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**STRATEGIC ISSUES LINKED TO THE MEASUREMENT OF INTERNATIONAL
TRANSACTIONS**

**SESSION IIA: SELECTED MEASUREMENT ISSUES: SOME CURRENT
ACCOUNT ISSUES**

THE CHANGED TREATMENT OF GOODS FOR PROCESSING AND MERCHANTING IN
THE REVISED SYSTEM OF NATIONAL ACCOUNTS (SNA93, REV. 1) AND THE SIXTH
BALANCE OF PAYMENT MANUAL (BPM6)

Note by the Census and Statistics Department of Hong Kong SAR, China¹

I. INTRODUCTION

1. Hong Kong is one of the most externally oriented economies in the world. In 2006, Hong Kong was ranked the tenth largest trading economy in the world in terms of total merchandise trade value. The ratio of Hong Kong's total merchandise trade value to its Gross Domestic Products (GDP) in 2007 was around 340%. The growth in Hong Kong's external trade in the past few decades was very much related to the rapid development of outward processing trade during the period.

¹ This paper has been prepared at the invitation of the secretariat.

2. As a major trading hub in the world, Hong Kong plays a pivotal role in the global production of goods and services. As early as the 1980s, many manufacturing companies in Hong Kong had started to relocate their production processes to the mainland of China (the Mainland) to take advantage of the geographical proximity and availability of low-cost land and labour there. The offices of these companies located in Hong Kong mainly act as regional headquarters performing a wide range of manufacturing related functions, such as management, sales and marketing, materials sourcing, design, research and development and information technology management. The increase in outward processing activities in the Mainland had resulted in massive movements of raw materials and semi-manufactured goods from Hong Kong to the Mainland for processing, and subsequent return of the processed goods from the Mainland to Hong Kong for re-exportation to the rest of the world.

3. Hong Kong's traders also engage in a substantial amount of "merchanting" activities because of their extensive network of buyers and sellers in the global market. Also, with the rapid infrastructural development in the Mainland, particularly ports and related transportation facilities, traders in Hong Kong have made use of business opportunities to diversify the exporting channels by exporting processed goods manufactured in the Mainland directly to overseas markets. Exports of merchanting services to buyers abroad have become more prominent for the Hong Kong economy.

4. Under the present framework, "goods for processing" are recorded in gross terms under the goods account of Hong Kong whenever they move into or out of Hong Kong, while the value of "merchanting" services is recorded under the services account.

5. In the *System of National Accounts 1993, Revision 1 (1993 SNA Rev. 1)* and the *Balance of Payments and International Investment Position Manual, sixth edition (BPM6)*, new international statistical standards will be recommended for the compilation of goods account based on the "change of ownership" principle. On theoretical ground, the changes are recognised to be able to better reflect the increasing trend of globalization of production. Yet, there are practical difficulties that should be fully addressed. In particular, the changes would have a substantial impact on data collection, compilation, presentation and interpretation of the external trade statistics of Hong Kong. The implementation of the new statistical standards would be one of the major initiatives and challenges of the Census and Statistics Department of Hong Kong in the coming years.

