

International Workshop on Economic Census Beijing, 26-29 July 2005

A paper describing the situation and experiences of
Hong Kong, China in respect of
Economic Censuses/Surveys activities and
an Integrated Economic Statistics Program

Frederick W. H. HO
Commissioner for Census and Statistics
Census & Statistics Department

HONG KONG, CHINA

(I) Introduction

This paper describes the situation and experiences of Hong Kong, China in respect of the themes covered by the Workshop, viz.

- (i) Business Registers
- (ii) Coverage and Content of Economic Censuses/Surveys
- (iii) Data Collection and Processing of Censuses/Surveys
- (iv) Towards an Integrated Economic Statistics Program

2. The Census and Statistics Department¹ (C&SD) operates a number of programs covering various areas of social and economic statistics. Given the inter-dependence of the work programs, the C&SD has all along been taking a holistic, integrated approach in developing the various statistical activities under each of the programs and among the programs.

(II) Business Registers

Central Register of Establishments

3. C&SD maintains a Central Register of Establishments (CRE), which is a computerized register serving as a basic sampling frame for surveys on business establishments conducted by C&SD. It supports a single level of organizational structure of a business undertaking and the statistical unit adopted is the establishment. An establishment is defined, according to the United Nation's International Standard Industrial Classification of All Economic Activities (ISIC), as an economic unit which engages, under a single ownership or control, in one or predominantly one kind of economic activity at a single physical location.

4. The CRE covers most establishments engaged in the major economic activities classified under the Hong Kong Standard Industrial Classification (HSIC), which is adapted from the ISIC Rev.2 to reflect the structure of the local economy. Regular reviews of the classification system have then been made to cater for changes in the economic structure. The latest version of the classification is HSIC Version 1.1. The HSIC serves as a set of common industry classification principles adopted by all economic censuses/surveys

¹ The Government of the People's Republic of China resumed its exercise of sovereignty over Hong Kong on 1 July 1997. On this date, the Hong Kong Special Administrative Region (HKSAR) was formed under the "One Country, Two Systems" principle. As stipulated in the Basic Law of the HKSAR, the Region would operate with a high degree of autonomy. The HKSAR maintains its separate statistical systems and continues to compile and disseminate statistical data about the HKSAR. The Census and Statistics Department, which is the central statistical authority of the HKSAR, is responsible to the Government of HKSAR only and there is no administrative relationship between it and the corresponding departments in the mainland of China.

conducted by C&SD so that the usefulness and comparability of economic statistics by industry can be enhanced.

5. The CRE covers a wide range of information pertaining to individual establishments, including establishment name, physical address, mailing address, type of business activity, employment size, type of ownership, operating status, date of commencement, date of business registration and contact information such as name of contact person, telephone number and fax number. The Business Registration Office of the Inland Revenue Department is a primary updating source of the CRE. It provides basic information, including business registration number, business name and address, on new business registrations to the C&SD on a regular basis. Apart from using the CRE as a sampling frame, various economic censuses/surveys conducted by the C&SD also provide information for updating the establishment records, such as type of business, employment size and operating status. Among these, the Quarterly Survey of Employment and Vacancies is the most important updating source: this survey has its sampling scheme so arranged that over a period of three years, all entries in the CRE would have been canvassed once, so that a good degree of updatedness of the CRE can be ascertained.

6. While the CRE basically has a complete coverage of ordinary business undertakings, semi-government bodies and non-profit making organizations, there may still be cases where some small business undertakings are not covered in the CRE, e.g. small retail units set up in designated locations in certain festival time. In such cases, economic surveys which cover such missing units would arrange special fieldwork operation so as to add them back to the relevant survey sampling frame before sample selection.

7. The sampling units and enquiry units in all C&SD's economic surveys are basically the same, save for some exceptional treatments for certain sampled cases to suit operational need. While some economic surveys use establishments as sampling units because of the need to produce statistics by geographical location, other economic surveys use sampling units other than establishments to suit their specific requirements. Thus, there is a need to restructure the CRE before it can be used by such economic surveys as their sampling frame. The purpose of frame restructuring is to create different sampling units (which are the same as the enquiry units) from the initial frame which consists of establishments uniquely identified by their 11-digit Business Registration Number (BRN) (with the last 3 digits being the branch code).

