按年經濟統計調查計劃的發展 — 與香港的經濟發展並進

Development of the Programme of Annual Economic Surveys – Keeping in Pace with Hong Kong's Economic Development

政府統計處進行一系列按年經濟統計調查,爲數據使用者提供詳盡統計資料以瞭解本港經濟表現及結構轉變。配合經濟發展的步伐,政府統計處不斷就統計調查計劃進行檢討,以確保所編製的統計數據合乎使用者的要求。本文介紹按年經濟統計調查計劃的設計、數據和行業的涵蓋範圍及近年的發展。

The Census and Statistics Department conducts the Programme of Annual Economic Surveys (PAES) to provide data users with comprehensive economic statistics for depicting the performance and structural changes of Hong Kong's economy. Keeping in pace with changes in the economy, the Department reviews the programme continuously to ensure that its statistical output can meet the needs of data users. This article describes the survey design, data and industry coverage, and the development of PAES in recent years.

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1. 背景

1.1 在過去二十多年來,政府統計處發展及建立了一套具規模的經濟統計調查系統 — 按年經濟統計調查計劃,爲數據使用者提供詳盡統計資料以描繪本港經濟表現及結構轉變。這統計計劃就香港主要商業活動提供詳細營運統計數字,有關數據亦是編製本地生產總值的主要資料來源。

1.2 按年經濟統計調查計劃由五項統計調查組成,每一統計調查以一個主要經濟組別爲統計範圍。基於所涉及的資源和工作的複雜性,該五項統計調查並非在同一時間發展及推行。按年經濟統計調查計劃是按香港經濟發展的步伐發展。在七十年代初期,正當香港發展爲繁盛的工業港,政府統計處便開始進行首個按年經濟統計調查 — 工業生產按年統計調查。隨著香港擴展其經濟基礎至服務業,按年經濟統計調查計劃亦相應擴大其行業及數據涵蓋範圍,以涵蓋日漸重要的商業活動。

- 1.3 組成按年經濟統計調查計劃的五項統計調查,現已涵蓋本港所有主要經濟活動。現按統計 調查開始的先後次序分列如下:
- i) 工業生產按年統計調查 首個統計年度:1973 涵蓋範圍:採礦及採石、製造業、電力、水 務及燃氣業。
- ii) 批發、零售、進口與出口貿易、食肆及酒店 按年統計調查

香個統計年度:1977

涵蓋範圍:批發、零售、進口與出口貿易、 食肆及酒店。

1. Background

- 1.1 Over the last two decades, the Census and Statistics Department has developed and instituted an elaborate system of economic surveys, the Programme of Annual Economic Surveys (PAES), to provide data users with comprehensive economic statistics for depicting the performance and structural changes of Hong Kong's economy. PAES provides detailed operating statistics on all major business activities in the territory. It is an essential data source for compiling Gross Domestic Product estimates (GDP) of Hong Kong.
- PAES comprises five survey systems, with 1.2 each system targeted at a major economic sector. On account of the scale of resources and complexity of work involved, the five survey systems were not developed and implemented at the same time. The history of development of PAES followed closely the track of Hong Kong's economy. PAES started its first survey system, the Annual Survey of Industrial Production, in the early 70's when Hong Kong was prospering as a manufacturing port. With Hong Kong broadening its economic base into the tertiary sectors, there has been corresponding expansion of PAES in terms of industry and data coverage to cover business activities which are emerging in economic significance.
- 1.3 The five survey systems constituting PAES now cover all the major economic activities of Hong Kong. They are listed below in order of the year of inception of the system:
- i) Annual Survey of Industrial Production

 First survey reference year: 1973

 Coverage: mining and quarrying; manufacturing; and electricity, water and gas.
- ii) Annual Survey of Wholesale, Retail and Import and Export Trades, Restaurants and Hotels

First survey reference year: 1977

Coverage: wholesale, retail, import and export trades; restaurants and hotels.