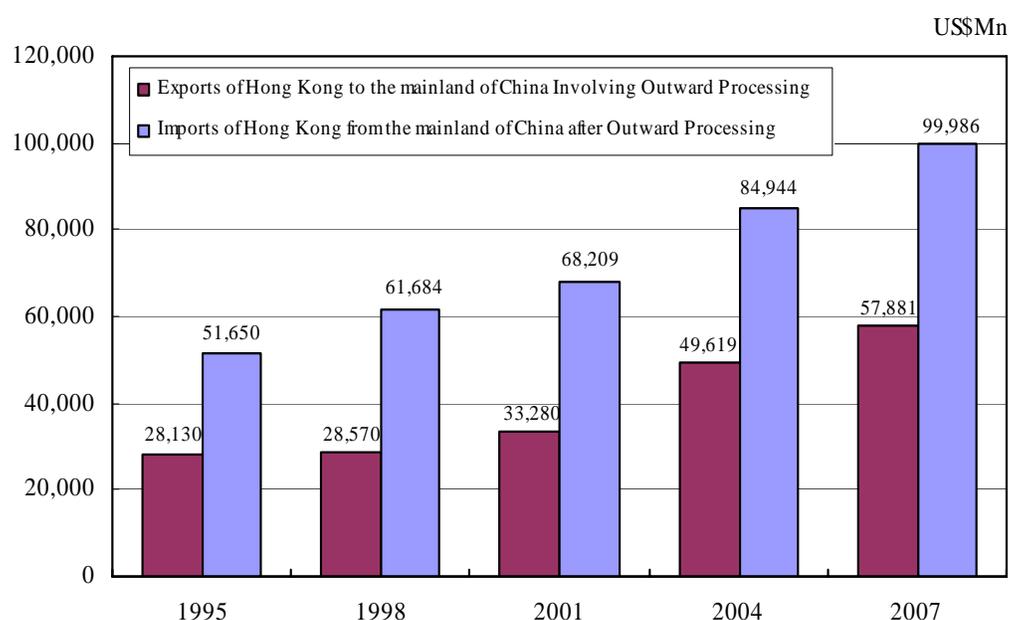
6. The major focus of this paper is to present the future plan of Hong Kong in implementing the new statistical standards under the *1993 SNA Rev. 1* and *BPM6*. Specific issues relating to data collection and dissemination of statistics are also addressed in this paper.

II. OUTWARD PROCESSING TRADE AND MERCHANTING IN HONG KONG

7. Hong Kong's involvement in the activities of goods sent abroad for processing and merchanting is one of the largest in the world. Over the past years, trading activities relating to "goods for processing" and "merchanting" play a vital role in the external trade front of Hong Kong. In 2007, about 27% of goods imported into Hong Kong, and 17% of goods exported from Hong Kong were related to goods for outward processing in the Mainland, whereas an estimate of 25% of exports of services of Hong Kong was related to "merchanting" activities.

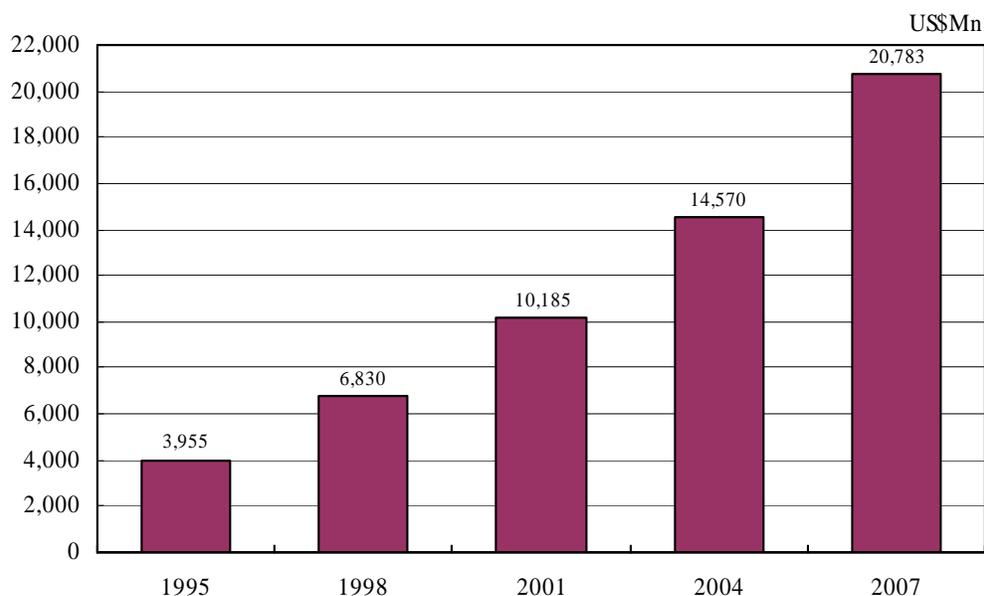
8. The historical trends of outward processing trade of Hong Kong in the Mainland and exports of merchanting services from Hong Kong are presented in Charts 1 and 2 respectively. It can be seen from the charts that both outward processing trade of Hong Kong in the Mainland and the exports of merchanting services from Hong Kong have been increasing quite notably over the past decade. The value of exports of goods from Hong Kong to the Mainland involving outward processing increased from US\$28 Bn in 1995 to US\$58 Bn in 2007, representing an average annual growth rate of 6%. The value of imports of goods into Hong Kong from the Mainland after processing increased from US\$52 Bn in 1995 to US\$100 Bn in 2007, representing an average annual growth rate of 6%. Meanwhile, the value of exports of merchanting services from Hong Kong rose significantly, from US\$4 Bn in 1995 to US\$21 Bn in 2007, representing an average annual growth rate of 15%.