8. An enquiry unit in the economic surveys concerned is a group of establishments in the same industry such that (i) they have the same first 8-digit of BRN (which normally indicates a main office-branch relationship) or (ii) they operate under the same group with the same major economic activity even though they may bear different first 8-digit of BRNs (e.g. supermarkets and fast

food shops) and they could provide only a combined return covering all the establishments concerned. These specially formed enquiry units are called multi-location establishments.

Frame of Hong Kong Enterprise Groups

9. Besides the CRE, C&SD also maintains a survey frame of Hong Kong Enterprise Groups (HKEGs) with external claims and liabilities as the statistical unit for data collection. This frame is basically used by the Survey of External Claims, Liabilities and Income (SECLI), which is an integrated survey to collect data on Hong Kong's external financial transactions and positions as well as associated income flows. Under the design of SECLI, a HKEG consists of a Hong Kong parent company, its Hong Kong subsidiaries, associates and branches. It also includes any Hong Kong subsidiaries and associates of the Hong Kong subsidiaries, and any Hong Kong subsidiaries of the Hong Kong associates. The top company of a HKEG is designated as the target company to report data for the whole enterprise group.

10. The survey frame of SECLI is constructed and maintained based on various relevant sources, including its own pre-survey enquiry and enterprise structure updating (ESU)² exercise, the Programs of Annual Economic Surveys (PAES) and miscellaneous other economic surveys conducted by C&SD as well as from some external sources³. For instance, the PAES provides SECLI with up-to-date information on companies reported to have inward direct investment, while the Annual Survey of Regional Offices Representing Overseas Companies in Hong Kong provides SECLI with up-to-date information on companies likely to have inward direct investment. These cases would be added into the survey frame of SECLI after verification as appropriate.

11. There is at present no linkage among the records of the CRE, the restructured survey frames for individual surveys created based on the CRE and the survey frame of SECLI in their computer systems. To centralize the maintenance process of a single business register to suit the needs of all economic surveys, C&SD is planning to enhance the CRE. Among the various

² An ESU is used to collect information on the linkages among, and particulars of, different companies in a HKEG and also on other non-resident affiliated and related companies that a group may have.

³ For instance, the list of share registrars and insurers were obtained from their respective Federations, the list of fund managers from Hong Kong Investment Fund Association, the list of licensed banks, restricted licence banks and deposit-taking companies from the Hong Kong Monetary Authority Mo

enhancement items being planned, the CRE would be enhanced for more effective processing and organization of business information related to hierarchical layers of enterprise groups, enterprises, kind of activity units and establishments so as to support the different sample selection needs of various economic surveys. In parallel with this development, it is being planned that there would be a common sampling module that aims to support the process of sample selection using predefined sampling units, coverage, procedures and parameters.

(III) Coverage and Content of Economic Censuses/Surveys

12. C&SD conducts a number of economic censuses/surveys on various economic aspects of the Hong Kong economy. Specifically, a series of activity-oriented economic surveys are conducted which can be broadly classified into two types, viz. (i) annual censuses/surveys and (ii) sub-annual surveys (i.e. quarterly and monthly surveys). While the annual censuses/surveys aim at collecting data on the operating characteristics of different economic activities and providing data for assessing their contribution to the Gross Domestic Product (GDP) of Hong Kong, the sub-annual economic surveys serve to provide up-to-date information to gauge the short-term economic performance trend.

Annual Economic Surveys

13. There are at present seven such annual economic censuses/surveys as follows covering basically all economic sectors in Hong Kong.

<u>Censuses/Surveys</u>	<u>Industry Coverage</u>
(i) Annual Survey of Industrial Production (ASIP)	Manufacturing; Mining and Quarrying, and Electricity, Gas and Water
(ii) Annual Survey of Building, Construction & Real Estate Sectors (ASBCRE)	Building and Civil Engineering Construction; Real Estate Development; Architectural, Surveying and Project Engineering; Real Estate Leasing, Brokerage and Maintenance Management
(iii) Annual Survey of Wholesale, Retail & Import & Export Trades, Restaurants & Hotels (ASW)	Wholesale Trade; Retail Trade; Import and Export Trades; Restaurants; Hotels and Boarding Houses

