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Managing Issues addressing the Challenges of Using Administrative Data for Statistical Purposes

Country Paper – Hong Kong, China

I. Introduction

Like many other economies, administrative records are important sources of data for compiling a number of key statistical indicators in Hong Kong. Section II of this paper introduces the major uses of administrative data in Hong Kong while Sections III to VI discuss the management issues involved in meeting challenges in the use of administrative data. In order that the discussion for each facet of the use of administrative data is more focused, only selected data sources which are more relevant to the facet being discussed are presented.

II. Major uses of administrative data

- 2. The Government Statistical Service of the Hong Kong Special Administrative Region, which comprises the Census and Statistics Department (C&SD) and statistical units established in various government departments and policy bureaux, draws on a number of administrative sources for the production of statistics and the construction of sampling frames. The major uses of administrative data are given below.
 - (a) Use of import/export declarations (TD) for compilation of trade statistics A person who imports or exports any article other than an exempted article is required by law to lodge with the Commissioner of Customs and Excise a TD within 14 days after importation/exportation of the article. The TDs lodged are the source documents for compilation of external merchandise trade statistics by C&SD.
 - (b) Use of administrative records from the Immigration Department (ImmD) for updating population statistics Administrative systems maintained in the ImmD in respect of births, deaths and marriages provide ready data sources for producing vital and demographic statistics. Records of passenger movements also provide crucial data for estimating the current size of the population and studying the mobility of the population. These administrative data, provided in the form of anonymised individual records to C&SD, are

also used to generate statistics as essential supplement to the benchmark population data obtained in population censuses/by-censuses. The two sets of data sources together provide a comprehensive statistical database which serves the purpose of compiling population estimates as well as a multitude of other purposes.

- (c) Use of information on business registrations from the Business Registration Office (BRO) of the Inland Revenue Department for updating the Central Register of Establishments (CRE) maintained by C&SD The CRE serves mainly as a sampling frame for surveys on business establishments
- (d) Use of administrative records from the Buildings Department, Housing Department and Lands Department, etc. for updating the Register of Quarters (RQ) maintained by C&SD The RQ serves mainly as a sampling frame of residential and partially residential addresses for population censuses/by-censuses and household surveys.
- (e) Use of administrative records by statistical units in other government departments to produce subject matter statistics required by those departments for policy-making and monitoring purposes Some notable examples include statistics on pupils, teachers and school place provision produced by the Education Bureau, health statistics by the Department of Health, housing statistics by the Housing Authority, and statistics related to social security by the Social Welfare Department.
- 3. The C&SD also actively explores opportunities for making more use of administrative records as sources of data for statistical compilation. In particular, a study has been undertaken to assess the feasibility of using tax records for the compilation of economic statistics so as to lower enumeration costs and reduce respondent burden. More discussions on this will be given in Section VI below.

III. Management issues on the use of administrative data

4. In general, incomplete or inaccurate records do not pose a serious problem for the administrative sources mentioned in (a) to (e) in paragraph 2 above. The major management issue is rather to address the difference between the concepts and definitions used by the departments collecting the administrative data and those adopted by C&SD for statistical purposes. As the data are usually collected in the first place for purposes other than statistics compilation, and the data collecting departments and C&SD often have different work priorities, it may not be feasible to compromise on the list of data items to be collected as well as the concepts and definitions used.

5. The case of the CRE may be used as an illustration. Information on the nature of business collected by the BRO for business registration purpose is usually very broad and is not sufficient for classifying the economic activity of an establishment according to the Hong Kong Standard Industrial Classification (which is adapted from the International Standard Industrial Classification of All Economic Activities). Also, certain useful information such as the telephone number of the establishment is not available. Thus, upon receipt of new business records from the BRO, C&SD needs to send out questionnaires to the new establishments to collect additional data items, such as telephone number and more detailed information on the economic activity of the establishments, for maintaining the CRE.

