## 香港統計月刊

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香港 — 知識型經濟 Hong Kong as a Knowledge-based Economy

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環球經濟在近數年經歷了重大的轉變,這些轉變的其中一項特點是各類經濟活動均日益重視知識的應用。蘊藏在人才與科技中的知識,被視為長遠經濟增長的主要源頭。資訊與知識融入經濟活動的程度之深,大大影響一個經濟體在結構及質量上的運作。

本文透過展示一些與知識型經濟息息相關的統計指標,從不同角度描述香港過去 10 年邁向知識型經濟的發展情況。

The global economy has undergone significant changes in recent years. One of the key features of the changes is the growing importance of knowledge in all sectors of economic activities. Knowledge, as embodied in human capital and in technology, is a vital source of long-term economic growth. The degree of incorporation of information and knowledge into economic activities has now become so great that it is inducing profound structural and qualitative changes in the way an economy operates.

By presenting some relevant statistical indicators which capture the essence of a knowledge-based economy (KBE), this article aims at portraying the development of Hong Kong towards a KBE in the past decade from different perspectives.

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#### 香港 — 知識型經濟

#### Hong Kong as a Knowledge-based Economy

#### 1. 引言

- 1.1 環球經濟在近數年經歷了重大的轉變,這些轉變的其中一項特點是各類經濟活動,尤其在先進的經濟體的經濟活動,均日益重視知識的應用。蘊藏在人才與科技中的知識,被視為長遠經濟增長的主要源頭。
- 1.2 資訊與知識融入經濟活動的程度之深,大大影響一個經濟體在結構及質量上的運作。隨着知識的運用在經濟活動中日漸深化與及全球邁向一體化的影響,經濟分析模式也不再如以往般專注於土地、勞工及資本等傳統的生產要素。知識資本在生產過程中的作用愈趨重要。

#### 2. 何謂知識型經濟?

- 2.1 經濟合作及發展組織最初將知識型經濟 定義為「直接以生產、傳播和運用知識與資訊 為本的經濟體」。這個意念後來被擴展為在一 個知識型經濟體內,知識的生產、傳播和運用 是促進各行業增長、創富和就業的主要動力。
- 2.2 知識型經濟強調側重知識、資訊及高水平技能的趨勢,而工商及公營機構對接觸這些元素的需要日益增加。必須持續學習系統化的資訊及掌握運用資訊的才能是知識型經濟的特徵。新資本的投放(特別是在資訊及通訊科技的投資)、勞動力質素的提升,以及增強創新與科技的能力都是知識型經濟的基本特徵。

#### 1. Introduction

- 1.1 The global economy has undergone significant changes in recent years. One of the key features of the changes is the growing importance of knowledge in all sectors of economic activities, especially those in the advanced economies. Knowledge, as embodied in human capital and in technology, is a vital source of long-term economic growth.
- 1.2 The degree of incorporation of information and knowledge into economic activities has now become so great that it is inducing profound structural and qualitative changes in the way an economy operates. Driven by the rise in knowledge intensity of economic activities and the increasing globalisation of economic affairs, there has been a paradigm shift in economic analysis model from the approach of devoting major attention to the traditional factors of production such as land, labour and capital. Intellectual capital is playing an increasingly important role in production.

### 2. What is a knowledge-based economy (KBE)?

- 2.1 The term KBE was first defined by the Organisation for Economic Co-operation and Development (OECD) as "an economy which is directly based on the production, distribution and use of knowledge and information". This idea was then extended to that in a KBE, the production, distribution and use of knowledge are the main driver of growth, wealth creation and employment across all industries.
- A KBE is featured by the trends towards greater dependence on knowledge, information and high skill levels and the increasing need for ready access to all of these by the business and public It is characterised by the drive for continuous learning of both codified information and the competencies to use information. New capital investment, particularly that on information and communication technology (ICT), rising quality of and enhancement of innovation labour, and technology capability are regarded the fundamental features of a KBE.