- | | |
|---|---|
| (iv) Annual Survey of Transport and Related Services (AST) | Land, Sea and Air Transport (e.g. those operating public buses, tramways, taxis, public light buses, trucks, ferries, ships and airlines); . Transport-related Services (e.g. car parks, travel agents and cargo forwarding agents). |
| (v) Annual Survey of Storage, Communication, Financing, Insurance & Business Services (ASS) | Storage and Warehouse; Communications; Financing (except licensed banks, restricted licence banks, deposit-taking companies and local representative offices of overseas and Mainland banks); Insurance and Business Services (e.g. accounting and auditing; advertising; information technology related services; employment agency; equipment and machinery rental; legal; news agency; secretarial and other business services). |
| (vi) Annual Survey of Banks, Deposit-taking Companies, Restricted Licence Banks and Representative Offices of Foreign Banks (ASB) | Licensed Banks; Restricted Licence Banks; Deposit-taking Companies and local representative offices of overseas and Mainland banks. |
| (vii) Annual Survey of Personal, Social and Recreational Services [Major Division 9 (MD9) Survey] | Selected activities in Community, Social and Personal Services. |

14. Except for the ASB, which is in fact a census because of the small number of firms involved, all the others are sample surveys that mainly use the CRE with some prior restructuring as discussed in para.7-8 above as their sampling frame. For the ASB, the list of authorised banking institutions and local representative offices of overseas and Mainland banks maintained by the Hong Kong Monetary Authority is used as the survey frame.

15. Basically, the questionnaires for the annual economic surveys have two parts: Part I collects the basic data on the operating characteristics of the selected establishments and Part II collects data on specific subject areas that are of analytical interest. Data collected in Part I include type of ownership; origin of investment; floor area; employment; compensation of employees (i.e. wages, salaries and other employee benefits); operating expenses; business

receipts; capital expenditure and other related information on the business operation of the establishments. The data are useful for assessing the contribution of the various economic activities to the economy and to study the structure and operating characteristics of different industries. Examples of data collected in Part II include resources used on computer products and services, research and development activities and transactions in non-financial intangible assets with parties outside Hong Kong. While data collected in Part I remain basically the same for each round of the surveys, those in Part II would be reviewed for changes on an annual basis to cater for any specific requirements from statistics users that may arise from time to time.

Sub-annual Economic Surveys

16. Besides annual economic censuses/surveys, C&SD also conducts sub-annual sample economic surveys for the purpose of compiling up-to-date indicators on the performance and business outlook of specific economic sectors and providing data for compiling the quarterly estimate of GDP. The sub-annual economic surveys use the same sampling frame as the annual economic surveys based on the restructured CRE in respect of the relevant economic sectors.

17. The industry coverage and major statistical indicators produced by the various sub-annual economic surveys are summarized below:

	<u>Surveys</u>	<u>Industry Coverage</u>	<u>Major Statistical Indicators</u>
(i)	Quarterly Survey of Industrial Production	Manufacturing	Indices of industrial production Producer price indices
(ii)	Quarterly Survey of Construction Output	Construction	Gross value of construction work performed
(iii)	Quarterly Survey of Restaurant Receipts and Purchases	Restaurants	Indices of restaurant receipts
(iv)	Quarterly Survey of Services Industries	21 service industries	Business receipts indices for 21 service industries and 2 service domains Producer price indices

(v) Monthly Survey
of Retail Sales

Retail

Indices of retail sales

18. At the same time as relevant data on the performance of different industries are produced from the Quarterly Survey of Industrial Production and the Quarterly Survey of Services Industries, producer prices indices (PPIs) are also produced. These PPIs are used to measure the average changes in prices received by domestic producers of goods and services. Producer prices are actual transacted prices received by local producers for their outputs, net of any discounts, premiums, rebates or allowances given to buyers but including surcharges. PPIs are mainly used to deflate revenue streams of business undertakings to obtain real growth in output.

19. In Hong Kong, the quarterly PPIs data for manufacturing industries have been released by C&SD since 1997 while that for service industries have been released in phases since 2000. Compared with manufactured products, output of the service industries is more difficult to measure owing to the difficulties involved in defining and delineating the various types of services and hence in measuring their respective changes. Apart from PPIs of different manufacturing industries, PPI series of eleven selected service industries are currently published, i.e. (i) hotels and boarding houses; (ii) telecommunications; (iii) miscellaneous communication services; (iv) air transport; (v) land transport; (vi) maritime transport; (vii) storage; (viii) rental of machinery and equipment; (ix) real estate maintenance management, brokerage and agency services; (x) stock, commodity and bullion brokerage services; and (xi) legal, accounting, auditing and bookkeeping services.

