Distr.
GENERAL

Working Paper 6
18 November 2011

ECONOMIC COMMISSION FOR EUROPE and CONFERENCE OF EUROPEAN STATISTICIANS

UNITED NATIONS STATISTICAL DIVISION

EUROPEAN FREE TRADE ASSOCIATION

<u>Workshop on the Implementation of the 2008 System of National Accounts</u>
Kiev, 29 November-2 December 2011

Item 6b of the provisional agenda

Merchanting

<u>Extract from the UNECE guide "The Impact of Globalization on National Accounts": Chapter 6</u>

I. INTRODUCTION

1. The statistical treatment of merchanting is defined in BPM5 as *"the purchase of a good by a resident [of the compiling economy] from a non-resident and the subsequent resale of the good to another non-resident; during this process the good does not enter or leave the compiling economy"* (paragraph 262).

2. The recording requirements for merchanting activities are straightforward. Merchanting is calculated as the value of the goods sold (estimated at basic prices) less the cost of purchasing them. In the BPM5 and the 1993 SNA this merchanting margin is classified as an export of merchanting services. However, the detection and regular recording of these activities is extremely challenging for the country where the merchant is resident. This is because the goods in question never cross the frontier of the country where the merchant is resident and are therefore not covered by the official trade statistics there.

3. The value of global merchanting transactions reported increased by almost 130 per cent between 2004 and 2008 (see chart 1). Merchanting increased globally from €28.5 billion in 2004 to €65.2 billion in 2008, showing the increasing importance of this activity, particularly in the European Union where 25 countries report some merchanting activity. Data for 16 EU countries and Switzerland are shown in table 1.

Chart 1
Growth in merchanting 2004 – 2008 (2004 = 100)

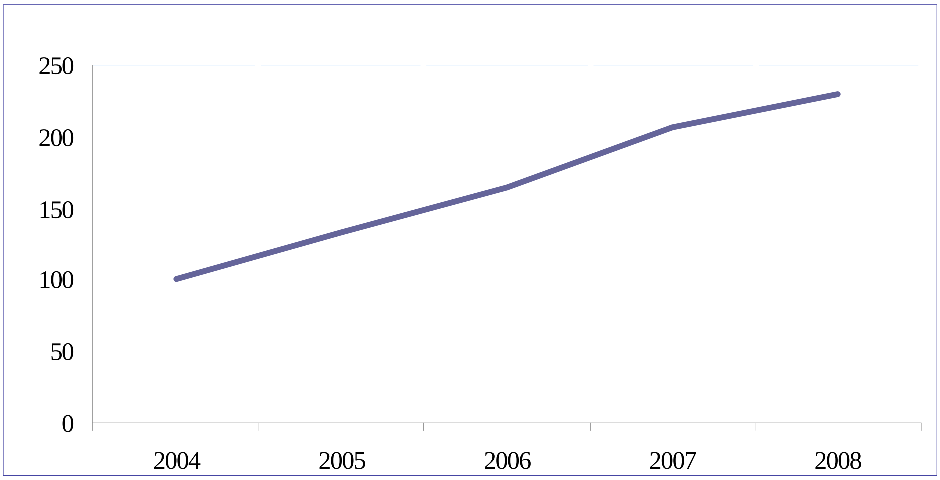


Table 1
Global merchanting 2004 – 2008

€ millions

	2004	*2005*	*2006*	*2007*	*2008*
European Union	25,543	34,223	41,453	52,329	56,145
of which:					
Belgium	1,233	1,469	1,408	4,580	4,251
Denmark	:	1,286	1,544	1,707	1,907
Germany	4,284	5,301	10,156	9,714	8,771
Ireland	2,480	4,018	5,301	8,816	9,817
France	3,323	5,864	6,213	5,631	8,220
Italy	140	141	164	132	106
Cyprus	319	404	468	369	627
Luxembourg	270	305	353	345	801
Hungary	988	1,234	1,157	1,235	1,317
Malta	35	61	80	51	82
Netherlands	1,020	1,059	1,143	1,196	1,240*
Austria	1,406	2,029	2,273	2,538	2,773
Slovenia	1	58	111	168	189
Finland	4,337	4,493	4,929	5,020*	5,100*
Sweden	3,459	3,936	4,866	6,669	7,392
United Kingdom	690	1,261	361	1,549	1,341
Switzerland	2,949	3,787	5,602	6,523	9,100
Total	28,492	38,009	47,055	58,852	65,245

(*) Estimate

4. Apart from Switzerland, Turkey is the only country outside the European Union to report merchanting activity, suggesting considerable underreporting of merchanting globally. Elsewhere, in (for example) the US balance of payments, the category "trade related" exports includes merchanting activities, but the amounts that relate solely to merchanting transactions cannot be determined from the published tables. In many countries the

activity may not be recorded at all. The fact that merchanting has hitherto been recorded on a net basis implies that the related gross flows would be even more significant. The 2008 SNA and BPM6 move to a form of gross reporting, in which the acquisition of goods by the merchant is recorded in the accounts of the country in which he is resident as a negative export, and the subsequent sale of the goods as a positive export, the difference representing the merchanting margin.

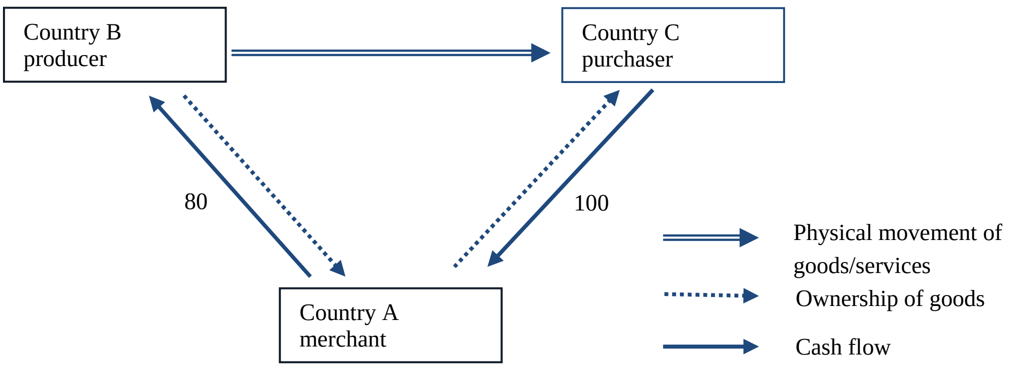
5. In this chapter the recommendations of the 2008 SNA and BPM6 for merchanting of goods will be outlined. Some guidance on identification of merchanting activities is also included, given the likely significant underreporting of this activity globally. Annex 2 discusses a range of merchanting issues from the perspective of the CSO in Ireland, where the phenomenon of merchanting of services is significant.

II. Background

6. The 1993 SNA, BPM5 and the international standards related to them provide no clear definitions of "merchanting" and "merchant" based on the economic nature of the activity. For example, in the BPM5 treatment as outlined above, the difference between the value of goods when acquired and the value when sold is recorded as the value of merchanting services provided (see chart 2 below for an illustration of a typical merchanting transaction).

Chart 2
Merchanting

Merchant in country A purchases goods from country B and sells to country C



7. However, there is a discussion of commodity arbitrage (*Balance of Payments Textbook*, paragraph 361) and the description in the 1993 SNA of this issue (paragraph 14.60) is along the same lines as BPM5. In addition the *Balance of Payments Compilation Guide* (paragraphs 138-139), *Balance of Payments Textbook* (paragraphs 189-194 and 361-362) and *Manual on Statistics of International Trade in Services* (MSITS) (paragraph 3.123 and box 6) deal with the treatment of merchanting. Nevertheless, various kinds of activities are included in the current definition of merchanting without any distinction between them. They include:

(a) Transactions resulting from global manufacturing.

(b) Global wholesaling services (and some retailing services).

(c) Commodity arbitrage (dealing).

8. Holding gains and losses on the goods while they are in the possession of the merchant, which properly speaking are not transactions, are nevertheless included indistinguishably in the provision of merchanting services.

9. However, the economic nature of the transactors and transactions does in fact differ, as explained below.

A. Global manufacturing

10. The MSITS when discussing merchanting (paragraph 3.123 and box 6) refers to commodity arbitrage and wholesale trading but not to transactions arising from global manufacturing. Many transactions between enterprises within a multinational enterprise (MNE) may however fall within the definition of merchanting. In reality, the merchanting service may often be a return for marketing, R&D, financing, process management, etc. provided by an enterprise that does not physically handle the goods. For example, an entity within an MNE arranges for goods to be manufactured by one non-resident affiliate and sold on to another. The transactions between the resident entity which commissions the production and acquires and then sells the goods, and its foreign affiliates, fall under the heading of merchanting for the resident affiliate.

11. Merchanting in the context of global manufacturing is no different from other examples of merchanting except that all transactions take place within the MNE. The key feature of this recording is that the product is not subject to any transformation while owned by the entity performing the merchanting function. If the good is transformed or processed while in the ownership of the resident entity, the transaction is instead recorded under the goods for processing heading “manufacturing services on physical inputs owned by others” in the services account.