iii) 屋宇建築、建造及地產業按年統計調查

首個統計年度:1979

涵蓋範圍:屋宇建造、土木工程、建築設計、測量及工程策劃服務、地產發展、租賃、經紀及保養管理服務。

iv) 運輸及有關服務按年統計調查

首個統計年度:1980

涵蓋範圍:陸路/海上/航空客運及貨運業、和有關的輔助服務如停車場管理、貨櫃裝卸、貨運代理和旅行社服務。

v) 倉庫、通訊、財務、保險及商用服務按年統 計調查

首個統計年度:1980

涵蓋範圍:倉庫、速遞、電訊、財務(銀行除外)、保險及商用服務如法律、會計、資料處理及廣告服務。

2. 搜集數據範圍與統計調查結果應用

2.1 按年經濟統計調查計劃搜集商業機構的業務 資料、開支和收入項目。搜集的數據項目包括擁 有權類別、投資來源、勞工開支、購貨成本、佣金 或判工費、營運開支、固定資產投資、存貨變動和 各類業務收入。政府統計處根據這些數據編製了多 項經濟統計數字,以反映各行業的營運及結構特 徵。其中包括按行業、公司規模和其他相關經濟組 別劃分的機構單位數目、就業人數、僱員薪酬、營 運開支、業務收入、增加價值和盈餘總額。其中, 增加價值更是編製「生產面本地生產總值估計」所 不可缺少的。 iii) Annual Survey of Building, Construction and Real Estate Sectors

First survey reference year: 1979

Coverage: building and civil engineering; architectural, surveying and project engineering; and real estate development, leasing, brokerage and maintenance.

iv) Annual Survey of Transport and Related Services

First survey reference year: 1980

Coverage: land/maritime/air passenger and freight transport and its supporting services such as car park management, haulage of containers, cargo forwarding, travel agents.

v) Annual Survey of Storage, Communication, Financing, Insurance & Business Services

First survey reference year: 1980

Coverage: warehousing; courier; telecommunications; financing (except banking); insurance and business services such as legal and accounting services, data processing, advertising.

2. Data Collected and Uses of Survey Results

PAES collects essential establishment particulars, and detailed expenditure outlays and revenue items of business undertakings. The data items include type of ownership, origin of investment, labour expenditure, purchases cost, commission or contract payment, operating expenses, capital investment, changes inventories and business receipts by sources. wide range of economic statistics are compiled from these data, providing readers insights into the operating and structural characteristics of an industry or business trade. Examples of the statistics are: number of establishments, number of persons engaged, compensation of employees, operating expenses, business receipts, value added and gross surplus, analyzed by industry, firm size and other relevant economic classes. Among these statistics, the figures on value added are important inputs for compiling the production-based GDP estimates.

2.2 按年經濟統計調查計劃旨在支援宏觀經濟分析,爲數據使用者提供主要行業類別和詳細行業組別的統計數字,從而在宏觀層面分析經濟表現及結構轉變。在決定所編製統計數字的詳細程度時,必須在用者要求及所需資源兩者間取得平衡。編製更詳細的統計數字需要較高昂的費用,包括要加大樣本維持可接受的精確度。同時,亦會加重被訪機構提供數據的工作量。政府統計處就上述的考慮定期作出檢討,以確保所編製的統計數字既合乎成本效益,又能滿足使用者不斷轉變的需求(詳情可參閱第五節)。

- 2.3 一九九七年度爲例,各行業的主要統計數字 列於表一。
- **3.** 按年統計資料與較高頻次統計系列的配合
- 3.1 鑑於按年經濟統計調查計劃所需的數據較複雜,而被訪機構從會計賬目中提取有關資料以填報問卷方面需時,現時發放按年經濟統計調查計劃的結果約需時十八個月。政府統計處正試行多項改善數據及時性的措施,其中包括引進資訊科技以縮短數據處理的時間、改良問卷設計以方便被訪機構填寫、及提供一站式服務以處理被訪機構填報問卷的困難。但儘管政府統計處在改善按年經濟統計調查的時間性方面已作出不斷努力,被訪機構合作盡早提供所需數據最爲重要。在這一方面,政府統計處會盡量爲未能依時填報問卷的被訪機構給予協助。

3.2 政府統計處進行多項按月及按季統計調查 〔如零售業銷貨額按月統計調查、建造工程完成量 按季統計調查及服務業按季統計調查等〕,以提供 可反映最新經濟表現和業務展望的指標。這些統計 指標可與按年經濟統計調查計劃的詳細統計數據互 補。

- 2.2 PAES is designed to support macro Statistics at sector levels economic analysis. and more detailed industry levels are available to users in studying the economic performance and structural changes at macro level. In deciding the publication level of industry breakdowns, a balance between user requirements and resources implication has to be maintained. More detailed statistical breakdowns would demand greater costs in terms of requirement for larger sample size to maintain an acceptable level of precision and of greater data reporting work on the part of respondents. Regular reviews are conducted in this light to ensure that the statistics compiled are produced in a cost-effective manner while meeting users' changing needs (see section 5 for more details).
- 2.3 Presented in Table 1 are the selected principal statistics obtained from the 1997 PAES.