Others Economic Surveys

20. Besides the above annual and sub-annual economic surveys, C&SD also conducts a number of other economic surveys on specific subject matters. For example, data on trade in services (TIS) are collected mainly through the Annual Survey of Imports and Exports of Services (ASIES), supplemented by data collected via the PAES. ASIES is a sample survey covering establishments in various economic sectors that have significant amount of TIS transactions, particularly the import and export trade sector. It is conducted simultaneously with PAES. While PAES collects data on the structural characteristics of various economic sectors of Hong Kong, ASIES collects detailed information on TIS transactions, including detailed type of services transacted and country/territory breakdowns. As far as service product statistics is concerned, there are detailed breakdowns of about 50 service items grouped under 6 major service groups, viz. transportation; travel; insurance services; financial services; merchanting and other trade-related services; and other services. Also, two other annual economic surveys are worth mentioning,

viz. the Annual Survey of Innovation Activities in the Business Sector and the Annual Survey on Information Technology Usage and Penetration in the Business Sector. The former collects data on research and development activities and other innovation activities undertaken in the business sector, while the latter collects data relating to information technology usage and penetration in the business sector. The two surveys are part of C&SD's work towards compiling science and technology statistics.

(IV) Data Collection and Processing of Censuses/Surveys

Legislative Provisions

21. C&SD conducts some 40 regular economic surveys each year to collect data from business establishments for compiling economic statistics. The main legislation governing the work of C&SD is the Census & Statistics Ordinance, which empowers the Commissioner for Census & Statistics to carry out censuses of population and statistical surveys either of mandatory or voluntary nature. The Ordinance contains provisions for protection of confidentiality of information in regard to individual persons, households or companies. These provisions, which apply to surveys of both mandatory and voluntary nature, are important in securing cooperation and willingness of respondents to supply the required data to C&SD.

Data Collection Methods

22. For economic surveys, self-administered questionnaires are usually mailed to sampled establishments and respondents are requested to return the completed questionnaires by mail. In case respondents have difficulties in completing the questionnaires, C&SD would arrange field officers to assist them. Survey hotlines are also available to handle enquiries from reporting establishments.

23. Telephone interview is mainly used for follow-up enquiry in economic surveys. Personal interview is considered to be a highly reliable data collection method, but its cost is higher than that of self-reporting by respondents. As Hong Kong is a small and densely populated territory, personal interview is considered viable, but it is mainly adopted in C&SD's surveys as a supplementary method for following-up outstanding cases, in case contact telephone numbers are not available or telephone follow-up is not successful.

24. With rapid development in computing technology and good acceptance of telephone interviews, C&SD introduced the first computer-assisted telephone interview (CATI) system in 1990. Currently, CATI is adopted in surveys as deemed appropriate. Under CATI, the

computer performs auto-scheduling and auto-dialing of assignments for field officers. Moreover, while the interview is being conducted, the interviewer can directly input the respondent's answers and codes into the computer, which would enable validation checks to be performed immediately and the computer can prompt the interviewer to verify any dubious data.

25. To ensure that quality data are collected cost-effectively, C&SD continuously reviews its data collection practice in the light of changing circumstances. Along with the increasing popularity of using electronic means for communication in the business sector, C&SD started to offer respondents the option of supplying data using electronic questionnaires in recent years. Electronic questionnaires are available for economic surveys amenable to the electronic mode of delivery. However, up till now, this mode is still not popularly utilized.

Improving Respondent Cooperation

26. The cooperation of respondents is essential for their timely return of completed questionnaires to C&SD to enable the production of accurate and timely statistics. To gain and maintain the respondents' support for the surveys, C&SD has been doing immense work on (i) easing the reporting work of data suppliers; and (ii) strengthening rapport of respondents to improve responses.

27. For example, an arrangement has been adopted for business establishments participating in multi-surveys to consult the same field officer if they require assistance. Through such "one-point-contact" arrangement, the respondents can reduce contacts with field officers, while C&SD is in a better position to assist them in resolving their problems in supplying data. Moreover, as large establishments in major sectors are constantly selected to participate in statistical surveys because of their economic prominence, a "customer window scheme" was implemented in 2003 on a trial basis to provide them with a single contact point in C&SD and tailor-made reporting arrangement, with a view to better coordinating survey requests from different survey sections, thus easing their reporting load and minimising field contacts.

