefit of its founder, and is therefore necessarily equated to low-quality.

The U.S. is well known for its many excellent private non-profit universities, such as Harvard, MIT, Yale, Princeton and Stanford. Japan has many well-known private universities such as Keio University and Waseda University. In the Republic of Korea, which has a population of approximately 50 million, the tertiary enrolment rate is over 90 percent. However, there is only a total of eleven national universities (all publicly funded) in the entire country, one national university in each of the eleven provinces. The best Korean university is Seoul National University, followed by Yonsei University and Korea University, both private universities, in

75. As discussed in section 6 above, the government should also support increased opportunities for articulation, so that an Associate Degree holder can go on to obtain a full Bachelor degree if he or she wishes to do so.

respectively the second and third place. In Taiwan, where the tertiary enrolment rate is reportedly over 100 percent, there are also many private universities such as Tunghai and Yuan Ze.

However, before Hong Kong can undertake to increase its enrolment of non-local students, Hong Kong must first strive to satisfy Hong Kong's own local needs for higher education first. It is politically untenable for Hong Kong to try to become an international education hub if it cannot even satisfy the needs of its own permanent residents. Hong Kong should therefore plan for an eventual increase of its local enrolment rate to at least 40 percent. The number of non-local students should not be too large relative to the enrolment of local Hong Kong students; there should be, say, no more than 30 percent for undergraduates (compared to the current 20 percent), but a higher percentage should be allowed for research post-graduate students[76]. The non-local undergraduate students and taught post-graduate students should be self-financed and charged a non-resident tuition fee that covers the full marginal cost, except for those truly meritorious non-local students, who can be granted scholarships. A differential between the tuition fees of local and non-local students is standard practice in the public tertiary educational sector in many countries and in Hong Kong[77]. As long as the non-local tuition fee charged is sufficient to cover the full marginal cost of teaching the additional non-local student, everyone--the local students, the universities and Hong Kong--is better off.

Non-local students are attracted to Hong Kong because of its recognized regional if not global excellence in a variety of subjects. The tertiary educational institutions in Hong Kong should be able to offer educational opportunities of a quality or a specialization that are not readily available in their home countries and regions. These students should be well treated, as clients and customers are treated. That is why the tertiary educational institutions should offer the highest-quality education to not only the citizens of Hong Kong, but also to students from everywhere. In so doing, it should also be able to attract the best talents from around the world[78].

What are the potential benefits of becoming an international education hub to Hong Kong? First of all, the expansion of the tertiary education sector will help to attract talents and retain them in Hong Kong. It will also enhance and upgrade the quality of its labor force at all levels, and hence maintain its competitiveness.

Second, it can create many permanent jobs of varying skill requirements that cannot be moved away. Teaching jobs are generally

76. Note that the out-of-state (including out of the U.S.) students at the University of Michigan, a public university supported by the State of Michigan, constitutes approximately 35 percent of the total enrollment of the University, and at least half of the students in tertiary educational institutions in the Greater Boston area are from outside the area.

77. For example, the tuition fee for an overseas undergraduate student at the University of Cambridge and the University of Oxford is approximately 24,000 pounds, equivalent to HK$240,000, a year. Other British universities have lower fees.

78. The U.S. is the greatest beneficiary of its open higher education system, which recruits the most talented students from the entire world, from countries and regions that have borne the full costs and efforts of raising and educating all their youth for 18 years. Many of these students stay in the U.S. after their graduation and become significant contributors to the U.S. economy and society.

stable and reasonably high-paying jobs. Some of the service jobs created to serve the additional students, both local and non-local, are similar to those serving the tourists, except that they are more stable and permanent, and not so cyclical or fickle. In addition, a non-local student population also creates derived tourism on the part of their parents, family members, relatives and friends. A successful education hub generates an annually renewable service demand.

Third, Hong Kong will be training the future elite of the East Asian region. By studying full-time in tertiary educational institutions in Hong Kong, the non-local, including Mainland, students are exposed to Hong Kong's way of life and are likely to develop an appreciation and understanding of and hopefully affection for Hong Kong. This can only rebound to the benefits of Hong Kong in the future, regardless of whether they decide to stay here in Hong Kong, in which case they will augment the talent pool, or to return to their home countries and regions upon graduation, where they can act as goodwill ambassadors for Hong Kong.

Fourth, the opportunities for Hong Kong's own students to be exposed to multiple different cultures is beneficial to them in this increasingly globalized world.

Finally, the expansion of the tertiary education sector will facilitate the gradual transformation of Hong Kong to a knowledge-based economy, with higher-skilled and higher-paid jobs replacing the low-skilled jobs, raising the income of the average Hong Kong citizens in the process. A knowledge-based economy will also allow Hong Kong to maintain its competitive advantage over Mainland and Southeast Asian cities with their lower costs of labor and land.