Chart 1: Outward Processing Trade of Hong Kong in the mainland of China



Note:

The difference between the value of goods exported from Hong Kong to the Mainland for processing and the value of goods returned to Hong Kong from the Mainland after processing is equal to the processing fees paid by Hong Kong, plus the value of any other raw materials/semi-manufactures used in processing which are procured domestically in the Mainland or imported directly from sources other than Hong Kong to the Mainland.

Chart 2: Exports of Merchanting Services from Hong Kong

A. Goods for processing

9. Hong Kong's outward processing activities are predominantly carried out in the Mainland. Processing trade in areas other than the Mainland has been relatively insignificant. Outward processing in the Mainland involves the exportation of raw materials or semi-manufactures from or through Hong Kong to the Mainland for processing with a contractual arrangement for subsequent re-importation of the processed goods into Hong Kong.

10. At present, data required for the compilation of goods account of Hong Kong's Balance of Payments (BoP) statistics primarily come from customs-based external merchandise trade statistics, which are compiled based on import/export declarations. The external merchandise trade statistics record all physical movements of goods at the time they cross the boundary of Hong Kong, but not at the time of change of ownership. "Goods for processing", including the exportation of raw materials or semi-manufactures and the subsequent re-importation of the processed goods, are thus included in exports and imports of merchandise trade statistics, and are recorded on gross terms under the goods account.

11. To assess the economic impact of outward processing activities on Hong Kong, the Census and Statistics Department started compiling statistics on trade involving outward processing in the Mainland in the late 1980s. The outward processing trade statistics of Hong Kong are compiled based on data obtained from a monthly survey which covers the outward processing activities in the Mainland where there exists contractual arrangement for subsequent re-importation of processed goods back into Hong Kong. The survey provides estimates of the

value and proportion of trade involving outward processing in the Mainland based on a sample of import/export declarations.

B. Merchancing

12. “Merchandising” activities involve purchase of goods by a Hong Kong resident from a non-resident and subsequent resale of the goods to another non-resident without the goods ever entering and leaving Hong Kong. Transactions of goods manufactured outside Hong Kong through sub-contract processing arrangement and directly sold to parties outside Hong Kong without the goods entering and leaving Hong Kong are also included in “merchandising”.

13. At present, data required for the compilation of “merchandising” of Hong Kong are collected from an annual survey on trade in services. Data on the sales of goods and cost of goods sold for “merchandising” are collected to compile the value of merchancing services provided.

III. NEW INTERNATIONAL STATISTICAL STANDARDS

A. Goods for Processing

14. Under the *System of National Accounts 1993 (1993 SNA)* and the *Balance of Payments Manual, fifth edition (BPM5)*, the value of “goods for processing” is recorded in both exports and imports of goods as genuine external trade in gross terms although when the goods are sent abroad for processing, no “change of ownership” takes place and thus there are no actual transactions. This is not consistent with one of the basic principles of balance of payments that a transaction should involve a “change of ownership”. Under *1993 SNA Rev.1* and *BPM6*, the value of “goods for processing” would be excluded from exports and imports of goods in goods account. Instead, the payment of processing fees by the outward processing economy would be recorded as imports of services under the new standards.