#### 3. 量度香港作為知識型經濟有何重要 性?

- 3.1 由於經濟增長較以往更加倚重知識的創造、生產、傳播和運用,社會愈來愈講求掌握知識型經濟的各種動力,以及知識型經濟與傳統經濟動力的關係。有關知識型經濟影響力的課題已成為決策者制定合適的發展政策的核心。有鑑於此,編製反映一個經濟體邁向知識型經濟進程的統計指標,有助策劃合適的發展策略。
- 3.2 全球有不少經濟體正在知識的道路上邁進。合適的知識型經濟指標,有助確定相關政策的目標是否已達到,並可作為與其他經濟體比較的基準,從而找出有待改善之處。

## **4.** 衡量香港作為知識型經濟的統計方法

- 4.1 要了解一個經濟體邁向知識型經濟的進程如何,先要具備一個分析框架,再從中設定相關的統計指標。雖然迄今尚未有一個國際間一致接納的框架,一些國家/地區及國際組織已採用不同的方法量度知識型經濟。一般而言,最常採用「描述式」或「展示式」的方法,把一系列的統計指標按被廣泛認同為知識型經濟的重要支柱,即資訊及通訊科技、人力資源發展、創新系統及營商環境四個範疇而歸納。本文所採用的知識型經濟框架,是基於此框架而建立的。
- 4.2 知識的集成及透過資訊及通訊科技傳遞 資訊日趨普遍,締造了發展資訊社會的有利條 件。*資訊及通訊科技*範疇內的統計指標反映經 濟體內知識和資訊傳遞/應用的效率和效能。

## 3. Why is it important to measure Hong Kong as a KBE?

- 3.1 Increasing is directed attention to understanding the dynamics of the KBE and its relationship with traditional economic forces as economic growth is much more dependent on the creation, production, distribution and use of knowledge than before. Issues regarding the implications of the KBE become the focal points for policy makers in formulating appropriate development policies. As such, statistical indicators showing the evolution of an economy into a KBE can provide clues for devising appropriate strategies.
- 3.2 Many economies around the world are now progressing on the knowledge track. Appropriate KBE indicators thus help ascertain whether the targets of KBE policies have been achieved, and to benchmark with other economies with a view to identifying areas for improvement.

## 4. Statistical approach for measuring Hong Kong as a KBE

- 4.1 To help understand the development progress of an economy into a KBE, an analytical framework is needed, following which relevant statistical indicators can be constructed. While internationally accepted standard is not yet available, different approaches have been adopted by some countries/territories and international organisations for measuring a KBE. Generally, a "descriptive" or "presentational" approach is commonly adopted, making reference to a suite of statistical indicators grouped into four dimensions which are widely recognised as the crucial pillars of a KBE, viz. ICT; human resources development; innovation system; and business environment. The KBE framework adopted in this article follows this framework.
- 4.2 The growing codification of knowledge and transmission of information through ICT are enablers of an information society. Statistical indicators categorised under *ICT* reflect the efficiency and effectiveness of knowledge and information distribution/application in the economy.

- 4.3 培育知識廣博的人力資源是爭取競爭優勢的關鍵。人力資源發展涵蓋的指標反映經濟體內能夠接觸及運用知識和資訊,從而進一步創造/生產/傳遞知識和資訊的人才數量和質素。
- 4.4 創新與科技是提升競爭力的主要動力。*創新系統*的指標反映經濟體內創造/生產/應用知識和資訊的數量、質素和速度。
- 4.5 一個經濟體的社會及經濟特色,以及宏觀經濟環境,是孕育知識型經濟的先決條件。*營商環境*涵蓋的指標反映經濟體的營商環境如何有利創造/生產/傳遞/應用知識和資訊。

#### 5. 香港的資訊及通訊科技發展

5.1 香港的工商機構和消費者均可享用高質素的電訊基礎建設。香港的電訊業競爭相當激烈,而流動電話在香港已是日常生活的必需品,在2016年年底,每百名人口中平均有234個公共流動電話用戶(約為固網電話用戶數目的4倍),是全球比率最高的地方之一。 (圖1)

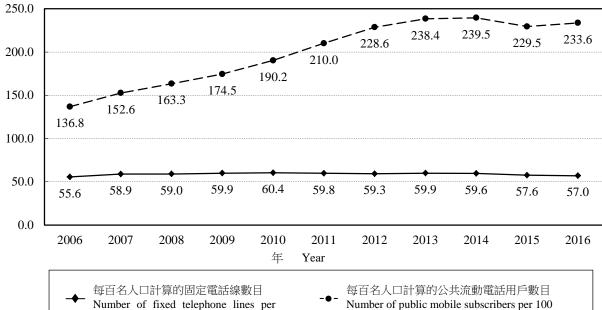
- 4.3 Development of a pool of knowledge-rich human resources is the key for carving out competitive advantages. Indicators covered under human resources development reflect the quantity and quality of individuals equipped for access to and use of knowledge and information for further creation/production/distribution of knowledge and information in the economy.
- 4.4 Innovation and technology are crucial driving forces to enhance competitiveness. Indicators of *innovation system* reflect the quantity, quality and rate of knowledge and information creation/production/application in the economy.
- 4.5 The underlying social and characteristics together with the macroeconomic environment provide the pre-requisite for nurturing a Indicators categorised under successful KBE. business environment reflect how conducive the business environment is to the creation/ production/distribution/application of knowledge and information in the economy.