12. In reality transactions between affiliates of an MNE may combine elements of merchanting and processing. Chapter 5 concerns goods for processing, and Chapter 8 discusses this and many other issues arising from the recording of global manufacturing.

B. Global wholesaling and retailing services

13. The treatment of merchanting also covers international wholesale/retail activities, where the merchant earns a margin by purchasing from one non-resident supplier and selling to another non-resident retailer or other distributor.

C. Commodity trading

14. Historically, merchanting often involved buying and selling physical commodities in the hope of profiting from price differences in the market for them. Much commodity trading now takes the form of trading in derivatives (options, futures, swaps, etc.) rather than in the underlying commodities. Trading in commodity derivatives is not regarded as merchanting.

III. The statistical treatment recommended in international standards

15. The reporting of merchanting-type activities has been discussed in all versions of the BPM since the first edition in the late 1940s. Over time, as the nature of globalized business activities has broadened and the methodology for the balance of payments current account has been elaborated, more activities have been reported under the heading of merchanting.

16. Previous editions of the BPM classified merchanting activities in various ways, as summarized in table 2.

Table 2
Treatment of merchanting activities in successive IMF Balance of Payments Manuals

Edition of the Manual	*Required recording*	*Classification in the BPM methodology*
BPM 1st edition - 1948	Record net under merchandise	Other transactions in merchandise
BPM 2nd edition - 1950	Record gross under merchandise	Other transactions in merchandise
BPM 3rd edition - 1961	Record net under merchandise	Merchandise transactions abroad
BPM 4th edition - 1977	Record net under "other" goods, services and income	Other goods, services and income
BPM 5th edition - 1993	Record net under services	Business services
BPM 6th edition - 2009	Record gross under goods (imports recorded as negative exports)	Goods under merchanting

17. For national accounts, the treatment of merchanting follows the same approach as that of the BPM and is outlined in the 1993 SNA as follows:

"*...the third exception [to the change of ownership principle] is one in which a change of ownership may occur but is ignored in the accounts. The exception relates to merchants or commodity dealers who buy commodities or other goods from non-residents and then sell them again to non-residents within the same accounting period without the commodities actually entering the economy in which the merchants are resident. The difference between the receipts and the sales of such dealers is treated as measuring the value of the services they provide and recorded under exports or imports of services*" (paragraph 14.60).

18. While not mentioned explicitly in previous SNA manuals, the treatment of merchanting activities is a generalized one for all cross-border transactions in goods and services. For example the 1968 SNA says:

"*the scheme of classification [of the 1968 SNA] is also aligned as much as is possible with the classification of goods and services in the third edition of [the] Balance of Payments manual of the International Monetary Fund*" (paragraph 6.138).

19. It can be seen that the thinking behind the recommended treatment for merchanting has varied between net and gross recording. It is noteworthy that the motivation in BPM6 and the 2008 SNA for the required recording of merchanting in the goods account rather than the services account of the balance of payments is in line with the treatment in BPM3, where merchanting was to be recorded under the goods heading so that the net balance on merchanting "*must be added to exports to make world exports equal world imports*" (BPM3, page 43, paragraph 4). Subsequent editions seem to be more concerned to recognize the services aspects of merchanting activities at the expense of global additivity within the goods account. This is reflected in the instructions to record merchanting under services in BPM5.

A. International discussions on the 1993 SNA and BPM5 treatment of merchanting

20. Merchanting has been extensively discussed in various fora as part of the drafting of 2008 SNA and BPM6. These include the Advisory Expert Group (AEG) on National Accounts, the Intersecretariat Working Group on National Accounts (ISWGNA), the Balance of Payments Technical Expert Group (BOPTEG), the IMF Balance of Payments Committee and the Inter-agency Task Force on Statistics of International Trade in Services (TFSITS).

21. The discussions have focused on the merchanting of goods, and in this context they have highlighted a number of difficulties caused by the current treatment of merchanting. These difficulties can be summarized as follows.

(a) The recording of merchanting transactions is asymmetrical, i.e., the merchanting margin is recorded under services for the economy in which the merchant is resident, whereas statisticians in the countries in which the counterparties are resident record the related gross transactions in the goods account for both the exports and imports. This method of recording merchanting activities results in a global imbalance in the goods account. Annex 1 contains a full discussion of this issue.

(b) The treatment is inconsistent with *inventories* data and *balance sheets* both for the merchant and for the supplier. Legal and economic ownership of the goods passes to the merchant when he acquires them, but the current treatment ignores this, with the result that data on assets are inconsistent with the enterprise accounts and balance sheets which show the actual position of the merchant. As the national accounts may not record these stocks in the *value of inventories* as owned by the resident merchant, the inventories may be without an owner. Although there is a provision to avoid this outcome in both the 1993 SNA (paragraph 14.60: "*If, however, the goods are not resold within the same accounting period, the purchases have to be recorded as imports of goods which are temporarily held as inventory*..") and BPM5 (paragraphs 213 and 262: "*…if the commodities are not resold by the merchant in the same accounting period, an import of goods is recorded in the first period and a negative import entry is recorded in the later period*"), implementing these guidelines is difficult for the compiler, with the likely consequence that inventories are not attributed to any owner.

(c) The valuation principles are not consistent with supply and use (SU) tables. Ignoring taxes, the SU tables are valued at either basic prices (i.e. goods transactions and margins are shown separately) or purchasers' prices (i.e. goods transactions are valued at basic prices plus corresponding margins). The existing treatment of merchanting is not consistent with either pricing approach, as the merchant's margin is recorded under wholesale trade with no corresponding goods transaction. The treatment also undermines the relationship between distribution industries and the corresponding goods transactions, as the latter are omitted.

(d) All other goods transactions in the balance of payments are recorded gross, including any retail and wholesale margins arising up to the national frontier. But only the margin (not the underlying good) is recorded in the balance of payments current account of the country where the merchant is resident.

(e) No clear definitions, based on the economic nature of the activity, are provided for "merchanting" and "merchant" in the 1993 SNA and BPM5 and related international standards.

B. Merchanting in the 2008 SNA and BPM6

22. The revised treatment for merchanting in the 2008 SNA and BPM6 can be summarized as follows.

(a) The acquisition of goods by merchants is to be shown under goods as a negative export of the country in which the merchant is resident.

(b) The subsequent sale of the goods is shown under "goods sold under merchanting" as a positive export of the country in which the merchant is resident.

(c) The difference between sales and purchases of merchanted goods is shown as "net exports of goods under merchanting." This item includes merchants' margins, holding gains and losses and changes in inventories in the form of goods under merchanting (where the merchanting activity spans two accounting periods). As a result of losses, or increases in inventories, net exports of goods under merchanting may be negative in some cases. If the merchant arranges for the goods to be packaged, or otherwise treated without affecting their condition, the merchant buys "manufacturing services on physical inputs owned by others" (see BPM6, box 10.1).

(d) Merchanting entries are valued at transaction prices as agreed by the parties, not at "free on board" (f.o.b.) prices.

(e) In the SU tables the difference between the sales and purchases of merchanted goods appears as the production of a service in the merchant's economy, consistently with the treatment of margins applied to domestically produced goods. Annex 3 discusses the recording of merchanting in SU tables.

23. The new treatment can be summarized as requiring merchanting transactions in goods to be recorded in the goods account rather than the services account in the balance of payments and the national accounts. Although the recording is gross, both the purchase and sale are entered on the credit (export) side, with purchases (imports) recorded as negative exports. In the SU tables the net surplus earned by the merchant is shown as a service.

C. Impact of the treatment in the 2008 SNA and BPM6

24. How far the new guidelines resolve the difficulties associated with the current recording of merchanting of goods under the 1993 SNA and BPM5 is now discussed following the order in paragraph 21.

(a) *The recording of merchanting transactions is asymmetrical.* On the assumption that all merchanting transactions are in the goods account, the changed reporting requirements help to remove the discrepancy between global exports and imports. This result is illustrated in annex 1 which compares the 1993 SNA and 2008 SNA treatments.

(b) *The treatment is inconsistent with inventories data and balance sheets both for the merchant and for the supplier.* As paragraph 22 (c) noted, the difference between sales over purchases of merchanting is shown as the item “net exports of goods under merchanting”, which includes merchants' margins, holding gains and losses and changes in inventories of goods under merchanting. The new standards should resolve the difficulties with inventories and holding gains (see annex 1). However, it should be noted that holding gains and losses are excluded from trade margins in national accounts, because they do not represent transactions. In practice, particularly in the case of merchanting where data are scarce, the new manuals recognize that data sources may not allow all holding gains and losses to be excluded.

(c) *The valuation principles are not consistent with SU tables.* The inclusion in the gross value of exports by the merchant of the wholesale/retail margin and the holding gains/losses accruing while the goods are in inventory is consistent with the measurement in SU tables of these margins in the SNA and BPM.

(d) *All other goods transactions in the balance of payments are shown including any retail and wholesale margins arising up to the national frontier,* not with these margins separated. At the individual country level this drawback remains, and it is difficult to see how this issue could be resolved while at the same time attributing the surplus to the country of the merchant.