28. In addition, the staff of C&SD have been paying courtesy visits to prominent business establishments and conducting Meet-the-Clients sessions from time to time since 1999. The latter provides a friendly atmosphere for survey respondents, statistics users and the management of C&SD to exchange views on the products and services provided by C&SD. Respondents are welcome to give views on how C&SD may enhance its services to facilitate them in furnishing data in a timely manner.

29. Procedures are in place to ensure the quality of the data collected from various economic surveys. Completed questionnaires received are subject to thorough checking by office staff and detailed validation checks by computer before tabulation. Such checking covers completeness of entries, consistency among data items and credibility of reported data. Clarification is made on the dubious data with respondents by telephone or field verification visits. Errors will be corrected by the data provided by the respondents during the telephone or field verification visits or by imputation from the accepted data of establishments with similar characteristics. All the data in the returned questionnaires are input into computer, and estimated values are multiplied by grossing-up factors for compiling preliminary tabulations. The survey results of the last year and other related survey results will be used to check against the preliminary tabulations. For those statistics in doubt, verification and amendments will be made before compiling final tabulations.

30. Basically, all the annual economic surveys release their results within twelve months after the survey reference period. Similarly, basically all the sub-annual economic surveys release their results within the quarter/month after the survey reference quarter/month. Survey results are usually disseminated in the form of press releases and reports. In addition, press conferences/briefings are also arranged for release of statistics of major public concern as deemed necessary. Moreover, summary statistics are also uploaded to C&SD's website. Chinese and English are both official languages in Hong Kong. Accordingly, bilingualism is adopted in all forms of data dissemination.

(V) Towards an Integrated Economic Statistics Program

31. Besides the systems of economic censuses/surveys described above, C&SD maintains a number of statistical systems for compiling statistics on a wide range of areas of economic statistics including merchandise trade, national accounts (including balance of payments statistics), monetary and banking statistics, and price statistics. These systems draw their required input data from administrative records and outputs of the economic surveys. C&SD has all along been taking a holistic approach in developing the various areas of economic statistics, be they compiled from administrative records, raw data collected from economic censuses/surveys or from outputs of other statistical surveys/systems, with a view to achieving ultimately an integrated economic statistics program (IESP) within C&SD.

The purposes/uses of an Integrated Economic Statistics Program

32. The benefits of achieving an IESP are obvious as it could serve a number of important purposes and uses. *First*, the wide range of economic

statistics available from the IESP could enable economists and analysts to perform various types of macro-economic and micro-economic analyses. For example, GDP and GNP serve as important indicators on the overall economic performance of an economy. Moreover, the economic statistics are also indispensable in analysing the various sectors. For analyzing the external sector, statistics on trade in goods and services and balance of payments are needed. Statistics on the output and operating characteristics of the various industries are useful in gauging the performance of the domestic sector. Monetary and banking statistics are useful for analyzing the financial sector. And statistics on various types of price, including consumer price indices, producer price indices, import and export unit prices, terms of trade and GDP deflator help discern the inflationary pressure faced by the economy on various fronts.

33. **Second**, the economic statistics from an IESP also serve as important references for the government in the course of macro-level policy formulation and decision. Financial services, trading and logistics, tourism, and producer and professional services are key industries in the Hong Kong economy. Recently, the government is promoting the introduction and application of new and advanced technologies in the local industries to enhance Hong Kong's competitiveness. Moreover, the government also plans to foster a favourable social and economic environment to promote the development of the cultural and creative industries thus facilitating the transition of Hong Kong to a knowledge-based economy. All the above work make heavy use of the economic statistics produced by C&SD. **Third**, the statistics are also useful to the government in developing strategies for development in specific economic sectors, be it manufacturing, construction or services industries. The economic statistics also enable the conduct of sectoral productivity studies by both the government and the private sector.

34. **Fourth**, the economic statistics are not only essential for the government in formulating policies, but also useful for the private sector in drawing up plans and strategies and in making important business decisions. For example, the statistics can be used to calculate a lot of analytical ratios. Such ratios are useful reference for a business in identifying profitable lines of business, appropriate mix of factor input that yield a higher return, optimum level of operation for achieving economy of scale, benchmarking of the business's own performance against the average position of the industry which the business is in, formulating marketing strategies and making investment decisions.

35. **Fifth**, as a data quality control measure, the IESP could enable C&SD to test consistency of statistics from various statistical systems and subsequently to identify data problems where inconsistencies exist or appear to exist. **Sixth**, the IESP could also facilitate coherence of statistical development

such that users' needs would better be met overall and that C&SD could use its resources more effectively.