#### 5. ICT development in Hong Kong

5.1 Business establishments and consumers in Hong Kong enjoy an excellent telecommunications infrastructure. The telecommunications sector in Hong Kong is highly competitive and the use of mobile phone is part of everyday life in Hong Kong. There were on average 234 public mobile subscribers per 100 population in end 2016 (about 4 times of the number of fixed telephone line subscribers), being one of the places with the highest ratio in the world. (Chart 1)

圖 1 按每百名人□計算的固定電話線<sup>(1)</sup>數目和公共流動電話用戶<sup>(2)</sup>數目
Chart 1 Number of fixed telephone lines<sup>(1)</sup> and public mobile subscribers<sup>(2)</sup> per 100 population





註釋: 上述統計數字是根據年底人口數字編製而成,為截至 2017 年 9 月底已公布的數字。

100 population

- (1) 包括直通內線式電話線、圖文傳真線、電文線路的直撥服務、網際規約(IP)電話服務及無線固網電話服務客戶數目。由 2007 年 12 月開始,IP 電話服務客戶數目是指所有持牌營辦商根據「香港號碼計劃」獲指配電話號碼的 IP 電話服務客戶的數目。
- (2) 包括預付智能卡及後付智能卡。

5.2 香港市民在工作及生活上使用互聯網服務愈趨普遍。在 2016 年年底,每百名人口中便有 38 個固定互聯網用戶。隨着科技的進步及電訊網絡營辦商提供具競爭力的價格,以寬頻連接互聯網已日漸普及。在 2016 年年底,每百名人口中便有 35 個是固定寬頻互聯網用戶。根據國際電信聯盟發表的數字,香港的固定寬頻互聯網用戶比率(按每百人口計算)在 2016 年的排名為亞太區第 2高。(圖2)

Notes: The above statistics are compiled based on the year-end population figures, which refer to those released up to end-September 2017.

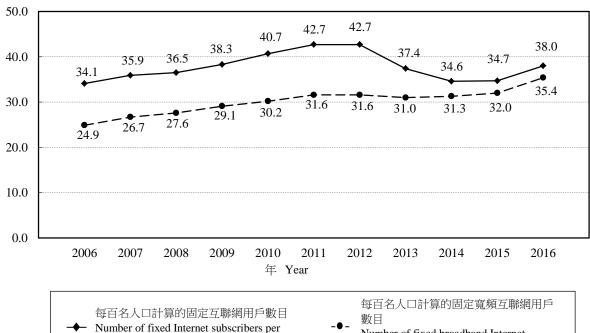
population

- (1) Including direct dialing in lines, facsimile lines, datel lines, subscribers of Internet Protocol (IP) telephony services and wireless fixed telephony services. From December 2007 onwards, figures reported under the IP telephony services refer to the number of subscribers of IP telephony services of all licensed operators assigned with telephone numbers in accordance with the Hong Kong Numbering Plan.
- (2) Including pre-paid SIM cards and post-paid SIM cards.

The use of Internet has been prevailing in work and life of people in Hong Kong. In end 2016, the number of fixed Internet subscribers per 100 population reached 38. With the advance in technology and competitive pricing offered by telecommunications network operators, the use of Internet with broadband connection has become popular. As at end 2016, the number of fixed broadband Internet subscribers per 100 population reached 35. According to the information released by the International Telecommunication Union, the fixed broadband Internet subscription rate (per 100 population) in Hong Kong was the second highest in the Asia Pacific region in 2016. (Chart 2)

#### 按每百名人口計算的固定互聯網用戶<sup>(1)</sup>及固定寬頻互聯網用戶<sup>(2)</sup>數目 Number of fixed Internet subscribers<sup>(1)</sup> and fixed broadband Internet 圖 2 Chart 2 subscribers<sup>(2)</sup> per 100 population

每百名人口的數目 Number per 100 population



上述統計數字是根據年底人口數字編製而成,為截至 註釋: 2017年9月底已公布的數字。

100 population

- 數字為持牌互聯網服務供應商客戶的數目,有關 的客戶數目是根據(i)寬頻互聯網接駁客戶戶口的 數目、(ii)以撥號接駁的已登記客戶戶口(不包括 互聯網儲值卡)、(iii)作撥號接駁用途的互聯網 儲值卡;及(iv)以私人租用線路接駁的已登記客戶
- 數字為持牌互聯網服務供應商的寬頻互聯網接駁 客戶的戶口數目。
- 資訊及通訊科技已改變我們生活、學 習、營商及與人交往的模式。在 2016 年,全港有 80.6% 的住戶擁有個人電腦,而 家中電腦有接駁互聯網的住戶比例為 79.5% (2006 年的相應數字分別為 71.7% 及 67.1%) • (圖3)

Notes: The above statistics are compiled based on the year-end population figures, which refer to those released up to end-September 2017.