IV. Managing the quality of statistics derived from administrative data

- 6. In general, the administrative data used by C&SD are reliable sources in terms of coverage and completeness of records. To ensure that statistics derived from administrative sources are of good quality, checks and validations are carried out where appropriate.
- 7. One example is the processing of TDs for the production of trade statistics. Under authority delegated by the Commissioner for Customs and Excise, C&SD is responsible for the checking of TDs. Under the free trade policy of Hong Kong, traders are only required to lodge TDs within 14 days after the importation and exportation of articles. To guard against any omissions in the submission of TDs, C&SD conducts a checking process whereby all TDs submitted by traders are checked against cargo manifests received from carriers. Apart from ensuring the complete submission of TDs, C&SD also imposes different measures, including computer validation and manual checking on selected TDs, to ensure the quality of the information in the TDs. Detailed investigations are conducted in respect of TDs with suspected erroneous information (e.g. abnormal import/export unit value). Where necessary, cases are referred to the Customs and Excise Department for follow up action and further investigation.
- 8. Another way to ensure good quality of administrative data is to use survey data to supplement administrative data. For instance, various surveys conducted by the C&SD, which uses the CRE as the sampling frame, feed back information such as type of business, employment size and operating status (e.g. closure cases) of individual establishments to update the existing records in the CRE.

V. Managing the relationship with departments collecting the administrative data

9. C&SD puts much emphasis on maintaining good communication and relationship with our data suppliers. A Customer Liaison Group on Trade Matters, which comprises traders

frequently submitting TDs, transportation companies submitting cargo manifests and users of merchandise trade statistics, has been set up to provide a platform for direct exchange of views between C&SD and its customers on operational and service matters relating to the lodgement and processing of import/export declarations, cargo manifests and related trade documents, and services relating to access to and uses of merchandise trade statistics.

- 10. With a view to improving the completeness and accuracy of the TDs, C&SD conducts seminars on "How to Complete Import/Export Declarations" regularly to brief traders about the legal requirement of TDs and common errors identified in the TDs. The latest arrangement is to have joint seminars with the Customs and Excise Department. These seminars are targeted at traders who habitually provide inaccurate information in the TDs. The traders are also reminded of the possibility of being prosecuted for late or non-lodgement of TDs.
- 11. As for population statistics, an Inter-departmental Coordinating Committee on Population and Related Statistics, chaired by the Commissioner for Census and Statistics and with senior officials from ImmD and major user departments as members, has been established with the objective to discuss issues and direction of developments on population and related statistics on a regular basis. By providing a channel for the data collectors (notably ImmD), the statistics compilers (mainly C&SD) and the users to communicate, cooperation and understanding among the various parties can be enhanced with a view to producing more relevant statistics for Government and public consumption.

VI. Obstacles/weaknesses on the use of administrative data

- 12. The major difficulties faced in Hong Kong for using administrative data for statistical purposes may be illustrated by the problems encountered in attempting to use tax records for the production of economic statistics.
- 13. Based on the experiences of other economies, tax return is a potentially useful source for compiling economic statistics. However, according to an exploratory study undertaken by C&SD a few years ago, there are certain obstacles that need to be overcome before this administrative data source can be used. First, the Census and Statistics Ordinance, which is the main legislation governing the work of C&SD, does not give C&SD the power to access administrative records from other government departments for statistical purposes. The Inland Revenue Department is also prohibited by law to release information of individual taxpayers to other government departments. Second, the data items available from tax records only correspond to some broad principal statistics (e.g. business receipts, operating expenses, compensation of employees, value added and gross surplus) collected from economic surveys.

Breakdowns of the principal statistics and other data items (e.g. origin of investments, research and development, IT expenditure) which are currently collected from economic surveys are not available. Third, the timing of data availability may be another obstacle even if IRD is willing to provide tax data for statistical purpose, as there would be longer time lag for collecting tax returns in which data (in particular for large companies) are provided based on audited accounts. In view of these constraints, tax data have not yet been used in the production of economic statistics.

VII. Concluding remark

14. The use of administrative data has great potential benefits including cost saving and relieving of respondent burden. Thus, notwithstanding the limitations of administrative data and the obstacles for using them, continuous efforts will be made to increase the use of administrative data in a cost-effective way, by drawing on experiences of other economies where applicable and through closer collaboration with government departments collecting the administrative data.

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