B. Merchancing

15. Under *1993 SNA* and *BPM5*, the trade margin derived from “merchandising” is recorded as exports of services in net terms by the economy where the trader resides. No external flow of goods is recorded in that economy notwithstanding that there is a “change of ownership” for those goods concerned. This is also not consistent with the “change of ownership” principle. Under *1993 SNA Rev.1* and *BPM6*, “merchandising” activities would be recorded in the goods account in net terms. The acquisition of goods abroad for “merchandising” would be recorded as imports (shown as negative exports) of goods by the economy where the trader resides, while the subsequent resale of goods would be recorded as exports of goods from that economy.

16. Conceptually, the implementation of new statistical standards on “goods for processing” and “merchandising” would not affect the overall balance of trade in goods and trade in services as the changes involve a reclassification between goods and services only. However, it has been noted from recent research studies that a significant amount of raw materials/semi-manufactures required for processing are not imported from Hong Kong to the Mainland. These raw materials/semi-manufactures are procured domestically in the Mainland or imported directly from sources other than Hong Kong to the Mainland. This business practice explains the large

difference between the value of goods exported from Hong Kong to the Mainland for processing and the value of goods returned to Hong Kong from the Mainland after processing, as both the processing fees paid by Hong Kong and these other procurements of raw materials/semi-manufactures are embedded in the value of processed goods imported from the Mainland.

17. While the processing fees would be recorded as imports of services under the new standards, proper statistical treatment is required for those other procurements of raw materials/semi-manufactures (i.e. raw materials/semi-manufactures procured domestically in the Mainland or imported directly from sources other than Hong Kong to the Mainland) in order to ensure that the overall balance of trade in goods and trade in services would not be affected under the new standards. Such other procurements of raw materials/semi-manufactures would be recorded as (i) imports of goods if they are arranged by the Hong Kong producers; or (ii) imports of services if they are arranged by the Mainland processing units.

IV. IMPACT OF THE NEW INTERNATIONAL STATISTICAL STANDARDS ON HONG KONG

A. Trade in goods and trade in services

18. Conventionally, Hong Kong has a persistent deficit in trade in goods and a surplus in trade in services. In the historical data series, the deficit in trade in goods was offset totally or partially by the surplus in trade in services. The impact of the new standards on trade in goods and trade in services of Hong Kong would be significant, as shown in Table 1. With the implementation of the new standards on “goods for processing” and “merchandising”, the balance of trade in goods of Hong Kong would be revised from a deficit to a surplus over the past decade, while the balance of trade in services would be revised from a surplus to a deficit. For example, the balance of trade in goods of Hong Kong in 2007 would be revised from a deficit of US\$20 Bn to a surplus of US\$43 Bn, and the balance of trade in services from a surplus of US\$42 Bn to a deficit of US\$21 Bn. The new standards would significantly affect the absolute magnitude of both trade in goods and trade in services for the Hong Kong economy, and dramatically change the economic interpretation and analyses of Hong Kong’s external account that local and international economists and analysts have long recognized.

Table 1: Balances of Trade in Goods and Trade in Services

(US\$Bn)

Reference Year	Balance of Trade in Goods		Balance of Trade in Services	
	Balance	Balance (Adjusted figures)*	Balance	Balance (Adjusted figures)*
1995	-16	12	9	-18
1996	-15	20	12	-22
1997	-17	21	11	-27
1998	-8	32	9	-31
1999	-3	36	12	-28
2000	-8	37	16	-30
2001	-8	37	16	-29
2002	-5	39	19	-25
2003	-6	38	20	-23
2004	-9	41	24	-26
2005	-8	48	30	-26
2006	-14	51	36	-29
2007	-20	43	42	-21

* Figures are adjusted for “goods for processing” and “merchanting” based on BPM6 standards.