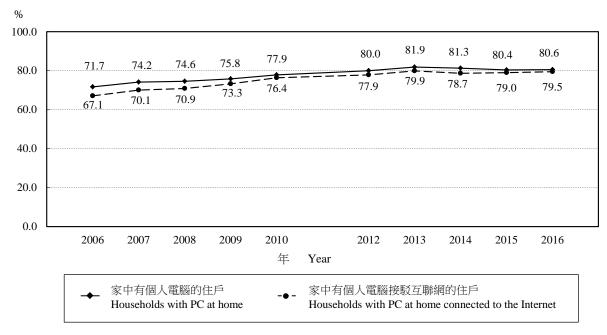
Number of fixed broadband Internet

subscribers per 100 population

- Figures refer to the number of customers of licensed Internet service providers which are compiled based on (i) registered broadband Internet access customer accounts, (ii) registered customer accounts with dial-up access (excluding Internet pre-paid calling cards), (iii) Internet pre-paid calling cards for dial-up access, and (iv) registered customer accounts with leased line access.
- Figures refer to the number of registered broadband Internet access customer accounts of licensed Internet service providers.

ICT as a tool has changed the way we live, learn, do business and interact with each other. In 2016, 80.6% of all households had personal computer (PC) at home, while the proportion of households having PC at home connected to the Internet was 79.5% (the corresponding figures for 2006 were 71.7% and 67.1% respectively). (Chart 3)

圖 3 家中有個人電腦<sup>(1)</sup>的住戶/家中有個人電腦接駁互聯網的住戶佔所有住戶的百分比 Chart 3 Percentage of households with PC<sup>(1)</sup> at home/households with PC at home connected to the Internet among all households



註釋: 在2011年沒有進行有關的統計調查。

- (1) 2006 年至 2008 年的數字包括桌面電腦、手提電腦/筆記簿型電腦/平板電腦及掌上電腦/個人數碼助理。2009 年、2010 年、2012 年及 2013 年的數字包括桌面電腦、手提電腦/筆記簿型電腦/小筆電/平板電腦及掌上電腦/個人數碼助理。2014 年至 2016 年的數字包括桌面電腦、手提電腦及掌上電腦/包人電腦的涵蓋範圍有些微差異,有關統計數字大致上亦可互作比較。
- 5.4 有使用電腦的工商機構的比例由 2005 年的 60.5% 穩步上升至 2015 年的 76.3%。在 2015 年,全港約有 79.9% 的工商機構有使用 互聯網,較 2005 年上升 25.2 個百分 點。 (表1)

Notes: Relevant survey was not conducted in 2011.

- (1) Figures for 2006 to 2008 include desktop computer, laptop/notebook/tablet and palm top/Personal Digital Assistant. Figures for 2009, 2010, 2012 and 2013 include desktop computer, laptop/notebook/netbook/tablet and palm top/Personal Digital Assistant. Figures for 2014 to 2016 include desktop computer, laptop and tablet only. Although the coverage of PC is slightly different across years, relevant statistics are broadly comparable.
- 5.4 The proportion of business establishments having used computer had been increasing steadily from 60.5% in 2005 to 76.3% in 2015. Some 79.9% of all business establishments had used the Internet in 2015, representing an increase of 25.2 percentage points as compared with 2005. (Table 1)

表 1 資訊科技在工商業的使用情況和普及程度
Table 1 Information technology usage and penetration in the business sector

	2005	2006	2007	2008	2009 20	)10 <sup>(1)</sup> 201	11 <sup>(1)</sup> 20	12 <sup>(1)</sup>	2013	2014(1)	2015
有使用電腦的工商機構的百分比 Percentage of business establishments which had used computer	60.5	60.5	63.8	63.1	63.6	-	-	-	75.2	-	76.3
有使用互聯網的工商機構的百分比 Percentage of business establishments which had used the Internet	54.7	55.9	59.8	58.8	60.6	-	-	-	74.8	_	79.9

註釋: (1) 沒有進行有關的統計調查。 Note: (1) Relevant survey was not conducted.