What advantages does Hong Kong have in trying to become an international education hub? Hong Kong has a myriad of advantages in attracting talents: there is the freedom of mobility, the freedom of speech, complete academic freedom, the unrestricted accessibility of information both on and off the internet. The press is among the freest in the world. There is a tradition of the rule of law, the protection of intellectual property, and a pleasant and safe living environment[79]. In addition, there is also easy communication and transportation to and from everywhere, including the Mainland and other parts of East Asia. There is no capital control of any kind. Hong Kong is an ideal place to learn about China and the Chinese economy. Finally, Hong Kong is bilingual–Chinese and English--it is one of the few places in East Asia where an English speaker can live, study and work using only English without any problem.

79. Aside from the very high cost of housing.

In order to increase the number of tertiary educational institutions, Hong Kong should encourage, promote and support the development of private, non-profit universities and colleges. What can the Government of the HKSAR do? It can be supportive in a variety of ways, both directly and indirectly.

First, the cost of land is prohibitive in Hong Kong. Thus, new private, non-profit tertiary educational institutions are possible only if the Government of the HKSAR is willing to lease land to these institutions to build their campuses at purely nominal rates (for example, at HK$1 a year). In order to avoid possible diversion to commercial use, the lease should include strict prohibitions on any change of the use of the land from its original purpose and on any transfer of the lease to any other entity without the prior permission of the Government of the HKSAR, which the Government has the sole discretion to grant or deny.

Second, in order for the new tertiary educational institutions to be able to attract students, local and non-local, Hong Kong must develop and maintain a public or quasi-public accreditation system for new universities and colleges that has credibility not only in Hong Kong but also in the East Asian region and the rest of the world. Moreover, Hong Kong must make sure that the degrees granted by the programs of the appropriately accredited tertiary educational institutions of Hong Kong are recognized not only in Hong Kong but also in the home countries/regions of the potential non-local students for the purpose of employment (including public employment) after graduation. To enable these Hong Kong degrees to be recognized, Hong Kong might also need to recognize, on a selective basis, the degrees from the other countries/regions as well[80].

Third, related to the above is the reciprocal recognition of professional qualifications. This is much more difficult to achieve but can probably be done for selected countries/regions on a profession-by-profession basis. For example, accountants trained by Hong Kong, after passing an examination administered by a professional body, are qualified to work as an accounting professional in other countries/regions. Hotel management professionals can probably be done similarly. The medical and legal professions are likely to be the most difficult. In this regard, some degree of reciprocity will probably also be required.

Fourth, in order to be able to attract the best professors in the world to Hong Kong, whether on a temporary or permanent basis, the Government of the HKSAR should adopt a more flexible work visa policy for professors. In addition, it should also try to conclude double tax agreements and treaties with the Mainland, the United States and other countries and regions to provide for the elimination of double taxation of professors of non-local origin so as to decrease the net cost of employing them by Hong Kong tertiary educational institutions (see Ayesha Macpherson Lau (2016)).

80. It may not be necessary to recognize all such degrees, but clearly Hong Kong would need to recognize some such degrees, from the best tertiary educational institutions of these countries/regions, and should therefore formulate and design a procedure for granting such selective recognitions.

Fifth, the government should consider the provision of enhanced benefits for private donations to public and accredited private non-profit universities, colleges and other tertiary educational institutions. For example, this can take the form of a double deduction from income coupled with a higher ceiling for such deductions as a share of taxable income, or the form of a government matching grant.

Sixth, the Government may also consider facilitating the issuance of multi-year multiple-entry student visas for full-time non-local students. The Government may consider relaxing the regulations on non-local students serving internships in Hong Kong, given that Hong Kong students are also being awarded internships in the Mainland and abroad. Hong Kong already has quite generous provisions for the graduates of Hong Kong tertiary educational institutions from the Mainland to seek and take up employment and eventually apply for permanent residency–basically, the time spent as a full-time student will count towards the seven years required. Hong Kong can consider extending these privileges to non-local students in general.

Tertiary education can become a major "industry" in Hong Kong in terms of GDP and employment, especially with significant private (non-profit) sector participation. As pointed out in Section 6 above, Tertiary education, R&D and innovation are all complementary to one another. Development of Hong Kong into an international tertiary education hub is a long-term undertaking and will require the long-term commitment of the Government of the HKSAR, its citizens, corporations, educational institutions and educators. But it will help propel Hong Kong on its way to becoming a knowledge economy.

Hong Kong as an International Health Care Hub

Hong Kong also has the potential to become an international health care hub for the East Asian region. It should aim to be the place where patients of difficult cases within the region will be sent for further examination, testing, diagnosis and treatment. Patients from all over can come to Hong Kong for medical treatment just as Hong Kong patients can go to the U.S. for medical treatment. There is a great deal of such potential demand for medical treatment by patients from the Mainland and Southeast Asia, for reasons of both the quality of the health care available in the home countries and the relatively restricted access to the best available care there even for those patients who can afford it.