(e) *No clear definitions, based on the economic nature of the activity, are provided for "merchanting" and "merchant" in the 1993 SNA, BPM5 and other current international standards.* The BPM6 contains a discussion of the economic nature of merchanting.

25. A final point is that the gross reporting of merchanting activities as negative and positive exports when the goods never cross the border of the country where the merchant is resident poses a serious challenge for compilers. To this end some practical approaches to identifying and recording merchanting activities are set out in the next section.

IV. Proposals for operational treatment in the accounts: identification and recording of merchanting activities

26. The IMF considers that merchanting activity is probably underreported globally. It is easy to understand that such a situation could arise given the nature of merchanting, where the goods being merchanted do not cross the border of the country in which the merchant is resident. Compilers must therefore first identify merchanting activities and then establish a system of regular reporting through business surveys. It may also be difficult for statisticians in the supplier country to assign goods sold to a foreign merchant to the correct country of destination, since they are likely to be recorded as shipped to the country of the final buyer.

27. How can these activities be captured in the balance of payments statistics and by extension included in the national accounts? It is important to identify enterprises engaged in merchanting, to establish a frame for collecting data on the activity. Merchanting activities can be identified in a number of ways.

(a) First, an entity or enterprise solely involved in merchanting normally employs a relatively small staff while having substantial turnover - turnover per person tends to be very large. The national statistical institute could use its business register to identify such cases using ratio analysis.

(b) MNEs sometimes engage in merchanting in conjunction with the production of other goods or services. These merchanting activities can be captured through a specific question on sales and purchases of merchanted goods.

(c) The analysis of administrative data such as corporation tax records or dividend tax payments can also be used to identify firms with large taxable profits but no substantial physical presence in the economy, which are characteristics of merchants. Comparing customs data with corporation tax records may reveal another indication of merchanting. Particular enterprises may earn large profits without having exports of goods which might be expected to generate them.

(d) An awareness of MNE practices and recording conventions is also helpful in identifying these activities, and statistical staff visiting MNEs should be aware that they may undertake merchanting activities, and be prepared to ask appropriate questions. It should be noted however that the term "merchanting" is generally not used by MNEs or other enterprises, which makes it more difficult to detect the activity. For example merchanting is also called "drop shipping" or "virtual sales" by these companies. In Ireland, an enterprise name ending in "EMEA" (short for "Europe, Middle East and Africa") sometimes indicates involvement in merchanting.

28. In general the detection of merchanting activities requires statisticians concerned with business services surveys and national accounts and balance of payments compilers to be aware of the phenomenon and also of the likely circumstances in which merchanting may occur. They may then devise questions designed to measure the activity.

29. As regards the recording of merchanting in national accounts, as mentioned earlier trade margins, such as the merchanting margin, should exclude holding gains and losses. In practice, it is difficult to exclude them. Thus:

- Collection systems for balance of payments statistics may not identify holding gains and losses.
- Balance of payments statistics may be compiled by a separate institution, e.g. the national central bank.
- Merchanting activities, whoever records them, will cover numerous transactions at both company and aggregate level.

30. The recording of merchanting activities is discussed in detail in annex 1. Some practical points need to be kept in mind in the context of the national accounts.

(a) On the expenditure side of the national accounts, the merchanting margin should have the same impact as in the balance of payments, i.e. the net export of goods should be identical in both sets of accounts. When transactions straddle accounting periods, the initial transaction (the negative export recorded in the accounts of the country in which the merchant is resident) must be matched by an increase in inventories, since otherwise GDP will be reduced by the amount of the purchase of the goods. In the second period, the sale of the goods must be recorded as a (positive) export largely offset by a reduction in inventories, leaving the margin earned on the transaction as a net addition to GDP. It may be useful if this change in inventories held abroad arising from merchanting can be recorded separately from other changes in inventories.

(b) As paragraph 29 noted, a fall (or rise) in the price of the goods in the course of the merchanting (a holding gain or loss for the merchant) is unlikely to be picked up in practice. Consequently the recording of changes in inventories and net exports of goods may result in some inconsistency between the expenditure and output measures of GDP.

V. Recommended future work on the issue: extension of the treatment to cover merchanting of services

31. The 2008 SNA and BPM6, which relate to the recording of merchanting of goods in the goods account of the balance of payments and in national accounts, should resolve most of the existing problems associated with statistical recording of this type of merchanting activity.

32. Merchanting of services is not a new idea. Indeed BPM3 referred to it in 1961:

"*…the compiling country's residents may carry out international transactions in goods and services that are entered only on a net basis. Such transactions involve the purchase of goods or services in one foreign country and the sale or granting of them to another foreign country...*" (paragraph 472).

However, where merchanting relates to services, the new guidelines may create some fresh difficulties. Under the BPM6 guidelines, there will no longer be a services category "merchanting." Services sourced and delivered in a merchanting-type arrangement must be recorded as gross transactions in the relevant services category. For example, if computer services are being merchanted, the compiler in the country in which the merchant is resident records an import of computer services of (say) 100 and an export of 130, with no indication that these services are being merchanted.

33. Moreover, merchanting of services and services-type activities in general is an area where considerable growth in activity has already been observed. This point is developed in a paper by Hummels:

"*There is perhaps a third era in cross border trade unfolding even now, again driven by rapid improvements in a technology for connecting people across great distances. Clearly the telecommunication and internet revolution has already affected international integration, leading to a growing rate of transformation and technology outsourcing and in migration of highly skilled professionals. The impact of these changes and the extent to which they displace older forms of integration bear close watching in the years to come*" (Hummels, 2007).

34. Thus an entity in country A may purchase services in country B and promptly sell them, without transforming them in any way, to a client in another country. This is a form of merchanting. An example of the merchanting of services is the purchase by a resident company from a non-resident of telecommunications services and the sale of these same services to a related company or third party abroad. The transaction might take the following form: a resident company (merchant) in country A enters into an agreement with a major international telecommunications company in country B, the owner of an international telephone line or similar satellite or wireless means of telecommunication. The agreement takes the form of a lease of the telephone line for a set period. This line is from country B to country C. The company resident in A (the merchant) then sells the use of this line to an affiliate or third party resident in country C. The buyer is typically an MNE

seeking to create a virtual international communications network. This transaction is therefore a single step in achieving this network. Annex 2 (paragraphs 52-55) gives an instance from the experience of Ireland, where a resident entity buys software services (for example, a licence to use software) from its US parent for sale to a client in another country. Although the international standards require gross recording of such services, it can be argued that a net recording, as for goods, would be more appropriate.

35. As part of this so-called third era of globalization, there has been an explosion in the merchanting of services through outsourcing facilitated by innovations in telecommunications and web-based (internet) services. Indeed BPM6 does refer to the merchanting of services:

"*Business and other services such as transport, construction, and computing may be subcontracted. This arrangement may be called 'outsourcing.' For example a specialist service arranger may be paid to provide back-office functions for a customer, which the service arranger subcontracts to another contractor. Thus, subcontracting is similar in some ways to merchanting of goods as the services are purchased and resold....'Service merchanting' of this kind is an important activity in some economies..*" (paragraph 10.160).

36. Although the requirement is for a gross recording approach for these services, later in the paragraph BPM6 does allow the possibility of providing net data on a supplementary basis.

37. So the BPM6 recognizes the issue of merchanting of services, but there is no distinct treatment for such transactions in the new manual. The scale of the gross flows involved in this type of merchanting activity, at least for the countries identified earlier in this chapter, does seem to warrant a net treatment under a separate classification in business services.

VI. Conclusion

38. 2008 SNA and BPM6 guidelines for the recording of merchanting activities address the shortcomings in the treatment of these activities in BPM5 and by extension in the 1993 SNA. These shortcomings relate to the global additivity of the goods account and the treatment of inventories and holding gains and losses. BPM6 also recognizes the issue of merchanting of services and its recording in the balance of payments. However, the recommended approach for the merchanting of services is a gross treatment under the relevant services category, with the possibility of a net presentation on a supplementary basis. This recommendation goes some way towards recognizing the impact of globalization and the consequent increase in the importance of telecommunications and internet services, and the impact that these developments will have on trade in services and on the merchanting of services in particular.

VII. Annex 1

Merchanting of goods: 1993 SNA and BPM5 treatment compared with the new standards in the 2008 SNA and BPM6

A. The basic case

39. The following example illustrates the basic principles of the present and new treatments, and the difference between them. It may help understanding of the consequences of the change in the 2008 SNA and BPM6. All transactions occur within a recording period, with the goods physically moving from country B to country C directly without entering country A where the merchant is resident. It is assumed that all transactions are settled by transfers of bank deposits (part of the financial asset category "currency and deposits").