#### 6. 香港的人力資源發展

6.1 知識的運用通常是依靠人才。知識資本是公認的重要資產,而人力資源的發展則是可持續發展的關鍵動力之一。教育是人力資源發展的基石。2016-17 年度政府的教育開支為826 億元,相對本地生產總值的比率為3.3%。 (圖4)

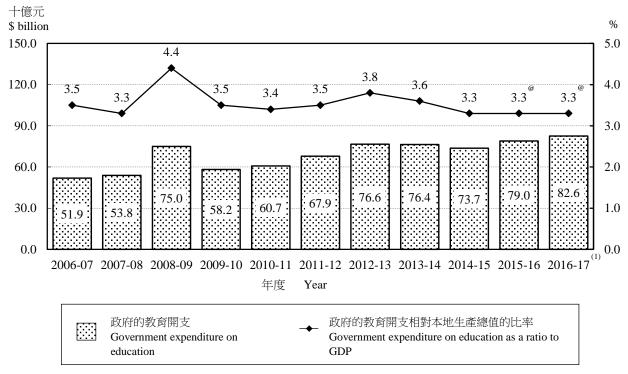
6.2 過去 10 年,政府在教育方面的開支由 2006-07 年度的 519 億元上升至 2016-17 年度的 826 億元,大幅增加 59.0%,顯示政府在投資教育方面的決心。政府的教育開支在 2008-09 年度異常龐大,主要是由於成立了一個 180 億元的研究基金以加強高等教育院校的研究能力和培育更多研究人才。 (圖 4)

## 6. Human resources development in Hong Kong

6.1 Knowledge is usually applied through the skills of individuals. Intellectual capital is widely recognised as a critical asset and development of human resources is one of the critical strategic thrusts for sustainable development. Education is the fundamental building block of human resources development. Government expenditure on education in 2016-17 amounted to \$82.6 billion, representing a ratio of 3.3% to the Gross Domestic Product (GDP). (Chart 4)

6.2 Over the past decade, government expenditure on education rose markedly by 59.0% from \$51.9 billion in 2006-07 to \$82.6 billion in 2016-17, reflecting the Government's unrelenting commitment to investing in education. The exceptionally high government expenditure on education recorded in 2008-09 was mainly attributable to the establishment of an \$18 billion Research Endowment Fund to strengthen the research capacity of the higher education institutions and nurture more research talent. (Chart 4)

圖 4政府的教育開支相對本地生產總值的比率Chart 4Government expenditure on education as a ratio to GDP



註釋: (1) 修訂預算。

@ 數字在日後可能作出修訂。

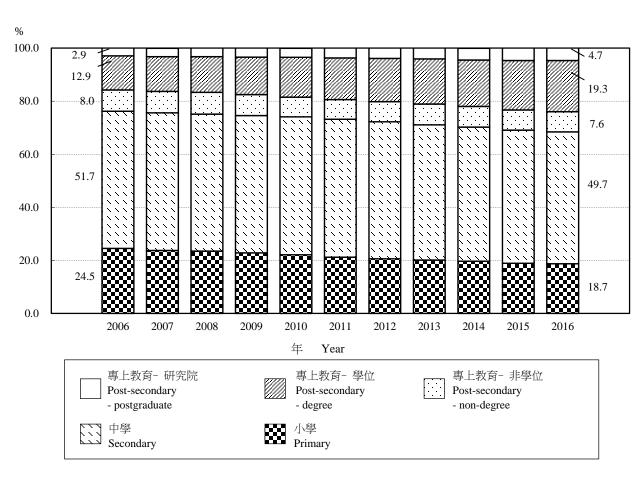
Notes: (1) Revised Estimate.

@ Figures are subject to revision later on.

6.3 人口的知識和技能水平與其教育程度息息相關。在現今以知識主導的社會中,大多數人都會不斷充實自己,因此擁有高等教育學歷的人士數目一直上升。曾受專上教育(即曾修讀非學位/學位/研究院課程程度)的人力資源佔 15 歲及以上人口的百分比由 2006 年的23.8%增加至2016 年的31.6%。在這些人士當中,擁有研究院課程學歷人士的比例由2006 年的12.2%增加至2016 年的14.9%。(圖5)

6.3 The level of knowledge and skills in the population is highly related to their educational attainment. In the knowledge-driven society nowadays, people in general are keen to better equip themselves and thus the number of individuals with higher education is expanding. The stock of human resources with post-secondary education (i.e. having attended non-degree/degree/postgraduate courses) as a percentage of the population aged 15 and over increased from 23.8% in 2006 to 31.6% in 2016. Among these persons, the proportion of those with postgraduate educational attainment increased from 12.2% in 2006 to 14.9% in 2016. (Chart 5)