However, in order for Hong Kong to become such a health care hub, it needs to increase its capacity for the provision of health care significantly–it will need more doctors, more nurses, and more hospital beds. Hong Kong cannot aspire to becoming an international health care hub if the local patients cannot be adequately cared for in a timely manner. While the potential is clearly there for health care to become a major service industry with significant private or non-profit sector participation, creating demand for health care professionals and generating more health care sector jobs, the supply constraints, especially on doctors, are daunting in the short and medium term. Hong Kong would have a unique advantage as a health care hub because its health care professionals would be able to try to combine the best that Western medicine and traditional Chinese medicine have to offer. And the growth in health care services can in turn spur related research and development in Hong Kong.

Hong Kong as an International Legal Services Hub

Hong Kong has always been and continues to be a common-law jurisdiction. Because of its long tradition of rule of law, its efficient and fair judicial system, and its abundance of professional legal manpower, Hong Kong can serve as a center for international legal, arbitration, dispute mediation and settlement services for the East Asian region. It can provide the necessary legal and other services, and the infrastructural support for Mainland enterprises investing abroad and foreign enterprises seeking to invest on the Mainland. In particular, it can serve the all the parties involved in the "Belt and Road" projects (see the discussion in Section 10 below). Of course, if the proposed East-Asia-wide securities market comes to fruition, a great deal of recurrent demand for legal services, by Hong Kong, Mainland and foreign clients, will be generated in Hong Kong.

Pearl River Delta (PRD) Economic Cooperation

Pearl River Delta (PRD) Economic Cooperation

The future economic success of Hong Kong depends on its relationship with its close neighbors. Hong Kong should capitalize on its geographical proximity to the Mainland to co-operate closely with Guangdong (including Shenzhen), in particular the Pearl River Delta, and Macau, as well as southern China. Guangdong (including Shenzhen), is the natural economic and financial hinterland of Hong Kong. It is a huge potential market for Hong Kong, especially for its service sector. Hong Kong must begin by providing the enterprises and households in its immediate hinterland with the best financial, educational, healthcare, legal and other professional services possible, so that they do not need to go elsewhere or try to develop their own alternative sources of supply for these services. If Hong Kong cannot even win over these potential natural customers, it will have a hard time trying to become a premiere international center for financial and other services.

Chart 28 shows how Hong Kong can become the vanguard of the Pearl River Delta Economic Zone, which comprises the nine municipalities of Guangdong--Dongguan, Foshan, Guangzhou, Huizhou, Jiangmen, Shenzhen, Zhaoqing, Zhongshan and Zhuhai--plus Hong Kong and Macau. It will constitute a giant metropolis, with a population of almost 67 million and a GDP over US$1.32 trillion in 2015.

The core of both the Greater PRD region and the Pan PRD region is the Province of Guangdong (including Shenzhen) and also Hong Kong and Macau. Hong Kong should adopt a "Serve Thy Neighbor" strategy. Guangdong, including Shenzhen, had a population[81] of 108.49 million in 2015, and is the most populous province on the Mainland. If the populations of Hong Kong (7.32 million) and Macau (0.65 million) are added to that of Guangdong, the total population of the combined region becomes 116.46 million, more than that of Germany (83 million) and almost equal to that of Japan (127 million) (see **Chart 29**). The GDP of Guangdong was US$1.122 trillion in 2015, 3.6 times the Hong Kong GDP of US$310 billion. It is also the province with the largest GDP on the Mainland, constituting 10.76% of the Mainland GDP. The GDP of Macau was US$46.18 billion. The GDP of Guangdong, Hong Kong and Macau combined was US$1.48 trillion in