- Value of goods purchased by a resident of country A from a resident of B = 80
- Value of goods which the resident of A resells to a resident of C = 100

Chart 3

Merchanting

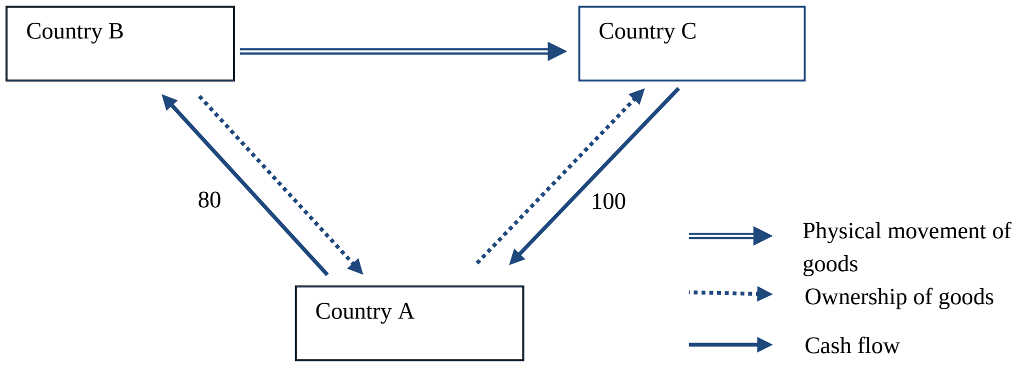


Table 3

Treatment under the 1993 SNA and BPM5 and recording in the 2008 SNA and BPM6

1993 SNA / BPM5 treatment			*2008 SNA / BPM6 treatment*		
	Credit	*Debit*		*Credit*	*Debit*
Country A			**Country A**		
Services: merchanting	20		Goods under merchanting	100	
Bank deposits		20	Goods under merchanting	-80	
			Bank deposits		20
Country B			**Country B**		
Goods	80		Goods	80	
Bank deposits		80	Bank deposits		80
Country C			**Country C**		
Goods		100	Goods		100
Bank deposits	100		Bank deposits	100	
Global balance*			**Global balance**		
Goods	80	100	Goods	100	100
Services: merchanting	20		Incl. goods under merchanting	20	0
Bank deposits	100	100	Bank deposits	100	100

* Merchanting is recorded only in country A (the exporter of merchanting services). This causes global imbalances in goods and services as no debit entry in merchanting is recorded.

B. Holding gains or losses

40. This case treats a holding loss; the recording principles are the same for a holding gain.

41. The following example (chart 4 and table 4) illustrates the principles of the present and new treatments if holding gains and losses occur. Before the resident of A resells the goods to the resident of B, the price decreases by 30. All transactions occur within a recording period, with the goods physically moving from country B to country C directly, and not entering country A. It is assumed that all transactions are settled by transfers of bank deposits.

- Value of goods purchased by a resident of country A from a resident of B = 80
- Value of goods which the resident of A resells to the resident of C = 50

Chart 4
Merchanting (holding gains and losses)

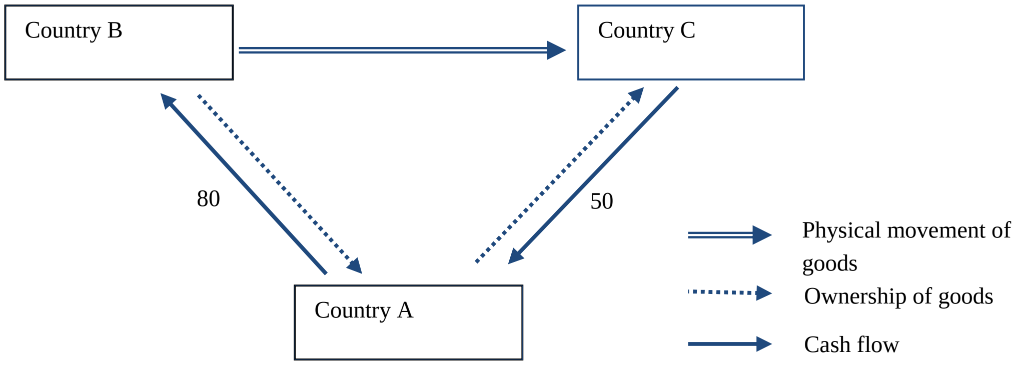


Table 4
Treatment under the 1993 ESA and BPM5 and recording in the 2008 SNA and BPM6

1993 SNA/BPM5 treatment			*2008 SNA/BPM6 treatment*		
	Credit	***Debit***		***Credit***	***Debit***
Country A			**Country A**		
Services: merchanting	-30		Goods under merchanting	50	
				-80	
Bank deposits	30		Bank deposits	30	
Country B			**Country B**		
Goods	80		Goods	80	
Bank deposits		80	Bank deposits		80
Country C			**Country C**		
Goods		50	Goods		50
Bank deposits	50		Bank deposits	50	
Global balance			**Global balance**		
Goods	80	50	Goods	50	50
			Incl. goods under merchanting	-30	
Services: merchanting	-30				
Bank deposits	80	80	Bank deposits	80	80

C. Changes in inventories: transactions that fall into two recording periods

42. The example in chart 5 and tables 5 and 6 illustrates the principles of the present and proposed treatments if merchanting transactions straddle recording periods. The value of the transactions is the same as in the basic case. However, the resident of A purchases goods from the resident of B in period t and resells the goods to a resident of C in period t+1. The goods move from country B to country C directly, without entering country A. It is assumed that all transactions are settled by transfers of deposits. Country A records an increase in inventories in period t, and a corresponding fall in t+1.

Chart 5

Merchanting (when transactions straddle recording periods)

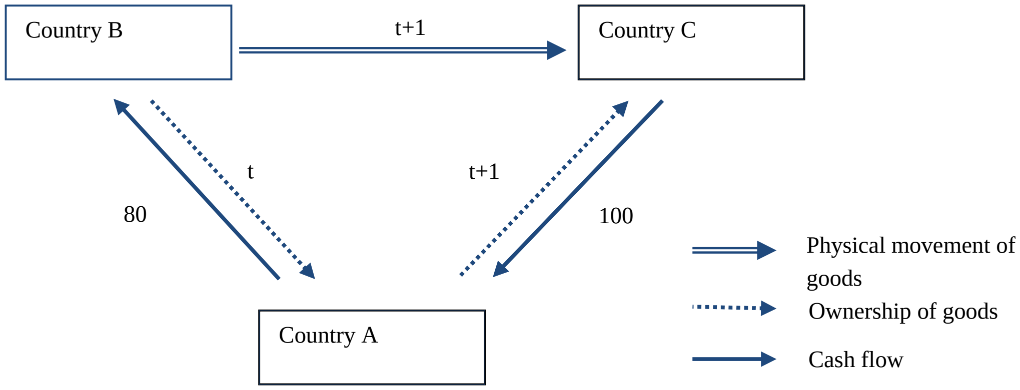


Table 5

Treatment under the 1993 SNA and BPM5

a) period t	*Credit*	*Debit*	*b) period t+1*	*Credit*	*Debit*
Country A			**Country A**		
Goods		80	Goods		-80
			Services: merchanting	20	
Bank deposits	80		Bank deposits		100
Country B			**Country B**		
Goods	80				
Bank deposits		80			
Country C			**Country C**		
			Goods		100
			Bank deposits	100	
Global balance			**Global balance**		
Goods	80	80	Goods		20
			Services: merchanting	20	
Bank deposits	80	80	Bank deposits	100	100

Table 6

Recording in the 2008 SNA and BPM6

a) period t	***Credit***	***Debit***	***b) period (t+1)***	***Credit***	***Debit***
Country A			**Country A**		
Goods under merchanting	-80		Goods under merchanting	100	
Bank deposits	80		Bank deposits		100
Country B			**Country B**		
Goods	80				
Bank deposits		80			
Country C			**Country C**		
			Goods, debit		100
			Bank deposits	100	
Global balance			**Global balance**		
Goods	80		Goods	100	100
Incl. goods under merchanting	-80		Incl. goods under merchanting	100	
Bank deposits	80	80	Bank deposits	100	100

VIII. Annex 2

Country practice: the Irish approach

43. As shown in table 1 in the introduction to this chapter, because of its highly globalized economy Ireland is one of the five most important countries for merchanting activities. However, recorded merchanting activity for Ireland includes merchanting of services as well as service activities associated with the merchanting of goods. This broader scope for merchanting activities is based on country specific treatments developed by the CSO on account of their scale in Ireland.[1]

44. The CSO approach in compiling these statistics on merchanting activities is based on the recommendations of the BPM5 in relation to merchanted goods. However, certain significant modifications are made where considered necessary for clear and understandable results. These modifications were initially related to the treatment of services outsourced and delivered abroad in association with the supply of goods. They have recently been extended to the treatment of services outsourced and delivered abroad where goods are not involved.

45. The main reason for the CSO's approach is to reduce the potential for statistical distortion arising from these very large transactions in both goods and services sourced and delivered abroad. Some statistical users, particularly trade associations or representatives, may be misled by statistics for exports of services which are inflated by gross recording of merchanted services. It seems better not to inflate the services exports and imports data by including such transactions, particularly if such large aggregate flows are likely to be compared with employment levels in a particular industry in Ireland. Nevertheless it is acknowledged that net recording by one compiler can lead to asymmetries where counterpart compilers record the transactions on a gross basis in their balance of payments statistics.