圖 5 15 歲及以上人口的教育程度分布 Chart 5 Distribution of population aged 15 and over by educational attainment



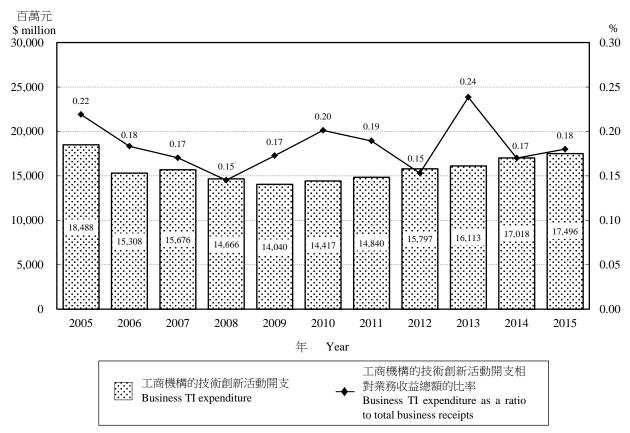
#### 7. 香港的創新系統

- 7.1 創新是提升競爭優勢和生產力的動力之一,而科技則有助推動創新。一個以創新帶動的經濟體建基於這些元素,以助其經濟持續發展。
- 7.2 創新活動主要關乎工商機構推出嶄新或經顯著改良的產品和程序、組織架構和市場策略等。這些活動創造價值,滿足顧客的需求並為有關工商機構帶來經濟收益。創新活動可分為技術創新(包括研究及發展(研發)、產品創新和程序創新)和非技術創新項目(包括組織創新和市場推廣創新)。工商機構從事技術創新活動的活躍程度,可按技術創新活動開支相對業務收益總額的比率來量度。有關比率在2015年為0.18%。 (圖6)

#### 7. Innovation system in Hong Kong

- 7.1 Innovation is one of the engines to enhance competitive edge and productivity, while technology is a key driver for innovation. An innovation-driven economy builds upon these components for sustaining economic growth.
- Primarily, innovation the implementation of new or significantly improved products and processes, organisational structures, marketing strategies, etc. that create value to consumers and generate financial returns to the business establishments concerned. Innovation activities can be distinguished into technological innovation (TI), including research and development (R&D), product innovation and process innovation; and non-technological innovation (non-TI), including organisational innovation and marketing innovation. The intensity of businesses undertaking TI, measured in terms of expenditure on TI activities as a ratio to total business receipts, saw a ratio of 0.18% in 2015. (Chart 6)

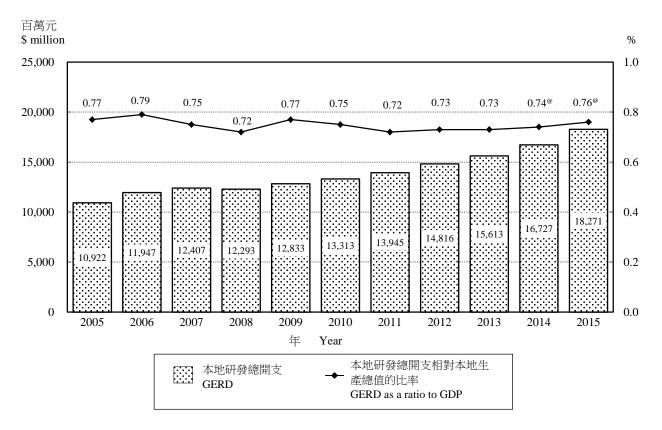
圖 6 工商機構的技術創新活動開支相對業務收益總額的比率 Chart 6 Business TI expenditure as a ratio to total business receipts