81. All population figures are for year-end.

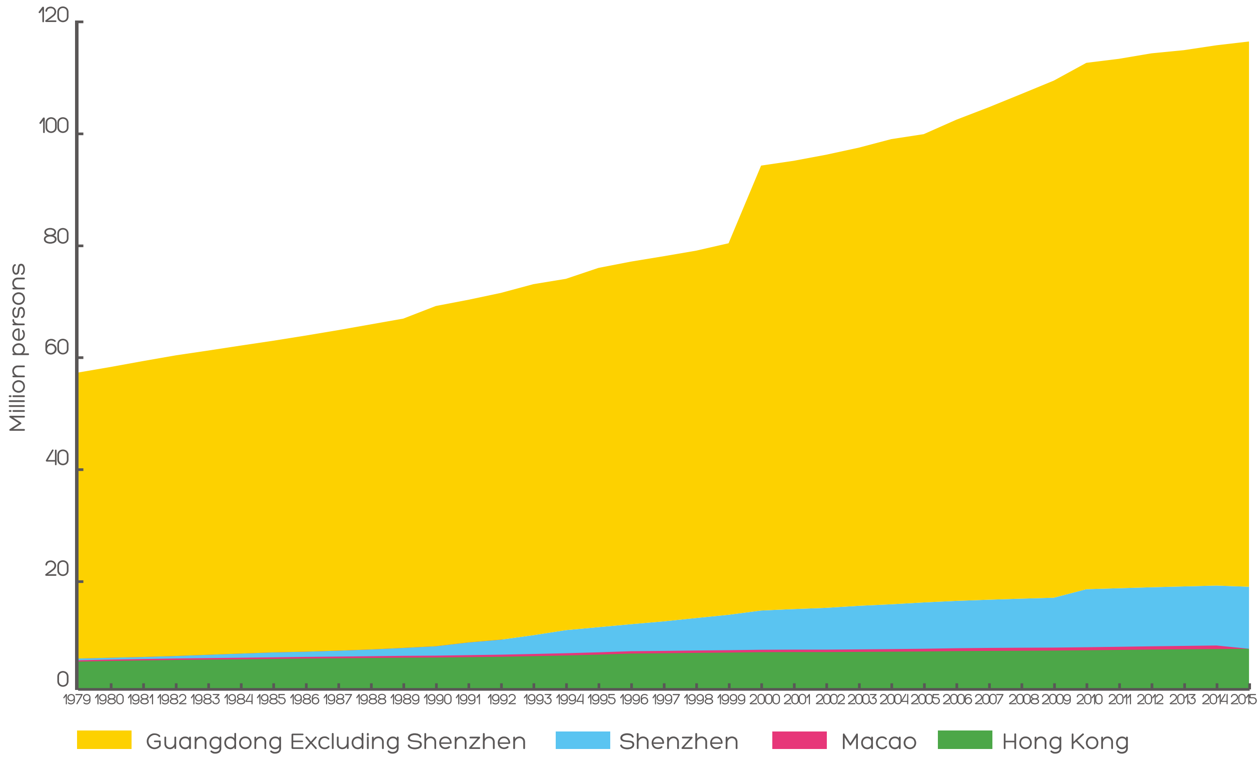
2015, almost 14.2% of the Mainland GDP (see **Chart 30**). The GDP per capita of the Guangdong in 2015 was US$10,339, compared to Hong Kong's US$42,430 and Macau's US$71,984. The GDP per capita of the combined region was US$13,541[82], comfortably exceeding the threshold for developed economy status of US$10,000 (see **Chart 31**). The total international trade of Guangdong amounted to US$1.02 trillion, or 25.9% of total Mainland international trade in 2015. In 2015, Guangdong accounted for 28.3% of Mainland exports and 22.6% of Mainland imports and had the largest international trade among all provinces, regions and municipalities on the Mainland[83].

Chart 28: Hong Kong as Part of the Pearl River Delta Metropolis

82. Data on Guangdong, Shenzhen, Hong Kong and Macau are from their respective government statistical agencies.

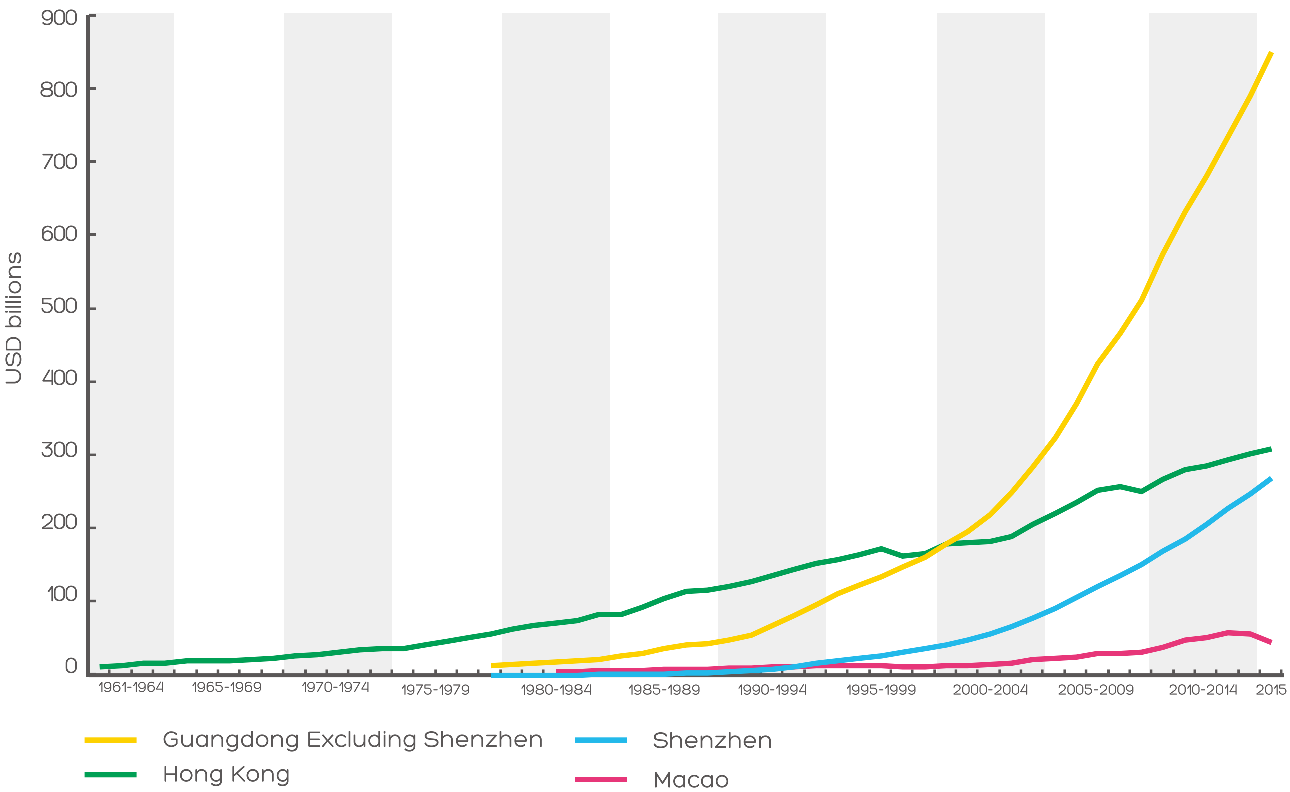
83 In the 1990s, Guangdong's share of Mainland international trade was as high as 40%. Of course, what is more interesting is Guangdong's share of Mainland value-added in exports, which can be quite different from its share of gross exports.