46. The treatments for outsourced services adopted by the CSO and described below may seem to depart from the recommendations of the international statistical standards. Yet, while a gross treatment of outsourced services delivered to a non-resident customer may be implicit in BPM5, there appears to be no explicit discussion of such delivery of services in the manual documentation or any explicit reference as to how the relevant transactions should be treated.

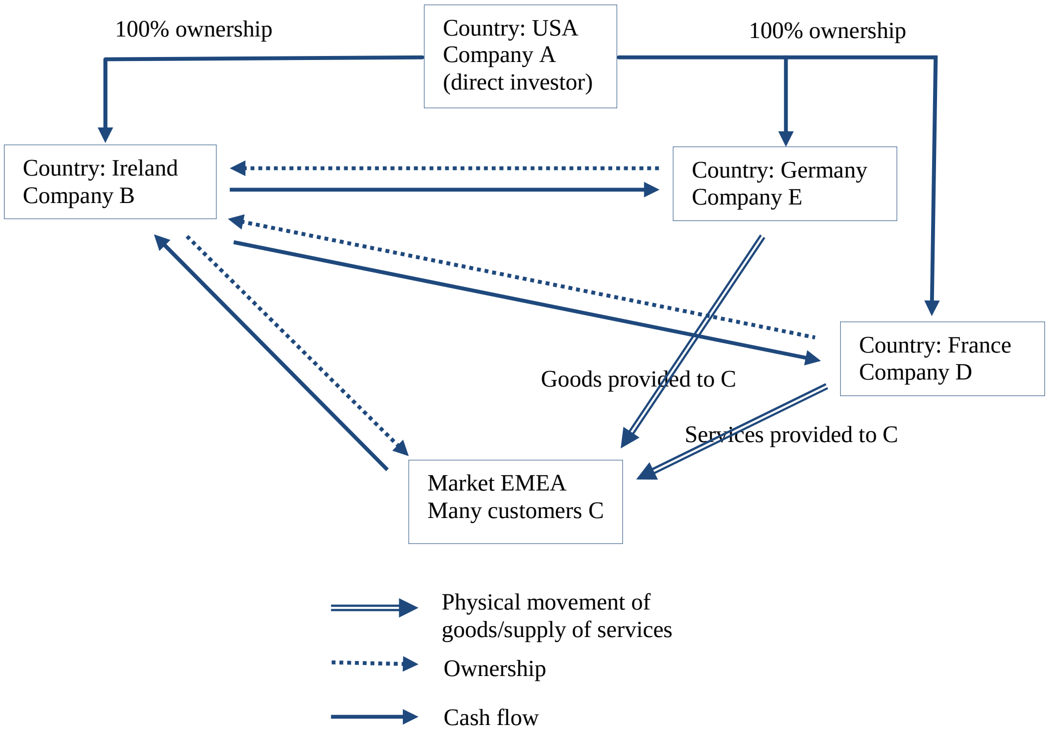
47. Two examples are set out below: the first relates to merchanting of goods and associated services, and the second relates to merchanting of services only.

A. Merchanting of goods and related services

48. The following is a simplified version of more complicated activities and practices. A direct investment enterprise located in Ireland (B) is owned by a US investor (A). B in Ireland arranges for the supply of equipment to a number of unrelated customers (C) in the European, Middle Eastern and African (EMEA) markets, for its installation and maintenance, and for the provision of related staff training, etc. The goods and services supplied are not sourced in Ireland by B: €2 billion of goods are purchased by B from its affiliate (E) located in Germany, and €3.5 billion of services are purchased from another affiliate D in France. The two affiliates deliver the goods and services to the customers (C). These customers pay B a total of €6 billion for the goods (€2.2 billion) and services (€3.8 billion) they receive. The Irish trader, B, records in its accounts all payments and receipts arising from the order. Chart 6 describes the situation.

[1] References to the CSO treatment of merchanting are based on Fitzpatrick, 2007.

Chart 6
Merchanting and related transactions



49. Under the BPM5 and other international recommendations, the goods element in these transactions would appear in the balance of payments of Ireland only as the net margin (€0.2 billion) recorded as a merchanting service credit. The related service transactions would appear in imports and exports of services, a credit of €3.8 billion and a debit of €3.5 billion (see table 7).

Table 7
1993 SNA and BPM5 recording treatment

			€ millions
B.o.p.item	***Credit***	***Debit***	***Net***
Merchanting services	200		200
Other services	3,800	3,500	300
Total	4,000	3,500	500

50. As both the goods and services delivered to the EMEA customers (C) have been sourced from and delivered by a non-resident of Ireland (i.e. a French D and a German E foreign affiliate of the Irish entity B), the CSO treats the combined transactions for goods and services described above on a net basis. It records the overall net margin of €0.5 billion as a credit (service export) under merchanting services in the services part of the balance of payments current account (see table 8).

Table 8
CSO, Ireland recording treatment

B.o.p.item	*Credit*	*Debit*	*Net*
			€ million
Merchanting services	500		500
Other services	-		-
Total	500		500

51. The new proposals for the treatment of merchanting do not allow for the merchanting of services. Table 9 shows what the recording of these transactions in goods and services would be under the 2008 SNA and BPM6.

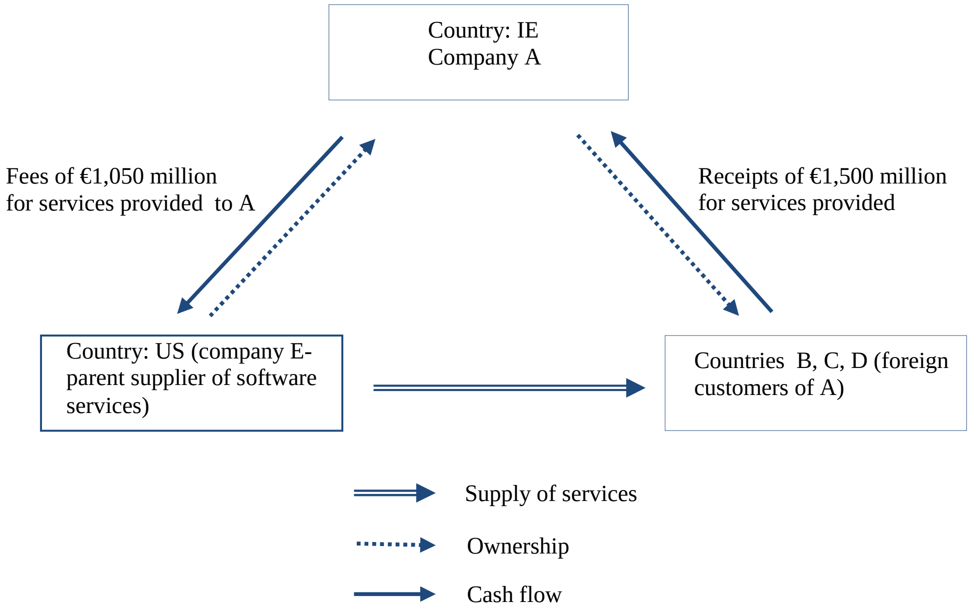
Table 9
Recording treatment under the 2008 SNA and BPM6

B.o.p. item	*Credit*	*Debit*	*Net*
			€ millions
Goods - merchanting	2,200 -2,000		200
Other services	3,800	3,500	300
Total	4,000	3,500	500

B. Merchanting of other services

52. In this further example, an Irish resident direct investment enterprise (A) has EMEA customers located in countries B, C and D. A purchases software services from its US parent for €1,050 million and supplies them to its EMEA customers for a total of €1,500 million. A records all turnover and expenditure as well as the profits generated. Chart 7 describes the situation.

Chart 7
Treatment of receipts and expenditure of an Irish direct investment enterprise for services provided by foreign affiliates



53. The CSO records the above transactions in its balance of payments statement as shown in table 10.

Table 10
CSO, Ireland recording treatment for merchanted services

			€ millions
B.o.p. item	***Credit***	***Debit***	***Net***
Merchanting services	450	-	450
Profits		450	-450
Total	450	450	0

54. The €450m recorded under merchanting services results from the netting of A's services imports of €1,050 million paid to the US parent with the services exports totalling €1,500 million. The operation in Ireland is assumed to be little more than a "brass plate" and its local costs to be zero. The merchanting surplus goes entirely to profits earned which are attributed to the US parent. Applying instead the proposed treatment for merchanting would give the result shown in table 11.

Table 11
2008 SNA and BPM6 recording treatment for this example

			€ millions
B.o.p. item	***Credit***	***Debit***	***Net***
Other services	1,500	1,050	450
Profits		450	-450
Total	1,500	1,500	0

55. The example suggests that a net treatment for the recording of transactions in merchanting of services (as in table 15) is appropriate. This is particularly important if the resident entity is the principal enterprise within a multinational group through which the receipts and expenditures of the various affiliates are routed, because a change in this arrangement can have a significant impact on the data. Thus a decision by the parent company to transfer the role to an affiliate in another country may result in a large discontinuity in the service data and profit/loss. A net treatment limits the extent of the discontinuity.