The components of an Integrated Economic Statistics Program

36. The IESP in C&SD basically comprises four major component systems, viz. (i) the Economic Census/Survey Program based on raw data collected directly from the business sector, (ii) Trade Statistics System for compiling merchandise trade statistics based on data from administrative records, (iii) National Accounts, BoP and Monetary Statistics System, and (iv) a program of price indices.

37. As mentioned above, C&SD conducts a series of annual and sub-annual economic censuses/surveys. Six of the seven annual economic censuses/surveys collecting data on the operating characteristics of different economic activities are collectively referred to as the Program of Annual Economic Surveys (PAES), reflecting the coordinated approach in their operation and development. While the remaining survey, the Major Division 9 (MD9) Survey, is not taken as part of the PAES, its operation and development is also coordinated with the PAES in general. The foremost coordination work is the harmonization of concepts, definitions and classifications among the various annual economic surveys. The data items collected in the annual economic surveys are basically similar to each other. Moreover, there is the Hong Kong Standard Industrial Classification (HSIC) being used in all the annual economic surveys as the common industry classification system. The restructuring of the CRE for use in various annual economic surveys is undertaken in a coordinated manner so as to ensure that there is no duplication of work and the resulting units of enquiries are consistent across all surveys concerned.

38. The sub-annual economic surveys use the same sampling frame of the annual economic surveys based on the restructured CRE in respect of the relevant economic sectors as their sampling frame. Thus the sampling units in various sub-annual surveys are the same as those in the annual economic surveys. Moreover, they adopt the same concepts/definitions/classifications as those in the annual economic surveys, thus ensuring the comparability of statistics between them.

39. Besides, an integrated approach is adopted in the sample design of the various annual and sub-annual economic surveys. Before such an approach is adopted, the samples for the annual and the sub-annual surveys were drawn without coordination. Hence there tended to be discrepancies between their results that were difficult to reconcile and respondent burden could not be controlled. To address the problems, integration of the sampling scheme of the annual and sub-annual surveys offers a solution.

40. In implementing the integrated approach, both the annual and the sub-annual surveys for a particular sector would enumerate all the large establishments in the “certainty” stratum. To enable this to be done, the annual survey and the sub-annual survey concerned would align their “certainty” strata as far as possible so as to enable the surveys to enumerate the same group of establishments in such strata. As for the medium size establishments, once a sub-annual survey sample has been selected, it would also be used in the corresponding annual survey of that reference year. For the small establishments, the annual and the sub-annual economic surveys would continue to draw independent samples of their own as the benefits of integration might be offset by the greater reporting burden for the small establishments. This integrated approach would minimize the discrepancy between the results of the annual and the sub-annual surveys. Moreover, the data of the same establishments from the annual and the sub-annual surveys can be cross-checked so as to improve data accuracy.

41. Apart from producing outputs that meet their own user needs, the results of the above economic surveys also serve as inputs to the statistical systems for compiling estimates of GDP and GNP (the third component system in the IESP, see para.36). To ensure that the above survey activities are coordinated and undertaken in a systematic manner, there are regular meetings among the C&SD officers responsible for the various annual and sub-annual economic surveys and those using the survey results as input for compiling GDP/GNP estimates. Various issues relating to the harmonization of concepts, definitions and classifications among the various surveys and how the need of the GDP/GNP compilation could be better met would be discussed in the meetings.

42. The Trade Statistics System is another major component system in the IESP. Every person who imports or exports any article, other than an exempted article, is required by law to lodge declaration to the Customs and Excise Department (C&ED) after the importation or exportation of the article. Submitted declarations are processed by the trade declaration checking system of C&SD, under delegated authority from C&ED. Checked declarations are then used for compiling the external merchandise trade statistics of Hong Kong.

43. Apart from checking for accuracy of submitted declarations, it is also necessary to ensure complete submission of declarations. This is performed using cargo manifests. A carrier company of cargoes is required by law to lodge a manifest of the cargo which it ships into or out of Hong Kong after arrival and departure of the vessel, aircraft or vehicle. Manifests received are checked against declarations for identifying any outstanding declarations which have not been lodged. In the case of non-lodgement of declarations, declaration notices, which are prepared based on information on manifests, would be sent to the importers/exporters concerned requesting them to submit

the declarations as soon as possible. Manifests are also the source documents for compiling the cargo statistics of Hong Kong.