Chart 29: The Populations of Hong Kong and Its Neighboring Economies, millions



Sources: Census and Statistics Department, IFS

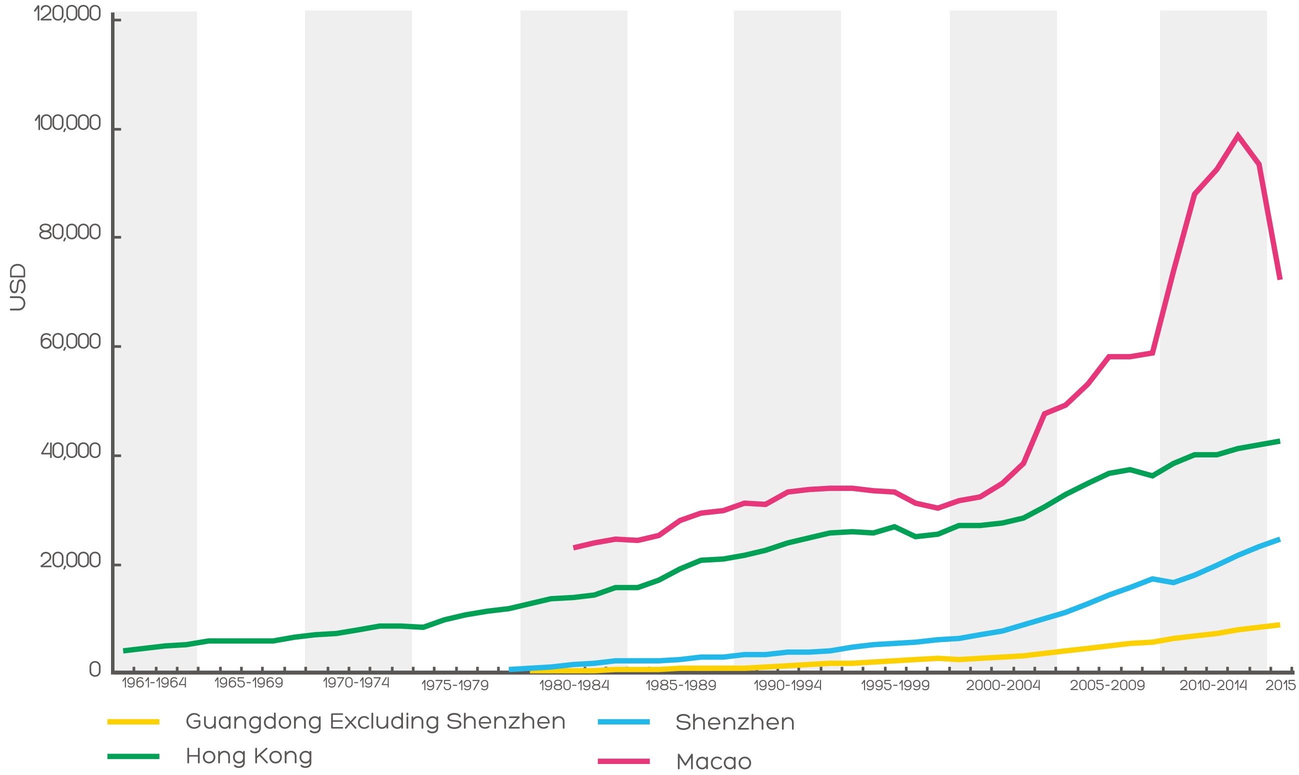
Chart 30: Real GDPs of Hong Kong and Its Neighboring Economies, billions 2015 US$