IX. Annex 3

The recording of merchanting in the supply and use tables

56. Chapter 6 outlined the changes to the guidelines for the recording of merchanting activities in the 2008 SNA and BPM6. These changes have consequences for the recording of merchanting in the SU tables, as illustrated here by an example. Merchants resident in economy A deal in two products, butter and computers. The recording of these merchanting activities in a particular year is set out below, firstly in line with the recording principles of the 1993 SNA (tables 12 and 13), and then following the recommendations of the 2008 SNA (tables 14 and 15).

57. The 1993 SNA records the **supply** from merchanting by allocating the output to the relevant industry engaged in the merchanting, namely *office machinery and equipment* for computers, and *food and beverages* for butter. This allocation can be seen in table 12. These two products are recorded under the **product** of *wholesale trade*, because, since the products have been sourced abroad and sold to another non-resident, effectively only the margin earned on these transactions is recorded by the industries engaging in the merchanting. In many cases merchanting is not the only activity of these firms, and the activity covers also merchanting among affiliates within MNEs. Unlike other wholesale trade activities in the economy, the total for this activity at basic prices is not then redistributed across the product categories in the *trade margin* column, as the underlying products being merchanted never enter the economy and the output is treated as a

service. Consequently in the supply table, going from output at basic prices to total supply at purchasers' prices, the merchanting margin is recorded under *wholesale trade* but is not then allocated to any underlying products. This differs from the general recording of trade margins in the supply table. In the example, the merchanting supply of 600 (200 butter, 400 computers) is the total at basic prices and at producer prices for the "product" *wholesale trade*.

Table 12
Supply table, 1993 SNA

	Industries	Agriculture, forestry and fishing	Food and beverages	....	....	....	Office machinery and computers	Total domestic supply at basic prices	Imports	Trade margins	Taxes	Subsidies	Total supply at purchasers' prices
Products													
Agriculture, forestry and fishing													
Food and beverages													
....													
....													
Wholesale trade			200				400	600					600
Office machinery and computers													
Total			**200**				**400**	**600**					**600**

58. The **use** of merchanting is recorded in the exports column of the use table at purchasers' prices. The total for merchanting exports representing the merchanting margin of 600 is recorded under the product *wholesale trade*.

59. In the 2008 SNA, the **supply** of merchanting activities is again allocated to the product *wholesale trade* and across the industries where merchanting took place. However, in contrast to table 12 (the 1993 SNA recording), the total for this activity at basic prices is then redistributed across the product categories in the *trade margin* column with the result that total supply is recorded by product at purchasers' prices. This occurs because merchanting has been reclassified as a transaction in goods in the 2008 SNA.

60. Table 15 sets out the recording of merchanting in the use table. This also changes because the merchanting margin is now allocated across the product types at purchasers' prices, whereas under the 1993 SNA the entire margin was allocated to the product *wholesale trade* in the use table (table 13).

61. Thus the new recording guidelines for merchanting improve the analysis of this activity in the SU tables. Whereas formerly all the supply was allocated to the product *wholesale trade* in the relevant activity at basic prices, the treatment is now symmetrical with the analysis at producers' prices.

Table 13
Supply table, 1993 SNA

	Industries	Agriculture, forestry and fishing	Food and beverages	....	Office machinery and computers	Total inter-industry	HCE	NPISH	Government	GFCF	Change in inventories	Exports	Total final uses
Products													
Agriculture, forestry and fishing													
Food and beverages													
....													
....													
Wholesale trade						0						600	600
Office machinery and computers						0							
Total						**0**						**600**	**600**

Table 14
Supply table, 1993 SNA

	Industries	Agriculture, forestry and fishing	Food and beverages	....	....	Office machinery and computers	Total domestic supply at basic prices	Imports	Trade margins	Taxes	Subsidies	Total supply at purchasers' prices
Products												
Agriculture, forestry and fishing												
Food and beverages									200			200
....												0
Wholesale trade			200			400	600		-600			0
Office machinery and computers									400			400
Total			200	0	0	400	600	0	0	0	0	600

Table 15
Supply table, 1993 SNA

	Industries	Agriculture, forestry and fishing	Food and beverages	....	Office machinery and computers	....	Total inter-industry	HCE	NPISH	Government	GFCF	Change in inventories	Exports	Total final uses
Products														
Agriculture, forestry and fishing														
Food and beverages													200	200
....														
....														
Wholesale trade							0						0	0
Office machinery and computers													400	400
Total													**600**	**600**

Abbreviations: HCE - household consumption expenditure; NPISH - non-profit institutions serving households; GFCF - gross fixed capital formation.

X. Annex 4

The case of Hong Kong, China[2]

A. Introduction

62. Hong Kong is one of the world's largest trading entities and a premier trading hub in the Asia Pacific region. The past decades have seen a continuous integration with the economy of mainland China. Factories operated by Hong Kong entrepreneurs in mainland China produce a wide range of commodities which are exported to many parts of the world.

63. In recent years, trading activities related to goods for processing and merchanting have played a vital role in the external trade of Hong Kong. In 2009, about 23 per cent of goods imported into Hong Kong, and 17 per cent of goods exported from Hong Kong, were related to goods for outward processing in mainland China, and about 26 per cent of exports of services of Hong Kong were related to merchanting activities. Charts 8 and 9 show the development over a period of years of trade in goods for outward processing with mainland China, and of exports of merchanting services. This annex concerns both processing and merchanting activities, and is therefore relevant to Chapter 5 as well as to this chapter.

[2] This annex is based on papers prepared for the 20th and 21st meetings of the IMF Committee on Balance of Payments Statistics, held on 29 October – 1 November 2007 and 4-7 November 2008.

Chart 8

Treatment of receipts and expenditure of an Irish direct investment enterprise for services provided by foreign affiliates

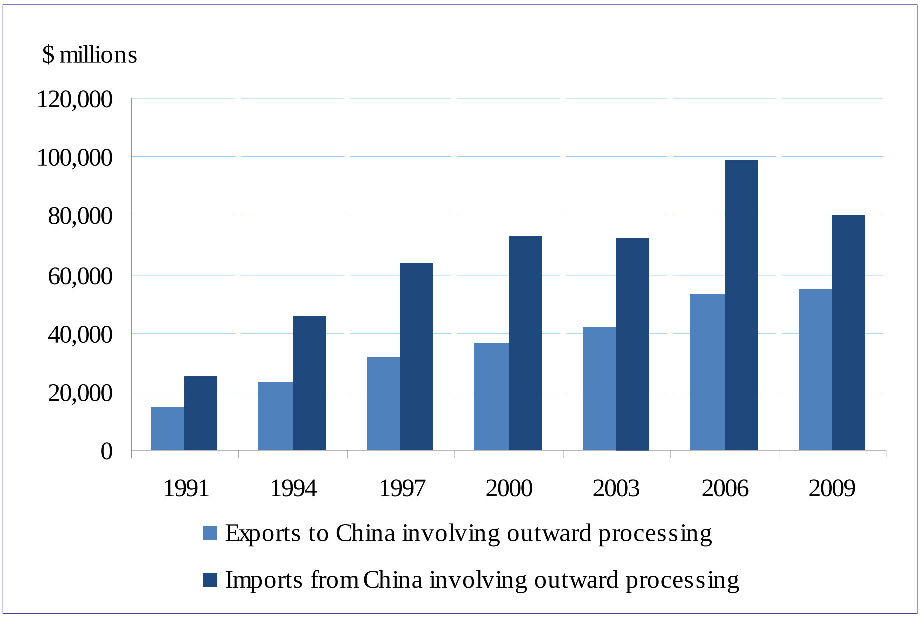
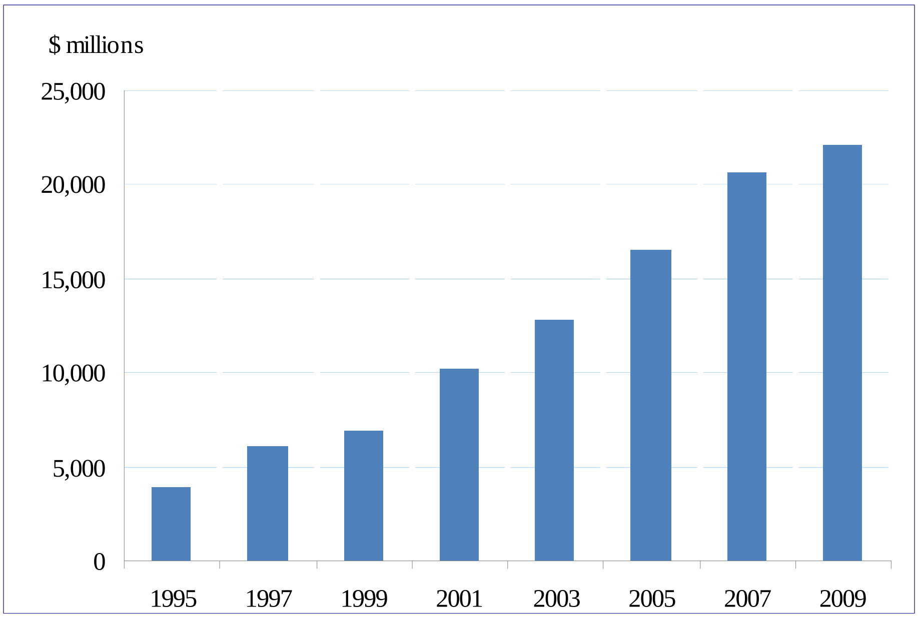


Chart 9

Treatment of receipts and expenditure of an Irish direct investment enterprise for services provided by foreign affiliates



64. At present, data required for the compilation of the goods account in Hong Kong's balance of payments statistics primarily come from external merchandise trade statistics based on trade declarations submitted by importers and exporters. The external merchandise trade statistics record all movements of goods at the time they cross the border of Hong Kong, but not at the time of the change of ownership. Goods for processing are

thus included in the merchandise trade statistics, and are recorded at the time they are exported to the processing economy or returned to the original economy for local use or re-export. This implies that a change of ownership is imputed for goods for processing whenever they move into or out of Hong Kong, and they are recorded on a gross basis in the goods account. Under the present framework, merchanting is also treated as an exception to the change of ownership principle.