3. The Complementary Nature of Annual Statistics and Statistical Series with a Higher Frequency

- Owing to the complexity of the data 3.1 enquiry in PAES and the time required by respondents to extract the relevant information from their accounts for data reporting, the existing time lag of releasing survey results is about 18 months. C&SD is exploring various measures to improve the timeliness of data release. These include shortening the time of data processing through increasing application of information technology, improving questionnaire design to make it more respondent friendly, and providing a one-stop service to handle respondents' questions in form But notwithstanding all such completion. efforts of improving the data timeliness of PAES, the co-operation of respondents to supply data early is most important. In this regard, C&SD would render every possible assistance to respondents who may have difficulty in providing a timely return.
- 3.2 To complement the detailed statistics of PAES, C&SD also conducts a number of monthly and quarterly surveys (e.g. Monthly Survey of Retail Sales, Quarterly Survey of Construction Output and Quarterly Survey of Service Industries, etc.) to provide up-to-date indicators on current economic performance and business outlook.

表 一 一九九七年按主要行業組別劃分的主要統計數字

Table 1	Principal Statistics by	v Maior Industr	v Group in 1997
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主要行業組別 Major industry group	機構單位 數目 No. of establish- ments	就業人數 No. of persons engaged	生產總值/業務收益及其他收入 (百萬港元) Gross output/ Business receipts and other income (HK\$Mn)	增加價值 (百萬港元) Value added (HK\$Mn)	盈餘總額 (百萬港元) Gross surplus (HK\$Mn)
製造業 Manufacturing	24 925	289 961	263,911 ⁽²⁾	80,049	29,599 (1)
建造業 Construction	19 649	168 457	254,050 ⁽²⁾	71,667	13,519
地產業 Real estate	7 905	72 534	140,317 (2)	119,066	81,483
建築設計、測量及工程策劃服務 Architectural, surveying and project engineering	1 327	19 131	13,635 ⁽²⁾	8,491	1,541
批發、零售、進出口貿易業 Wholesale, retail and import and export trades	173 978	834 799	2,861,939 ⁽³⁾	286,997	138,520
飲食、酒店及旅舍業 Restaurants, hotels and boarding houses	11 312	239 826	95,605 ⁽³⁾	40,692	8,775
倉庫業 Storage	267	5 360	5,128 ⁽³⁾	1,385	393
通訊業 Communications	839	41 892	67,899 ⁽³⁾	26,764	16,410
運輸及有關服務業 Transport and related services	38 005	205 050	248,106 ⁽³⁾	71,596	33,710
金融,保險及商用服務業 (不包括銀行業) ⁽⁶⁾ Financing(except banking) ⁽⁶⁾ , insurance and business services	29 205	230 930	297,117 ⁽³⁾	72,687 (4)	96,235 (5)

Notes: (1) Net of "textiles export quota transfer receipts".

- (2) The figure shown is "gross output".
- (3) The figure shown is "business receipts and other income".
- (4) Figure on "value added" does not include those of insurance industry and investment and holding companies.
- (5) Figure on "gross surplus" does not include that of insurance industry.
- (6) In view of the small number of establishments and special nature of business of the banking industry, it is not appropriate to collect data in the same format and degree of detail as for other industries covered in PAES. Accordingly, banking industry is not covered in PAES. Instead, a dedicated survey is organized to obtain data on the industry for GDP compilation.

註釋: (1) 已扣除「紡織品出口配額轉讓收益」。 (2) 數字指「生產總值」。

⁽³⁾ 數字指「業務收益及其他收入」。

^{(4)「}增加價值」並不包括保險業、投資及控股公司的數據。

^{(5)「}盈餘總額」並不包括保險業的數據。

⁽⁶⁾ 鑑於銀行業的機構單位數目較少及其特殊的業務性質,倘採用按年經濟統計調查計劃中其他行業的同一格式及同一詳細程度搜集數據,並不恰當。 故此,有關銀行業經濟活動的數據搜集及編製並不包括在按年經濟統計調查計劃內,而是透過另一項獨立的統計調查進行,以提供編製本地生產總值所需的數據。

3.3 由於這些按月及按季統計調查規模較爲簡單,所涉及的數據亦明顯少於按年經濟統計調查計劃,所以發放統計結果的時滯亦短得多。按月統計調查的時滯一般爲 1.5 - 1.8 個月,按季統計調查則爲 2.9 - 3.3 個月。按年經濟統計調查計劃配以按月和按季統計調查,可提供全面的最新資料以反映本港經濟的營運特徵和表現。