B. Ranking in world merchandise trade

19. Given the significance of “goods for processing” and “merchanting” to the Hong Kong economy compared with other major trading economies, the significant downward revision in the figures in respect of exports of goods and exports of services would change the relative ranking of Hong Kong in world exports of goods and exports of services, as shown in Tables 2 and 3 respectively. With the implementation of the new standards on “goods for processing” and “merchanting”, the world ranking of Hong Kong in exports of goods and exports of services would drop notably from the 11th position to the 13th position and from the 11th position to the 15th position respectively for 2006.

Table 2: Top 20 Economies in Exports of Goods for Year 2006

(US\$Bn)		
Economy	Exports of Goods	Exports of Goods (Adjusted figures) ²
Germany	1,131 (1)	1,131 (1)
United States	1,027 (2)	1,027 (2)
China	970 (3)	970 (3)
Japan	616 (4)	616 (4)
France	483 (5)	483 (5)
United Kingdom	450 (6)	450 (6)
Italy	417 (7)	417 (7)
Canada	402 (8)	402 (8)
Netherlands	391 (9)	391 (9)
Korea, Republic of	332 (10)	332 (10)
Hong Kong	318 (11)	283 (13)
Russian Federation	304 (12)	304 (11)
Belgium	284 (13)	284 (12)
Singapore	275 (14)	275 (14)
Mexico	250 (15)	250 (15)
Taiwan	224 (16)	224 (16)
Spain	216 (17)	216 (17)
Saudi Arabia	211 (18)	211 (18)
Switzerland	167 (19)	167 (19)
Malaysia	161 (20)	161 (20)

Table 3: Top 20 Economies in Exports of Services for Year 2006

(US\$Bn)		
Economy	Exports of Service	Exports of Services (Adjusted figures) ²
United States	409 (1)	409 (1)
United Kingdom	230 (2)	230 (2)
Germany	174 (3)	174 (3)
France	118 (4)	118 (4)
Japan	117 (5)	117 (5)
Spain	106 (6)	106 (6)
Italy	99 (7)	99 (7)
China	92(8)	92(8)
Netherlands	85 (9)	85 (9)
India	75 (10)	75 (10)
Hong Kong	73 (11)	54 (15)
Ireland	68 (12)	68 (11)
Belgium	60 (13)	60 (12)
Canada	59 (14)	59 (13)
Singapore	59 (15)	59 (14)
Switzerland	52 (16)	52 (16)
Korea, Republic of	52 (17)	52 (17)
Denmark	52 (18)	52 (18)
Luxembourg	51 (19)	51 (19)
Sweden	50 (20)	50 (20)

Figures in brackets are rankings among economies in the world.

Sources: International Financial Statistics Yearbook 2007, the IMF

² Figures for Hong Kong are adjusted for “goods for processing” and “merchanted” based on BPM6 standards, whereas figures for other economies are assumed unchanged.

20. The significant revision in the figures of exports and imports of goods and services would also change the relative ranking of Hong Kong in world total trade in goods and total trade in services, as shown in Tables 4 and 5 respectively. With the implementation of the new standards, the world ranking of Hong Kong in total trade in goods and total trade in services would change from the 10th position to the 13th position and from the 16th position to the 12th position respectively for 2006.

21. As trade statistics are an important source of information used in business decision-making and bilateral trade negotiations among economies, the likely impact of this revision in trade figures on data users and trade negotiations has to be carefully assessed.