Sources: China Data Online, Shenzhen Statistical Yearbook

Economically, Guangdong, Shenzhen, Hong Kong and Macau are complementary to one another. Guangdong (including Shenzhen) has a diversified industrial base–with light, heavy[84] and high-technology[85] industries--but is relatively weak in higher education, healthcare and R&D sectors. Hong Kong has little or no industry any more, especially high-technology industry, but it has world-class research-based universities such as the University of Hong Kong, the Chinese University of Hong Kong and the Hong Kong University of Science and Technology, to supply scientific, technological and medical manpower and R&D. The strong and seasoned financial sector of Hong Kong can also help the enterprises and provincial and local governments of Guangdong to raise both equity and debt capital in Hong Kong. For example, it can try to bring to the Hong Kong Stock Exchange Guangdong enterprises waiting to IPO in Shanghai; it can also help the governments to float infrastructural bonds (in either Renminbi or Hong Kong Dollars). The forthcoming Shenzhen-Hong Kong Stock Connect is a live demonstration of mutually beneficial win-win economic cooperation. There can also be other forms of regional cooperation in the future, such as a joint airport authority, with high-speed railroad links among all of the airports in the region. There is therefore a great deal of room for specialization, division of labor, and cooperation among Hong Kong, Macau and Guangdong (including Shenzhen), which can be win-win for all[86].

Chart 31: Real GDP-per-Capita's of Hong Kong and Its Neighboring Economies, 2015 US$



84. For example, Honda, Toyota and BYD.

85. For example, Shenzhen enterprises such as Huawei, ZTE and BGI are world-class high-technology companies.

86. Given the proximity and hence ready mutual accessibility between Hong Kong and Shenzhen, and their strong economic complementarity, they will develop in time into twin cities economically even though not politically.

It is thus in the interests of Hong Kong to be more closely aligned with Guangdong. Moreover, with Guangdong, Hong Kong has the advantage of not only proximity, but also linguistic as well as cultural affinity. The most commonly spoken dialect in Hong Kong and in Guangdong is Cantonese. The great majority of the residents in Hong Kong can trace their ancestral roots to different regions in Guangdong.

At their current rates of economic growth, Guangdong, Shenzhen, Hong Kong and Macau together constitute a region with the potential of eventually surpassing Japan, which has been economically stagnant, to become the third largest economy in the world in a decade or so. However, in order for this four-way economic cooperation to be successful, it is necessary to promote the free flow of goods and services, people and capital and the sharing of basic infrastructural facilities among them. For example, when the Hong Kong-Zhuhai-Macau Bridge is completed, one can think of more creative and profitable uses for the Macau and Zhuhai International Airports, because they will become so much more easily accessible to and from anywhere within the PRD Economic Zone[87].

The plan for a Guangdong-Shenzhen-Hong Kong-Macau Pilot Free Trade Zone should be actively pursued and developed. Goods and services can be allowed to flow freely within the Pilot Free Trade Zone. Once a good is imported and inspected[88], it can be shipped to anywhere within the Zone without any further tariff or inspection[89]. The freer flow of people can be achieved through the simplification of entry/exit and customs formalities for residents within the Pilot Free Trade Zone and the mutual selective recognition of academic degrees and professional qualifications[90]. The free flow of capital within the Pilot Free Trade Zone will require some restrictions on both the inbound and outbound capital flows between the Pilot Free Trade Zone and the rest of the Mainland, at least until the Renminbi is fully capital-account convertible.

87. For example, one possible role for the Macau International Airport is to become the hub for private jets for the entire PRD region; and the Zhuhai International Airport can become the hub for air freight and courier services for the entire East Asian region, covering not only the Mainland but also the ASEAN countries and serving Mainland as well as international carriers.

88. The inspection can be conducted jointly by Mainland, Hong Kong and Macau officials.

89. This can be facilitated with the use of labelling methods based on, for example, RFID identification markers.

90. The problem with the same-day cross-border "arbitrager" (for lack of a better term–these are people from both sides of the border who buy goods in Hong Kong and resell on the other side of the border) will actually disappear if there were a true pilot free trade zone. Importers and wholesalers in Hong Kong will simply ship their goods directly to Shenzhen and Guangdong.

The Role of Hong Kong in the "Belt and Road" National Initiative

The Role of Hong Kong in the "Belt and Road" National Initiative

The "Belt and Road" initiative of the Mainland and its affiliated projects (including the Asian Infrastructural Investment Bank (AIIB), the New Development Bank BRICS and the Silk Road Fund) involve a total of 66 countries with a combined population of 4.4 billion people and a combined GDP of US$21 trillion. It is expected to take several decades to complete. However, it should be emphasized that there is no direct connection between the "Belt and Road" initiative and the AIIB, which currently has 57 shareholder-member countries, even though they are clearly complementary to each other.