4. 行業分類與樣本設計

- 4.1 按年經濟統計調查計劃採納《香港標準行業分類》劃分機構單位的經濟活動。《香港標準行業分類》是以聯合國的《國際標準產業分類》爲藍本而加以編訂,使其切合本地經濟的特色。政府統計處進行的各項經濟統計調查,均採用《香港標準行業分類》,以便各種統計調查結果可作比較。
- 4.2 按年經濟統計調查計劃的抽樣框主要源自機構單位記錄庫。此計劃採用分層抽樣法把抽樣框先以行業組別分層,然後在每個行業分層內,再以就業人數分層,以提高統計數字的精確度。
- 4.3 一九九八年按年經濟統計調查計劃內各統計 調查的總體及樣本內的機構單位數目載列於表二。

3.3 Because the sub-annual surveys are much simpler and the number of questions asked in these surveys is much smaller than that in PAES, results can be made available with a much shorter time lag, around 1.5-1.8 months for monthly surveys and 2.9-3.3 months for quarterly surveys. The PAES together with the sub-annual surveys present a complete and up-to-date picture on the operating characteristics and economic performance of Hong Kong.

4. Classification and Sample Design

- 4.1 PAES adopts the Hong Kong Standard Industrial Classification (HSIC) in classifying economic units into different industry classes. The HSIC is modeled on the United Nation's "International Standard Industrial Classification" with adaptations to meet local economic characteristics. It is adopted in all economic surveys conducted by the C&SD, and as such, comparability of statistics across surveys can be maintained.
- 4.2 The Central Register of Establishments is the major source used for constructing the sampling frames of the PAES survey systems. To improve the precision of the statistics, stratified sampling design is used whereby sampling frames are stratified by industry group and, within each industry group, by employment size.
- 4.3 For the 1998 survey round, the number of establishments in the population and the sample of the respective PAES survey systems are shown in Table 2.

表 二 一九九八年按年經濟統計調查計劃內各統計調查的總體及樣本內的機構單 位數目

Table 2 Number of Establishments in the Population and in the Sample of PAES for the Reference Year 1998

統計調査	總體	樣本
Survey	Population	Sample
工業生產按年統計調查 Annual Survey of Industrial Production	26 009	5 254
批發、零售、進口與出口貿易、食肆及酒店按年統計調查 Annual Survey of Wholesale, Retail and Import and Export Trades, Restaurants and Hotels	187 400	10 056
屋宇建築、建造及地產業按年統計調查 Annual Survey of Building, Construction and Real Estate Sectors	39 631	5 144
運輸及有關服務按年統計調查 Annual Survey of Transport and Related Services	39 378	2 720
倉庫、通訊、財務、保險及商用服務按年統計調查 Annual Survey of Storage, Communication, Financing, Insurance & Business Services	33 169	2 349

5. 按年經濟統計調查計劃近年的發展

5.1 按年經濟統計調查計劃所提供的統計數字有效地幫助評估經濟結構轉變的情況。爲配合經濟發展的步伐,政府統計處不斷檢討統計調查的涵蓋範圍和進行方法,以確保統計調查的結果合乎使用者的要求。下列介紹兩個近年引進的主要改善工作。

5.2 製造業相關活動的資料

5.2.1 隨著中國經濟日漸開放,製造商紛紛把製造工序從香港遷移至中國內地,藉此利用中國內地的大量廉價勞工及土地資源。遷移生產線主要是透過分判製造工序予中國內地進行。這發展爲本地製造業帶來重大變化。

5. Development of PAES in Recent Years

5.1 The economic statistics compiled from PAES are useful in gauging the structural economic changes in Hong Kong. To keep in pace with the economic development over time, survey coverage and methodology of PAES are constantly reviewed to ensure that the statistical outputs can meet users' needs. Two areas of improvement introduced in recent years are described below.

5.2 Information on Manufacturing-related Activities

5.2.1 With the increasingly open economy in the mainland of China, many manufacturers have re-located the manufacturing process from Hong Kong to take advantage of the low labour and land costs there. Re-location of production lines has largely been effected through sub-contract processing arrangement (SPAC) in the mainland of China. The development has brought about profound changes in the local manufacturing sector.