44. Major external merchandise trade statistics compiled include aggregate trade values of imports, domestic exports and re-exports of goods, detailed trade statistics analysed by country/territory and/or by commodity, and trade index numbers in value and volume terms.

45. The banking and monetary statistics system is also an important component of the IESP. Such statistics are compiled by the Hong Kong Monetary Authority based on data submitted by the various financial institutions.

46. The compilation of GDP involves elaborated data feeding of data from virtually all kinds of economic surveys and household surveys, supplemented by administrative data from other sources including external trade statistics and government accounts data, with suitable adjustments to take into account differences in concepts, definitions and coverage of data among different systems. The harmonization of concepts, definitions and classifications in different economic surveys with the national accounting system is particularly important to the quality of GDP statistics. To provide a prompt indicator of the latest performance of the Hong Kong economy, quarterly GDP is compiled, drawing much from data from monthly and quarterly economic surveys. The GDP estimates are subject to revisions to incorporate the more comprehensive data from the annual economic surveys.

47. The C&SD also compiles and disseminates BoP account, International Investment Position statement and External Debt statistics. The data required for compiling BoP statistics are obtained from different statistical systems of C&SD. For instance, statistics on trade in goods and services from the Trade Statistics System and Annual Survey of Imports and Exports of Services (ASIES) respectively are used for compiling relevant components of the Current Account. Statistics on external factor income flows and the Financial Account are compiled based on data collected from an integrated statistical survey entitled Survey of External Claims, Liabilities and Income (SECLI). While the data collected from SECLI are primarily used for compiling BoP statistics, they are also used for compiling other macroeconomic statistics such as GNP and Foreign Direct Investment.

48. Finally, a program of price statistics exists to serve different purposes. Consumer price indices (CPIs) are compiled using current price data collected from a monthly Price Survey whereas the weights used are compiled from data collected in a Household Expenditure Survey conducted every five years. Besides CPIs, there are also Producer Prices Indices as mentioned in para.18-19 above.

49. While import/export unit value indices can simply be derived by dividing the trade value by the corresponding quantity obtained from the Trade Statistics System, they are often regarded as inadequate measures of genuine price changes in external trade as they are subject to non-price changes. As such, a monthly Import and Export Price Survey (IEPS) is conducted to collect price data for compiling specification import and export price indices for incorporation into the Unit Value Index System of trade statistics to improve the precision and reliability in the measurement of price movements in external trade. The IEPS adopts a “specification price” survey approach. Under this approach, price data for compiling specification import and export price indices are collected from a sample of establishments trading in the commodities concerned.

50. For an economy-wide measure of inflation, there is the GDP deflator, which takes into account all the price changes relating to consumption, investment, exports and imports. The GDP deflator is an implicit price deflator. In the national accounting statistical system, the constant price GDP is obtained by aggregating the re-valued current-price values of the corresponding components and sub-components. The GDP deflator is then implicitly derived by dividing the current price GDP by the constant price GDP and then multiplied by 100.

51. One important point to note is that the Integrated Economic Statistics Program (IESP) is not an isolated program independent of C&SD’s other statistical programs. Rather, it has a close linkage with the Labour Statistics Program and the Population and Demographic Statistics Program.

Features of an Integrated Economic Statistics Program

52. Below are some features of C&SD’s IESP that are worthwhile mentioning: (i) the basic design of the various component systems in the IESP accords with international recommendations, (ii) harmonized definitions are adopted in the various component systems, (iii) common classifications are used, (iv) appropriate data sources are employed, (v) the building block approach is used for geographical demarcation and (vi) interlocking nature of the component systems.

53. As far as the basic design of the IESP is concerned, C&SD develops and operates the various component systems in accordance with the recommendations of international organizations. For example, the compilation of GDP follows the standards promulgated in the 1993 Systems of National Accounts while that of BoP follows the Balance of Payments Manual Fifth Edition. The same is true for the other economic surveys and statistical systems. In respect of data dissemination, Hong Kong has subscribed to IMF’s

Special Data Dissemination Standards (SDDS) with effect from April 1997. Hong Kong is now in full compliance with the SDSS and has even exceeded the basic SDDS requirements in certain areas.

54. Different data users have different analytical interests. One feature of C&SD's IESP is the harmonization of concepts and definitions within and across component systems where standardization cannot be achieved because of historical and local reasons.