The demands for infrastructural investment are huge. According to a 2009 report of the Asian Development Bank, in the Asian region alone, between US$8 trillion and US$13 trillion worth of infrastructural investments will be needed in the next several decades. Another estimate puts the demands at US$750 billion per year over the decade beginning in 2020. The "Belt and Road" initiative, which aims at increasing the connectivity among Asia, Europe and Africa, will create significant additional demands for infrastructure. The newly established development banks, such as AIIB (capitalized at US$100 billion) and the New Development Bank BRICS, will at most be able to cover a tiny fraction of the total demand for infrastructural financing.

Two kinds of infrastructural projects are the most difficult to finance: development-leading infrastructural projects[91] and infrastructural projects with significant positive externalities. An example of a development-leading infrastructural project is the trans-continental railroad linking the Atlantic and the Pacific coasts of the U.S., which was built in the Nineteenth Century, successfully spurring the economic development in the American West. One ultimate objective of the "Belt and Road" initiative is to integrate Asia and Europe into one large unified market. An efficient Eurasian land bridge, if it materializes, will play the same role as the American trans-continental railroad, promoting economic development in all the countries along the way. An example of an infrastructural project with positive externalities is an urban mass transit system, which can reduce air pollution, climate change and congestion by providing an alternate efficient and convenient mode of transportation to the use of the private automobile. Unfortunately,

91. But these are also the infrastructural projects that will generate the most economic benefits in the long run. AIIB and other multilateral development finance institutions should focus on the financing of development-leading infrastructural projects.

development-leading infrastructural projects cannot be financed through the commercial capital market alone. Neither can infrastructural projects with significant positive externalities.

Having limited capital, the development banks, including the AIIB, must use leverage in a clever way, so as to attract participation by the private sector in financing both the equity and the debt of an infrastructural project. In order to minimize moral hazard, there must be local equity in the project, be it from the government or the private sector, or a mixture of both. The development banks will normally take the longest dated slice of financing. Everything in the middle will hopefully be financeable on the commercial capital market, through debt securities of various seniorities and maturities. It will require risk tiering of the debt securities and possibly currency swaps.

Hong Kong can serve as an international financial center for the arrangement of the financing of the "Belt and Road" infrastructural projects through a combination of both public and private equity and debt, direct commercial loans as well as development loans. Hong Kong can also try to provide a secondary market for these equity and debt securities to ensure some liquidity for the investors. Moreover, since many countries on the "Belt and Road" are Islamic, Hong Kong can further develop into an international center for "Sukuk" or "Sharia (Islamic Law)-compliant" bonds, which are the only debt-like instruments that can be used by Islamic countries. The potential establishment of an East-Asia-wide securities market in Hong Kong also fits in with the "Belt and Road" initiative. The Government of the HKSAR has already been actively pursuing double-tax agreements with the "Belt and Road" countries. As one terminus of the "Belt and Road" is Europe, Hong Kong, with its long tradition of close economic relations with Europe, can also play an important role in involving European businesses in the "Belt and Road" projects. The "Belt and Road" initiative will also cover the ASEAN region, especially the maritime portion of the "New Silk Road". It will also extend into South Asia and beyond, to the Middle East and even Africa.

Hong Kong can add significant value, if it is able to maintain an active and liquid stock and bond market for the East Asian region as a whole. Infrastructural projects are typically projects with long pay-back periods. If the Hong Kong market can provide liquidity at any time during this long pay-back period, it will enhance investor demand significantly and hence lower the effective cost of funding for these infrastructural projects. Local currency financing and trading will also be helpful for many of the borrowers of infrastructural project loans in the developing economies of East Asia. This will allow the development banks to leverage their limited capital base to fund more infrastructural projects.

In addition to helping with infrastructural project financing, Hong Kong can also provide various types of insurance as well as re-insurance for the infrastructural projects. It can also provide many one-off services, such as architectural, design, engineering and project management[92] as well as

92. For example, the MTR Corporation of Hong Kong is experienced in the management of the construction and the operation of urban mass transit projects around the world.

more recurrent services such as accounting and legal services. In addition, Hong Kong, because of its long tradition of rule of law and abundance of seasoned professional talents, can also be used as a center for arbitration, dispute settlement and mediation services in relation to the "Belt and Road" projects.

AIIB must be successful and will be successful. China cannot afford to have the first multilateral project proposed and led by China fail. In a way, AIIB has already had a positive impact on the world because its establishment alone succeeded in finally nudging the U.S. Congress into ratifying the recapitalization plans for the multilateral institutions such as the International Monetary Fund and the World Bank. Some competition among the multilateral development banks such as the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, and the World Bank is healthy. AIIB has committed to be clean, green and lean. We all wish AIIB every success and hope that it will establish a branch operation in Hong Kong soon.