65. As will be apparent from the main part of this chapter (and from Chapter 5 on processing), the 2008 SNA standards on goods for processing and merchanting will, when implemented, have a substantial impact on the compilation, presentation and interpretation of external trade statistics of Hong Kong. This will be one of the major initiatives of and challenges for the Census and Statistics Department (C&SD) of Hong Kong in the coming years.

66. This annex highlights the significant impact of the new statistical standards on Hong Kong and presents the plans and the latest progress of Hong Kong in implementing them. Specific issues related to data collection and dissemination of statistics are also discussed.

B. The impact of implementing the new international statistical standards

67. In order to assess the impact of implementing the 2008 SNA and BPM6 on the trade in goods and services statistics of Hong Kong, an adjustment based on preliminary survey results has been made to the statistics for the year 2008. The adjusted figures help to illustrate the likely magnitude of the change.

68. Table 16 shows that implementation of the new international statistical standards will have a sizeable impact on the external trade statistics of Hong Kong. In particular, the balance of trade in goods in 2008 would be revised from a deficit of (US) $23 billion to a surplus of $27 billion, and the balance of trade in services from a surplus of $45 billion to a deficit of $5 billion. In addition, given the importance of goods for processing and merchanting for the Hong Kong economy, 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 services.

Table 16

Impact of implementation of the 2008 SNA and BPM6 on goods for processing and merchanting

$ billions

External trade of Hong Kong in2008	***Under BPM5***	***Outward processing***	***Merchanting***	***Offshore trade with outward processing***	***Under BPM6***	***Percentage change***
Exports of goods	365	-57	19	18	345	-5%
Imports of goods	388	-77		8	319	-18%
Balance of trade in goods	*-23*				*27*	
Exports of services	92		-19	-3	69	-25%
Imports of services	47	20		7	74	+58%
Balance of trade in services	*45*				*-5*	
Balance of trade in goods and services	*22*				*22*	

Figures may not add to totals due to rounding.

C. Plans and progress of Hong Kong in implementing the new international statistical standards

1. Additional data needs for outward processing

69. Previous studies indicated that Hong Kong's outward processing activities were mainly conducted in mainland China. Therefore, to implement the new statistical standards on goods for processing, the following additional information is required for Hong Kong:

(a) Hong Kong's exports of goods to mainland China for outward processing.

(b) Hong Kong's imports of goods from mainland China after outward processing.

(c) The value of processing fees paid by Hong Kong traders.

(d) The value of raw materials/semi-manufactures used for processing in mainland China which are not delivered through Hong Kong, with the following breakdowns:

(i) procured by Hong Kong traders and delivered directly from sources other than Hong Kong to mainland China; and

(ii) procured by mainland processing units.

70. There are three options for obtaining this additional information, namely:

(a) Applying new data models.

(b) Conducting an enhanced survey on outward processing trade activities.

(c) Expanding trade declarations reported by traders to Hong Kong Customs.

71. Hong Kong has adopted a pragmatic modular approach to implementing the new statistical standards for recording goods for processing by flexibly combining these options at different stages of implementation and for different levels of statistical detail.

2. Applying new data models

72. First, to support timely compilation of major macroeconomic aggregates, such as GDP and balance of payments statistics, new data models have been constructed to produce preliminary estimates of goods related to outward processing at an aggregate level under the new standards. Regression involving a set of explanatory variables using the relevant time series, with appropriate time lag structures to take into account seasonal patterns, provides a basis for the data models.

73. With respect to estimating exports of goods from Hong Kong to mainland China for outward processing (EXOPt), the use of explanatory variables including Hong Kong's imports of raw materials/semi-manufactures from different suppliers has been explored. Model results indicate that two explanatory variables, namely imports of raw materials/semi-manufactures from mainland China[3] and from Japan, can effectively predict EXOPt. The r-squared is over 0.9 and the Durbin-Watson statistics are close to 2.0, indicating that the regression model should adequately fit the data series. The coefficients of the explanatory variables have expected signs and are statistically significant at the 5 per cent level. Furthermore, the average absolute percentage forecast errors are around 5 per cent. Overall, the estimation results are found to be robust and stable.

[3] Importing raw materials/semi-manufactures from mainland China for subsequent export back to mainland China for processing is a common trade practice in Hong Kong, reflecting the role of Hong Kong as a logistics and trading hub in the region.

74. The estimation of imports of goods by Hong Kong from mainland China after outward processing (IMOPt), on the contrary, is more complicated. Initially explanatory variables including Hong Kong's exports to mainland China for outward processing by broad commodity group with appropriate time lags were used to estimate IMOPt. The regression model was less satisfactory than that for EXOPt, as indicated by its smaller r-squared and larger forecast errors. This might be explained by the common business practice of including in the import value of processed goods from mainland China not only the raw materials/semi-manufactures exported from Hong Kong, but also the values of processing fees and raw materials/semi-manufactures not delivered through Hong Kong (see paragraph 82).

75. To overcome this difficulty, an autoregressive model has been developed to estimate IMOPt. Model results indicate that data with time lags of one quarter and four quarters have expected signs and are statistically significant at the 5 per cent level, indicating that economic trends and seasonal patterns have been captured in the estimation. The r-squared is over 0.8 and the Durbin-Watson statistics are close to 2.0, while the average absolute percentage forecast errors are around 5 per cent.

76. These data models, with appropriate input assumptions, also produce estimates of processing fees for inclusion in trade in services statistics. They also provide estimates of the values of raw materials procured by different parties (i.e. d (i) and (ii) in paragraph 69) for use in adjusting trade in goods statistics. Quarterly structural ratios of these processing fees and raw materials to the import value of processed goods by commodity group, which serve as important parameters to improve the accuracy of model estimates, are being collected by the enhanced survey described below.

3. Conducting an enhanced survey on outward processing trade activities

77. Given the importance of processing trade between Hong Kong and mainland China, the C&SD has been conducting the Survey on Trade Involving Outward Processing in the mainland of China since the late 1980s. The objective of the survey is to identify trade involving outward processing in mainland China in the regular trade statistics. The survey provides estimates of the value and proportion of such trade based on a sample of trade declarations, with a time series long enough to support the construction of the data models described above.

78. In order to implement the new statistical standards on goods for processing, the existing survey on processing trade has been enhanced since the second quarter of 2008 to collect the following additional information:

(a) The value of processing fees paid by Hong Kong traders.

(b) The value of raw materials/semi-manufactures used for processing[4] in mainland China which are not delivered through Hong Kong, with the following breakdowns:

(i) procured by Hong Kong traders and delivered directly from sources other than Hong Kong to mainland China; and

(ii) procured by mainland processing units.

79. To support the compilation of more detailed trade statistics under the change of ownership principle and the conduct of more in-depth trade analysis, the quarterly sample size of the survey has been enlarged from

[4] According to China Customs' definitions, there are two types of inward processing trade: *processing and assembling* and *processing with imported materials. Processing and assembling* refers to the type of inward processing in mainland China in which foreign suppliers provide all or part of the raw materials, parts or components under a contractual arrangement for the manufacture or assembly of products for subsequent exportation and sale by the foreign suppliers. Under this type of processing, the imported inputs and the finished outputs remain the property of the foreign suppliers throughout the process. *Processing with imported materials* refers to the type of inward processing in mainland China in which the raw materials, parts and components are purchased with foreign currencies and imported by the processing units for the manufacture of products or semi-manufactures, which are for subsequent exportation to foreign markets from mainland China. Under this type of processing, the ownership of the imported inputs has been transferred to the mainland processing units. For the purpose of Hong Kong's balance of payments account, only Hong Kong's outward processing in mainland China under *processing and assembling* contracts are adjusted under the new standards.

around 7,000 to over 25,000 trade declarations. This has allowed the number of commodity groups in the outward processing trade statistics to be increased from nine to eighteen.