- 7.3 量度工商機構所進行的創新及科技活動 的產出或成果涉及一些概念上和實際上的困 難。創新及科技活動涉及複雜的流程,在概念 上而言,這些活動的產出並不等同其成果。創 新活動帶來新知識和構思,工商機構所推出的 嶄新或經顯著改良的產品和程序,可視作創新 活動的產出。而創新活動對進行該活動的機構 單位所產生的經濟作用,如提升業務表現(例 如提升盈利能力或增加市場佔有率)和增強競 爭力(例如提升生產力、減低成本、改善產品 質素等),則可視為創新活動的成果。由於工 商機構的業務表現同時受着創新活動以及其他 因素影響(例如供求因素的相互影響),因 此,要獨立量度創新活動為工商機構帶來的成 果尤為困難。
- 7.4 工商機構普遍自行進行創新活動。這些活動的產出供有關工商機構自用,作進一步推出嶄新的產品和經改良的程序。有別於製成品的性質,該類由工商機構自產自用的創新活動,其產出並無實際的市場價格。此外,進行創新活動而獲得的成果可能需要一段時間才能轉化為嶄新的產品、經改良的程序或提升的生產力。在某些情况下,創新活動的成果未必能開拓作商業應用。
- 7.5 研發開支是科學及技術指標的其中一項,用以量度投放在研發方面的投資,和知識資本的形成並用作發明新產品、提供新服務或用途。與其他先進的經濟體相比,香港在研發活動的開支水平不算高,本地研發總開支相對本地生產總值的比率在 2005 年至 2015 年期間徘徊於 0.72% 至 0.79% 之間。 (圖 7)

- Measuring the output or outcome of innovation and technology activities performed by business establishments involves some conceptual and practical difficulties. Innovation and technology are complex processes and, conceptually, output of these activities should be distinguished from their outcome. Intuitively, innovation activities give rise to new knowledge and ideas and the output of innovation activities can be construed as new or significantly improved products and processes implemented by the business establishments. The outcome relates to the economic impacts that innovation activities have on the innovating establishments, such as higher business performance (e.g. profitability, increase in market share) and enhancement of competitiveness (e.g. higher productivity, cost savings, product quality improvement, etc.). It is more difficult to measure the outcome attributable to innovation activities alone because business performance is also affected by other factors (e.g. the interplay of supply and demand factors) apart from innovation activities undertaken by the business establishments concerned.
- 7.4 Innovation activities tend to be internal to the business establishments in most cases. The output of such activities is for own use of the business establishments for further implementing new products and improved processes and unlike a final product, there are no observable prices for the output of innovation activities undertaken on own account of the business establishments. Furthermore, there may be some time lag for the outcome of innovation activities undertaken in a particular period to be translated into new products, enhanced processes or higher productivity, and in some cases the outcome of some innovation activities may not be successfully commercialised.
- 7.5 Expenditure on R&D is one of the science and technology indicators for gauging the investment in R&D as well as formation of knowledge capital and its use in devising new products/services/applications. The level of expenditure on R&D in Hong Kong is not as high as that in other advanced economies, with the gross domestic expenditure on R&D (GERD) as a ratio to GDP ranging from 0.72% to 0.79% during 2005 to 2015. (Chart 7)

#### 圖 7 本地研發總開支相對本地生產總值的比率<sup>(1)</sup> Chart 7 GERD as a ratio<sup>(1)</sup> to GDP



註釋: (1) 比率是根據 2016 年 11 月發布的本地生產總值數字計算。

@ 數字在日後可能作出修訂。

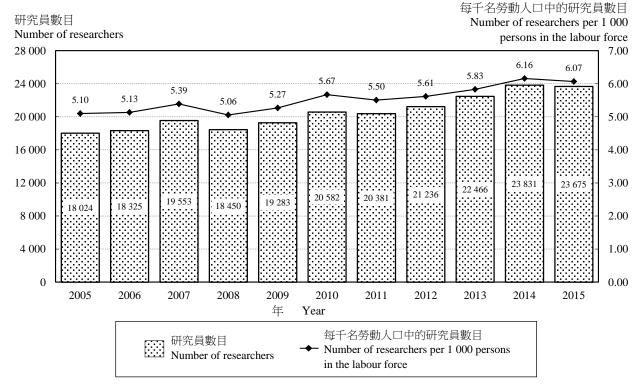
7.6 研究員數目是另一項量度研發活動資源 投放的指標。香港培育了一群高質素的研究人 員。在 2015 年,相當於全日制人數的研究員 數目為 23 675 人,較 2005 年上升 31.4%。同 期,每千名勞動人口的研究員數目由 5.10 人 上升至 6.07 人。 (圖 8) Notes: (1) The ratios are calculated based on the GDP estimates released in November 2016.

@ Figures are subject to revision later on.