55. As far as classification is concerned, efforts have been made to adopt common classifications in the component systems as far as possible. For example, the HSIC discussed above is used as the common industry classification in the compilation of all economic statistics where applicable. However, there are occasions when statistics may be compiled based on alternative classifications to meet user needs. For example, the HSIC does not support the compilation of statistics on the "electronics industry" as there is no such industry group separately identified in the HSIC, while many users are looking for data on this industry. As there is no international definition on the electronics industry, C&SD has devised a set of principles for classifying that industry for use in compiling the related statistics in Hong Kong. Another example is the compilation of "domain" statistics. A "domain" differs from an "industry" in that a domain comprises those parts of economic activities straddling different industries but are somehow related to a common purpose. For example, for the "tourism domain", statistics straddling a number of industries (hotel, retail, tour operators etc.) are collated for presentation. At present, C&SD compiles statistics on the "computer and related services" and the "tourism, convention and exhibition" domains.

56. Another obvious feature of C&SD's IESP is that each of the component systems may obtain their required data through different means, including raw data from economic censuses/surveys, administrative records and output data from other statistical systems. The appropriate selection of data sources is important. One other significant feature is the geographical demarcations. Here, a building block approach is adopted so that data for different geographical demarcations as desired by different user groups can be produced. Finally, a conspicuous feature is the interlocking nature of the component systems. One may observe that each component system actually produces output which may be used by both final data users and some other component systems as input data.

Achieving an Integrated Economic System

57. It is not at all an easy task for an Statistical Authority to achieve an IESP, including its initial establishment and subsequent maintenance. Many issues have to be carefully considered and balanced.

58. The foremost challenge is how the different statistical institutions in an economy could be well-coordinated for operating the overall official statistical system. In the case of Hong Kong, C&SD together with statistical units established in various government departments and policy bureaux form the Government Statistical Services (GSS) which represents a network for the provision of government statistical services. As statistical staff for these statistical units are also under the management of the C&SD (despite not so supervised on a daily basis), there is always a close working relationship among C&SD and other government departments in the development of various areas of statistics, particularly those falling under the purview of more than one parties. This greatly facilitates the development of C&SD's IESP as some of these departments are data suppliers to the IESP.

59. Good communication with potential statistics users and raw data suppliers is to be emphasized by an Statistical Authority to ensure that the required data could be effectively obtained from raw data suppliers and the statistics produced from the IESP meet the needs of data users. Besides the customer relations work in data collection as discussed above (see para.27-28), there is a Statistics Advisory Board which is a non-statutory advisory body chaired by the Commissioner for Census & Statistics and consists of ten non-official members from the private sector and three official members from designated government departments. The Board serves as a medium through which the views of statistics users, raw data suppliers and statistical scientists are collected and suitably taken into account in the development of government statistical activities.

60. Besides, close communication with international organizations is also conducive to the success of establishing and maintaining an IESP. Through this, the current international standards on various areas of economic statistics could be understood and adopted in a timely manner. In parallel, an Statistical Authority of an economy may also contribute to the establishment and evolution of various international standards, by letting known the needs and problems of the economy in question so that the standards may take account of such as far as possible.

61. Concerning the approach in establishing the IESP, C&SD has been adopting a dual approach. First, a bottom-up approach is used, whereby the various existing systems are reconciled. In parallel, a top-down approach is also adopted whereby the department first conceives an ideal overall program and then brings down to earth a realistic blue-print which features a balanced program.

62. Finally, an Statistical Authority also has to take priorities into consideration in the course of establishing an IESP. For example, constraints

in financial resources, technical resources and survey respondents' burden require careful priority setting. One should not be over-ambitious, but should consider the capacity of the component systems carefully. C&SD would not claim that it has a successful IESP, but the department is very mindful that its IESP is supported by well-established component systems.

(VI) Concluding Remarks

63. Over the years, the C&SD of Hong Kong SAR has been compiling economic statistics covering a wide range of areas in response to the needs of the government and the wider community. The statistics are crucial for building up a good information infrastructure, which is a key factor underpinning the economic and social development of Hong Kong. By taking a holistic, integrated approach in developing the various economic statistical systems, an IESP, more or less in shape, has been established in C&SD.

64. However, there are still challenges ahead in its continuous maintenance and enhancement. With this in mind, C&SD would continue to strengthen its IESP framework.