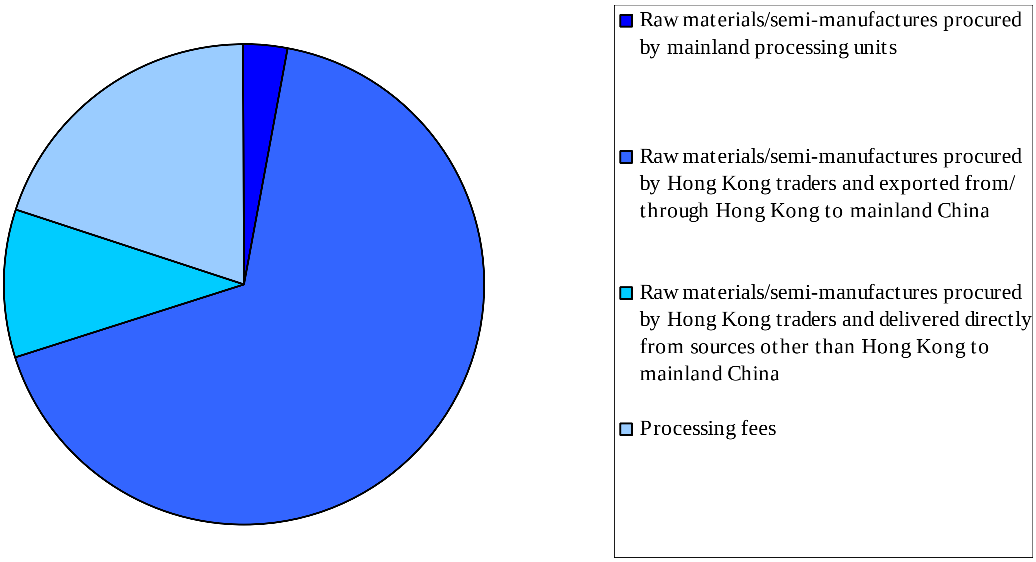
80. When the enhanced survey was initially implemented, one major difficulty regarding data collection was encountered in that a proportion of respondents were logistics companies[5] (rather than the owners of imported processed goods) who did not have readily available information about the new data required. The C&SD has made considerable efforts through liaison meetings, courtesy visits and education, so that these logistics companies can either acquire the relevant information from the goods owners themselves or provide the contact details of the goods owners for subsequent follow-up by the C&SD. The non-response rate of logistics companies is now quite low, and the overall response rate to the enhanced survey is around 85 per cent.

81. Preliminary estimates from the enhanced survey are stable and consistent with Hong Kong's trading pattern. For example, machinery and mechanical appliances and electrical equipment consistently contributed the largest proportion of imports from mainland China involving outward processing, followed by sound recorders and reproducers, television image and sound recorders and reproducers and articles of apparel and clothing accessories (textile garments).

82. The enhanced survey also presents the value of imports from mainland China involving outward processing under the arrangement of processing and assembling by component (chart 10). In broad terms, 20 per cent is processing fees; 70 per cent is raw materials/semi-manufactures procured by Hong Kong traders and exported from/through Hong Kong to mainland China; 10 per cent is raw materials/semi-manufactures procured by Hong Kong traders and delivered directly from sources other than Hong Kong to mainland China; and 2-3 per cent is raw materials/semi-manufactures procured by mainland processing units. These ratios are quite stable over time. At commodity level, processing fees consistently contributed to a higher proportion of the import value of toys, games and sports requisites than of other commodity groups, which also appears reasonable as these goods generally require more man-made components and higher quality standards.

Chart 10

Value of imports from mainland China involving outward processing under the arrangement of processing and assembling, by component



[5] It is a common phenomenon in Hong Kong that logistics companies are delegated by the owners of processed goods to handle the shipment of goods as well as the submission of trade declarations. Logistics companies which are sampled in the survey of outward processing trade activities are mainly freight forwarders/cargo consolidators, carriers (e.g. airline and transportation companies) and couriers.

83. Although information collected from the survey is less timely, it can be used to revise the preliminary estimates of trade aggregates produced by data models, and to support more in-depth analysis. This information, especially the structural ratios at commodity level, also serves to update the parameters of data models.

4. Expanding trade declarations

84. Any person in Hong Kong who imports or exports any article other than an exempted article is required by law to lodge with Hong Kong Customs an accurate and complete trade declaration within 14 days of the importation or exportation of the article. In order to provide the new data for goods for processing, collecting additional information required under the new standards through trade declarations is a possible option.

85. The benefit of this option is that it can provide most additional statistical information required under the new standards. Reliable and timely statistics of exports and imports of goods for processing can be compiled. Moreover, detailed breakdowns by commodity group, country of origin and destination can also be compiled.

86. Nevertheless, this approach is likely to be strongly opposed to for various reasons. First, policy support for it from the Hong Kong Government would be difficult to obtain, as such a move is against the government's policy to facilitate trade. Collecting additional data in trade declarations would also impose a heavy reporting burden on virtually all traders. Support and co-operation of traders in the business community would not be easily obtained. Moreover, expansion of trade declarations would involve a series of complex legal procedures and revision to customs legislation. The electronic submission system currently used for trade declarations would have to be modified accordingly. In addition, as some 20 million trade declarations are processed each year, a huge amount of additional resources would be required to process the new data items collected from a large number of declarations. This would make the declaration procedures more costly and time-consuming. It is not likely that additional reporting requirements could be imposed in trade declarations for the foreseeable future.

5. Additional data requirements for merchanting

87. Considering the significance of merchanting to Hong Kong's trade in services, the C&SD has been conducting an annual survey to collect data related to merchanting activities since the 1990s. Data on the sales of goods and the cost of goods acquired for merchanting are collected to compile the value of merchanting services, which is the difference between the two.

88. In order to implement the new statistical standards on merchanting, a new quarterly survey was launched in 2010.

89. Apart from collecting the sales and the cost of goods bought for merchanting, the new survey collects data related to offshore trade activities involving outward processing, which could not otherwise be collected from trade declarations or the survey on outward processing trade of which the sampling unit is trade declarations, as these goods do not cross the border of Hong Kong. The additional data collected include the following:

(a) The value of goods sold offshore after processing.

(b) The value of cost of goods sold offshore after processing, further broken down into:

(i) processing fees paid by Hong Kong;

(ii) raw materials/semi-manufactures procured by Hong Kong traders and delivered to processing units through Hong Kong;

(iii) raw materials/semi-manufactures procured by Hong Kong traders but delivered to processing units without passing through Hong Kong; and

(iv) raw materials/semi-manufactures procured by processing units.

90. Compared with the survey on outward processing activities, the new quarterly survey on merchanting and other offshore trade activities cannot support a commodity breakdown. The reason is that, while detailed

information on commodities can be obtained from data reported in trade declarations sampled in the former survey, the new survey is an enterprise survey providing only information on aggregate trade values to keep down the response burden.

91. Preliminary results of the survey indicate that the amount of goods sold abroad after processing is only about 10 per cent of goods sold under merchanting. Final response rates approach 90 per cent. Results of the new survey will be carefully monitored and compared with an annual survey on trade in services to ensure that the quality of estimates is not sacrificed for timeliness.

6. Presentation and interpretation of the new statistics

92. Since the new statistical standards will profoundly affect the trade figures, Hong Kong plans to continue compiling the conventional merchandise trade statistics, which have a long history and are used for a variety of purposes, including forecasting the need for infrastructural facilities.

93. To meet the new international statistical standards, a supplementary set of trade in goods and trade in services statistics based on the change of ownership principle under the BPM6 will be compiled to facilitate macroeconomic analysis, international comparison and trade negotiations. The two sets of trade statistics will be complementary.

94. The compilation of merchandise trade statistics based on the change of ownership principle with detailed commodity breakdowns by partner country will give rise to profound data collection issues in Hong Kong. As imposing additional reporting requirements in trade declarations seems not to be feasible, the additional data required for implementing the new standards can only be obtained through surveys on traders, with limited breakdowns. The supplementary trade statistics will be provided at an aggregate level only.

95. The conventional trade statistics and the supplementary trade statistics will show large differences. To minimize confusion to data users, a reconciliation between merchandise source data and total goods on a balance of payments basis in accordance with BPM6 will be provided.

96. Successful implementation of the new statistical standards much depends on whether data users understand the changes in statistical concepts and can correctly interpret the data. An educational and publicity effort has therefore been undertaken to acquaint main users of the data with the changes.

D. Way forward

97. In the past few years, the C&SD has established the necessary infrastructure for the implementation of the new standards on goods for processing and merchanting, including devising data models and enhancing surveys and launching new ones. In the near future, the C&SD will focus on further strengthening the quality of data, especially for preliminary estimates, and will continue to engage with major data users to ensure correct understanding of the statistics. With the extensive work done and a solid foundation laid, Hong Kong is prepared to implement the change of ownership principle in 2012, making Hong Kong one of the first economies to implement the new standards.

* * * * *