7.6 Another input measure of R&D activities is the number of researchers. There is a pool of high-quality researchers in Hong Kong. The total number of researchers measured in full-time equivalent stood at 23 675 in 2015, which increased by 31.4% as compared to 2005. During the same period, the number of researchers per 1 000 persons in labour force rose from 5.10 to 6.07. (Chart 8)

#### 圖 8 每千名勞動人口中的研究員數目(1)

#### Chart 8 Number of researchers<sup>(1)</sup> per 1 000 persons in the labour force



註釋: 上述統計數字為截至 2017 年 9 月底已公布的數字。

(1) 研究員數目的計算單位是「相當於全日制的人數」,其定義為僱員於統計年內實際參與研發活動的工作月數除以12。

#### 8. 香港的營商環境

- 8.1 健全的宏觀經濟框架,配合公平的競爭環境,是鼓勵商業活動及投資的基礎。在各項要素中,審慎的公共財務管理、穩定的價格、穩健的法制和稅制是必不可少的條件。
- 8.2 香港是全球最開放和外向型的經濟體之一,以自由貿易為命脈。香港地處中國南岸,亦是東亞的中心,佔地利之宜外,還有許多有利的因素,使香港成為理想的營商大都會。這些因素包括低稅率、高透明度的普通法制度、公正的司法、穩健的公共財政系統、一流的基礎建設、資訊的自由流通、廉潔的政府和富企業家精神。以下的段落展示香港在過去10年的經濟表現的一些統計數字。

Notes: The above statistics refer to those released up to end-September 2017

(1) The counting unit for number of researchers is "Full-time Equivalent", which is defined as the actual number of employee man-months deployed to R&D activities during the reference year divided by 12.

#### 8. Business environment in Hong Kong

- 8.1 A sound macroeconomic framework together with a level playing field is the cornerstone to encouraging business activities and investment. This requires prudent fiscal management, stable prices, robust legal and tax regimes, among many others.
- 8.2 Hong Kong is one of the most open, externaloriented economies in the world, with free trade being its lifeblood. Apart from being strategically located in the heart of East Asia on China's southern coast, there are many favourable factors that make Hong Kong an ideal metropolis for conducting business: low tax regime; transparent common law system: impartial judiciary: robust fiscal system: state-of-the-art infrastructure: free flow information; a clean government; and entrepreneurial Some statistics depicting the economic performance of Hong Kong during the past decade are highlighted in the ensuing paragraphs.

- 8.3 在商品貿易方面,2016年的商品整體出口貨值(包括轉口和港產品出口)達 35,882億元。在2006年至2016年期間,平均按年增長率為3.8%。在商品出口錄得強勁表現的同時,商品進口貨值亦按年平均增長4.4%。2016年的商品進口貨值達40,084億元。在無形貿易方面,服務輸出的金額以平均每年6.1%的增長率上升,由2006年的4,229億元增加至2016年的7,670億元。服務輸入的金額也以1.6%的平均按年增長率上升,由2006年的4,949億元增加至2016年的5,775億元。
- 8.4 在 2006 年至 2016 年期間,香港的人均 本地生產總值平均按年實質增長約 2%。
- 8.5 整體服務業對以基本價格計算的本地生產總值的貢獻由 2005 年的 91% 上升至 2015 年的 93%。

#### 9. 結語

9.1 從知識型經濟的一般特點來看,香港在 許多方面都表現不俗。香港擁有優良的資訊及 通訊技術基礎建設,而有利的營商環境給予營 商者莫大的信心。香港市民不斷進取,增進知 識和技能。不過,香港仍有可改善之處。我們 需要加強創新能力,才可以充分運用先進的科 技。要保持經濟增長的勢頭、生生不息,我們 需要培養終身學習的風氣,無論個人與機構都 要不斷追求完善、自強不息。

- 8.3 On trade in goods, the value of total exports of goods (comprising re-exports and domestic exports) amounted to \$3,588.2 billion in 2016. This represented an average annual growth rate of 3.8% between 2006 and 2016. In tandem with robust export trade, imports of goods increased at an average annual growth rate of 4.4%, reaching \$4,008.4 billion in 2016. On invisible trade, the value of exports of services grew at an average annual rate of 6.1% from \$422.9 billion in 2006 to \$767.0 billion in 2016. The value of imports of services also increased at an average annual rate of 1.6% from \$494.9 billion in 2006 to \$577.5 billion in 2016.
- 8.4 Between 2006 and 2016, per capita GDP of Hong Kong increased at an average annual growth rate of around 2% in real terms.
- 8.5 The contribution of the services sector as a whole to GDP at basic prices increased from 91% in 2005 to 93% in 2015.

#### 9. Concluding remarks

Generally, Hong Kong positions well on many of the general characteristics of a KBE. We have excellent ICT infrastructure and our favourable environment provides business confidence to businesses. Our people are increasingly equipped in terms of knowledge and skills. Nevertheless, there is still room for improvement. We need to strengthen our innovation capacity to fully exploit advanced technologies. To sustain the momentum of economic growth and continued vitality, we need to embrace a culture of continuous learning and improvement at both the individual and organisational levels.