5.2.2 按照《香港標準行業分類》的經濟活動分類 定義,那些將所有生產活動從本地遷移至其他地 方,只保留市場研究、訂單處理、原料採購、產品 開發和品質控制等工序在港的公司,其商業特性會 被界定從製造業轉爲非製造業。在一般情況下,這 些本地公司會被分類爲進出口貿易業和爲內地生產 提供技術支援的服務業。

5.2.4 一九九七年製造業機構和從事與製造業相關的貿易商的統計數字列於表三。

- 5.2.2 According to the definition of economic activities under HSIC, firms which have all their production activities relocated from Hong Kong to other territories, leaving only such functions as marketing, orders processing, material sourcing, product development and quality control here, are considered to have shifted their business nature from manufacturing to non-manufacturing. Very often these local firms are classified to the import/export sector, and to the service trades which provide essential support services to the manufacturing base across the border.
- 5.2.3 In studying the local manufacturing scene, there has been increasing interest on the growth of manufacturing-related services. To meet users' request for supplementary information on these service-type activities, a review of the data contents of PAES was undertaken. As a result, questions were added, as from the 1992 reference round, in one of the PAES survey system, the Annual Survey of Wholesale, Retail and Import and Export Trades, Restaurants and Hotels, which covers a significant portion of trading firms with manufacturing-related functions. They aim to identify trading firms engaged in SPAC and to measure their economic contribution in terms of output and employment. The statistics obtained not only help reflect the increasing significance of SPAC, but also help researchers analyze "manufacturing activities" from a wider perspective by placing manufacturing firms and trading firms with manufacturing-related functions together for analysis.
- 5.2.4 Presented in Table 3 is an analysis of manufacturing firms and trading firms with manufacturing-related functions in 1997.

表 三 一九九七年製造業機構和從事與製造業相關的貿易商的統計數字
Table 3 Manufacturing Firms and Trading Firms with Manufacturingrelated Functions in 1997

	機構種類	機構單位數目	就業人數 (千人)	增加價值 (十億港元)	銷貨收益 ⁽¹⁾ (十億港元)
	Type of firms	No. of establishments	No. of persons engaged ('000)	Value added (HK\$ billion)	Sales revenue (1) (HK\$ billion)
(I)	製造業機構 Manufacturing firms	24 930	290.0	80.0	293.4
(II)	有從事分判製造工序予中國 內地及提供技術支援的進出 口機構 Import/Export firms engaged in SPAC and providing technical support services	25 980	146.4	68.8	592.4
	(a) 以往曾經爲製造業機構 operated as manufacturing firm before	7 170	59.7	27.1	218.1
	(b) 成立時爲進出口機構 set up as Import/Export firm	18 800	86.7	41.7	374.3
(I)+	(II)	50 900	436.4	148.8	885.8
• •	在(I)+(II)中所佔百分比 as % of (I)+(II)	51.0%	33.6%	46.2%	66.9%

註釋: ⁽¹⁾ 銷貨收益包括銷售自行生產的貨物和轉售從外界購買的貨物所得收益。此外,有關貨物包括本地產品及透過分判 製造工序予中國內地生產的產品。

Note: (1) Sales revenue includes revenue from selling of goods produced in-house and those purchased from external parties. It also covers goods from local production and production in the mainland of China through SPAC.

5.3 加強服務業統計

5.3.1 服務業的蓬勃增長是本港近年另一主要經濟發展。隨著這發展,有關服務業統計數字的需求亦隨之提升。爲配合用者所需,政府統計處加大了個別服務行業(包括零售、運輸、電訊、財務及選定商用服務)的樣本以編製更詳盡的營運及結構統計數字。首組以更詳盡行業分類編製的統計數字已刊登於一九九六年「批發、零售、進口與出口貿易、食肆及酒店按年統計調查」、「運輸及有關服務按年統計調查」和「倉庫、通訊、財務、保險及商用服務按年統計調查」報告書內。

5.3.2 除編製更詳細行業分類的經濟統計數字外, 政府統計處自一九九七統計年度開始亦透過上述三 項統計調查搜集以產品/服務類別劃分的業務收益數 據。這些資料有助分析服務業的結構轉變,特別是 新產品的市場擴展及現有個別服務行業式微的情 況。

5.3 Enhancement of Service Statistics

5.3.1 Another major development of Hong Kong's economy in recent years is the blooming of the services sector. The development generated increasing demand for more detailed statistics on the performance of different service trades. To cater for the demand, the sample sizes for selected service industries (including retail, transport, telecommunications, financing and selected business services) were expanded to support compilation of operating and structural statistics at finer industry levels. The first set of statistics at more detailed industry breakdowns was published in the 1996 reports of the Annual Survey of Wholesale, Retail and Import and Export Trades, Restaurants and Hotels; the Annual Survey of Transport and Related Services; Survey the Annual of Storage. Communication. Financing. Insurance and Business Services.

5.3.2 In addition to data at more detailed industry breakdown, as from the 1997 reference round, additional information on business receipts by product/service items is collected from the above three survey systems. Such information would facilitate analysis of structural changes in the services sector, particularly on the expansion of new product markets and phasing out of existing services.