Table 4: Top 20 Economies in Total trade in Goods for Year 2006

(US\$Bn)		
Economy	Total trade in Goods	Total trade in Goods (Adjusted figures) ²
United States	2,887 (1)	2,887 (1)
Germany	2,065 (2)	2,065 (2)
China	1,722 (3)	1,722 (3)
Japan	1,150 (4)	1,150 (4)
United Kingdom	1,054 (5)	1,054 (5)
France	1,004 (6)	1,004 (6)
Italy	846 (7)	846 (7)
Canada	758 (8)	758 (8)
Netherlands	734 (9)	734 (9)
Hong Kong	649 (10)	516 (13)
Korea, Republic of	634 (11)	634 (10)
Belgium	564 (12)	564 (11)
Spain	534 (13)	534 (12)
Mexico	506 (14)	506 (14)
Singapore	505 (15)	505 (15)
Russian Federation	469 (16)	469 (16)
Taiwan	424 (17)	424 (17)
Switzerland	329 (18)	329 (18)
India	290 (19)	290 (19)
Malaysia	285 (20)	285 (20)

Table 5: Top 20 Economies in Total trade in Services for Year 2006

(US\$Bn)		
Economy	Total trade in Services	Total trade in Services (Adjusted figures) ²
United States	752 (1)	752 (1)
United Kingdom	406 (2)	406 (2)
Germany	394 (3)	394 (3)
Japan	253 (4)	253 (4)
France	226 (5)	226 (5)
Italy	199 (6)	199 (6)
China	193 (7)	193 (7)
Spain	185 (8)	185 (8)
Netherlands	163 (9)	163 (9)
Ireland	146 (10)	146 (10)
India	139 (11)	139 (11)
Canada	132 (12)	132 (13)
Korea, Republic of	123 (13)	123 (14)
Singapore	121 (14)	121 (15)
Belgium	115 (15)	115 (16)
Hong Kong	110 (16)	138 (12)
Denmark	97 (17)	97 (17)
Sweden	90 (18)	90 (18)
Luxembourg	82 (19)	82 (19)
Switzerland	81 (20)	81 (20)

Figures in brackets are rankings among economies in the world.
Sources: International Financial Statistics Yearbook 2007, the IMF

V. PLAN OF HONG KONG IN IMPLEMENTING THE NEW STATISTICAL STANDARDS

A. Additional Data Requirement

22. In order to implement the new statistical standards on “goods for processing”, the following additional information will have to be collected for Hong Kong:

- (a) Value of processing fee paid by Hong Kong; and
- (b) Value of raw materials/semi-manufactures used for processing which are not imported from Hong Kong (i.e. procured domestically in the Mainland or imported directly from sources other than Hong Kong to the Mainland).

23. In order to implement the new statistical standards on “merchanting”, quarterly data on the sales of goods and cost of goods sold for “merchanting” have to be collected to compile the value of merchanting services provided, which is the difference between the two components.

B. Strategy for Implementation of the New International Standards

Goods for processing

24. There are three different options for collecting the additional information for compilation of “goods for processing” statistics, namely:

- (a) Expanding the trade declaration documents to be reported by traders to Hong Kong Customs;
- (b) Conducting an enhanced survey on outward processing trade activities; or
- (c) Applying new data models and imputations.

25. Option (a) can provide all additional data required under the new standards (i.e. additional data requirements specified in paragraphs 22 and 23) in a reliable and timely manner. Moreover, a comprehensive set of statistics with breakdowns by commodity, by country of origin and destination can be compiled. However, this option would impose a heavy reporting burden on virtually all traders, and a substantial amount of resources is required in processing new data items collected from a large number of declarations. Option (b) can also provide the additional data required under the new standards. Less resistance is expected from traders as additional reporting burden will not be imposed on all traders but confined to only those selected in the sample survey. However, the statistics obtained from this option would be less precise than those obtained from Option (a), and this option can only support a limited breakdown of statistics by commodity group (say, around 30 commodity groups) and by country. Moreover, the time lag of availability of statistics (around 3 months after the reference period) is much longer when compared with Option (a). Though Option (c) would not impose additional reporting burden on any trader, this option can only provide the additional data required under the new standards at

the aggregate level and the estimates are very crude. Moreover, breakdown of processing trade by commodity group and by country would not be available.

26. Since each of the three options has its own pros and cons, Hong Kong will adopt a pragmatic modular approach to implement the new statistical standards for recording “goods for processing” by flexibly combining the three options at different stages of implementation, and for different levels of statistical detail.