Concluding Remarks

Concluding Remarks

The primary objective of this report is epitomized by the Chinese saying, "tossing a brick to attract the jade (抛磚引玉)". We have tried to suggest some feasible directions of significant potential in which the economy of Hong Kong can aspire to develop. Further studies and open discussions are required for all of the proposed options. The goals may appear ambitious, but in our opinion, they are all doable with sufficient commitment and resolve.

Hong Kong has one disadvantage when compared to other economies–it cannot print Hong Kong Dollars, or otherwise increase its money supply, at will, because of its currency board system–all increases in the money supply of Hong Kong must be matched by a corresponding increase in U.S. Dollars held by the Hong Kong Monetary Authority as its official foreign exchange reserves. For worthwhile public projects, Hong Kong does have some capacity to raise debt in Hong Kong Dollars. But for Hong Kong to try to raise significant debt in another currency, such as the Renminbi or the U.S. Dollar, can be extremely risky. Hong Kong is more comparable to small economies such as Greece, Singapore and Taiwan in terms of its fiscal viability and choices. The Government of the HKSAR also has a special responsibility to make sure that the low-income groups in Hong Kong are not worse off over time in real terms.

It is essential to try to make Hong Kong more competitive once again. This means trying to do something to the high price of land, and the resulting high office space and housing costs. But if the price of land is allowed to fall, it will reduce government land revenue. Here we can take a page from "supply-side" economics, which says that a reduction in the income tax rate may under some circumstances increase the total income tax revenue, because the people may then have the incentive to work harder and earn more in response. The same may be true with a reduction in the price of land in Hong Kong. While government revenue from land sales is certain to fall, the increase in the income and profits that a reduction in the price of land is likely to generate, both directly and indirectly through the incentive effect, may increase both income and profits and hence the tax revenues based on them.

We have proposed different ways to transform the economy of Hong Kong in the long run, a menu if you like. Hong Kong indeed has the potential of surpassing both New York and London to become the leading international financial center in the world. It can also become the international innovation and venture capital center, the international center for creative arts, and the international professional services center of East Asia. Hong Kong can also play a pivotal role in the economic cooperation in the Pearl River Delta (PRD) and in the "Belt and Road" national initiative. Development of Hong Kong as an international hub for flows of people, goods and services, and capital is a long-term undertaking and will require the long-term commitment of the Government of the HKSAR, its citizens, and its public and private institutions. We need to put our whole hearts and minds into making it happen.

The success of the various strategies described above also depends on the support of the Central Government. However, Hong Kong must also do its own part in devising implementable plans and strategies and seeking assistance and support from the Central Government on the basis that these initiatives are win-win. It is up to Hong Kong to make itself indispensable once again, as it was during the early days of the Chinese economic reform and opening to the world.

There is clearly still great potential for the economy of Hong Kong! Yes. Hong Kong CAN create yet another economic miracle! However, time is of the essence. The time to act is NOW.

Bibliography

K. C. Chan (2015), "One-Belt, One-Road: Opportunities for Hong Kong," the Li Dak-San Shanghai-Hong Kong Development Lecture , Shanghai-Hong Kong Development Institute, The Chinse University of Hong Kong.

Carol Hsu and Sia Siew Kien (2015), "Prospects and Challenges of the Development of ASEAN Exchanges," SWIFT Institute Working Paper No. 2014-001.

Ayesha Macpherson Lau (2016), "Recommendations for Enhancing the Eco-System of Innovation and Technology in Hong Kong," unpublished paper, March.

Lawrence J. Lau (2015), "The Sources of Chinese Economic Growth Since 1978," paper presented at the Conference, "A Just Society: Honoring Joseph Stiglitz", The Columbia Business School, Columbia University, New York, 16-17 October 2015.

Lawrence J. Lau (2016), "The Thirteenth Five-Year (2016-2020) Plan and Hong Kong," Working Paper No. 47, The Institute of Global Economics and Finance, The Chinese University of Hong Kong, March.

Lawrence J. Lau and Yanyan Xiong (2015), "Are There Laws of Innovation? Part I: Introduction," Working Paper No. 39, The Institute of Global Economics and Finance, The Chinese University of Hong Kong, October.

Lawrence J. Lau and Huanhuan Zheng (2015), "How Much Slack Was There in the Chinese Economy Prior to Its Economic Reform of 1978?" Working Paper No. 34, The Institute of Global Economics and Finance, The Chinese University of Hong Kong, September.

Lap-Chee Tsui, Rita Lun and Edwin Cheung (2015), "The Ecosystem of Innovation and Technology in Hong Kong," Hong Kong: Our Hong Kong Foundation, December.

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