27. First, new data models and imputation procedures will be constructed based on existing information to produce preliminary estimates of the additional data required at aggregate level under the new standards. Such data could be made available within short time lags for supporting timely compilation of major macroeconomic aggregates, such as GDP and BoP statistics. The data models will be designed to produce estimates on the proportion of goods related to outward processing trade within the overall trading activities, taking into account historical trends and relevant proxy indicators. An example of such proxy indicators is the imports of raw materials into Hong Kong from various sourcing markets since these raw materials would need to be imported into Hong Kong before they are delivered to the Mainland for outward processing. These data models, with appropriate input assumptions, will also produce estimates on processing fee for inclusion into trade in services statistics. Benchmark ratios of processing fee to the value of goods involved by commodity group and by country can be collected from benchmark surveys once every few years to supplement the model estimates.

28. Second, the existing survey on outward processing trade activities will be enhanced to collect additional information for compiling external trade statistics under the new standards. Enhancements include collecting additional information on the value of processing fee paid by Hong Kong, and the value of raw materials/semi-manufactures procured from sources other than Hong Kong and exported directly to the Mainland for processing without going through Hong Kong. Information collected from the survey will be available only with longer time lag but it can be used to revise the preliminary estimates of the trade aggregates produced by the data models and imputation procedures, and to support more in-depth analysis. The enhanced survey will also provide the information necessary for regularly updating the parameters of the data models used for estimating the preliminary trade aggregates.

29. A longer term target is to produce external trade statistics under the new standards with comprehensive breakdown by commodity group and by country. Among the various possible options, the possibility of collecting detailed information through expanding the trade declaration documents will be explored. In view of significant resistance from traders due to additional reporting burden and the high cost involved in processing new data items collected from a large number of trade declarations each quarter, a strong policy support of the initiative from Hong Kong SAR Government is essential. In order to solicit the support and co-operation of traders and the business community, a long-term strategy has to be developed involving various parties concerned.

Merchanting

30. Statistics related to “merchanting” are currently compiled based on data obtained from an annual survey of trade in services, which can only provide annual data. To implement the new

standards, the existing survey will be enhanced to collect quarterly breakdown on values of sales and cost of goods involved in “merchanting” for compiling quarterly GDP and BoP statistics.

C. Presentation and Interpretation of New Statistics

31. Apart from enhancing existing trade statistics to better reflect the increasing trend of globalization of production, trade statistics compiled based on “change of ownership” principle could more accurately reflect the genuine international trade flows, and therefore the trade relations among different countries/regions and the relative benefits accrued to the countries/regions concerned. Such statistics could facilitate economic analysis of bilateral trade among Hong Kong and her partner countries, and put the bilateral trade balance of these partner countries into proper perspective.

32. Under the new statistical standards, the value of external trade in goods shown under national accounts and BoP framework will be significantly different from that shown under merchandise trade statistics since the latter statistics are not compiled based on the “change of ownership” principle. To minimize confusion to data users, the following alternative dissemination practices will be carefully considered:

(a) Releasing Two Different Figures on Trade in Goods with Appropriate Bridge Tables to Explain the Gaps.

33. The benefit of this option is that it supports the specific needs of different data users. The bridge tables which explain the gaps between the two sets of figures on trade in goods would help to reduce the confusion to data users.

(b) Releasing Only One Single Figure on Trade in Goods and Services in National Accounts

34. The benefit of this option is that it avoids the publication of two different sets of statistics on trade in goods, one under national accounts and one under merchandise trade. Given that the distinction between goods and services is increasingly blurred, an increasing number of users may accept that they have to perform analysis by pooling trade in goods and trade in services together. However, there are always some data users who need to have breakdowns on goods and services, and their statistical needs must also be met.

35. Views of major data users on these alternative dissemination practices will be sought through talks, discussion sessions and visits organized for different target groups of data users. Educational pamphlets with illustrative examples elaborating on appropriate applications of the two sets of figures on trade in goods will be prepared and distributed to data users.

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