



11

Goods

Introduction

11.1 The goods component of the balance of payments current account covers (with a few exceptions) moveable goods for which changes of ownership (between residents and nonresidents) occur. These goods should be measured at market value on an f.o.b.¹ basis.

11.2 Ahead are presented the primary entries for the compilation of goods in the balance of payments, including various adjustments to source data that are required to satisfy requirements of the *BPM6*. The adjustments are covered in more detail in subsequent tables. Also shown are the standard components required by the *BPM6*. Compilation of goods in balance of payments is done by adjusting the data recorded through the main data source with data from additional data sources to assure adequate coverage and classification.

Recorded trade (international merchandise trade statistics (IMTS), international transactions reporting system (ITRS), enterprise surveys, other)

Adjustments:

For coverage

For classification

For valuation

For timing

Total goods (on a balance of payments basis)

of which:

General merchandise

Net exports of goods under merchanting

Nonmonetary gold

¹F.o.b. value (free on board) covers the transaction value of the goods and the value of services performed to deliver goods to the border of the exporting economy. It does not cover the insurance and freight cost between the exporting and the importing economies, or within the importing economy.

11.3 The next three sections in this chapter describe how goods items may be compiled by using information from the IMTS, an ITRS, and enterprise surveys. A discussion of commodity classifications and the preparation of estimates in the absence of data follows.

IMTS as a Primary Source for Compilation of Goods

11.4 The IMTS is the subject of Chapter 5, which discusses the nature, conceptual framework, classifications, and measurement of these statistics. Most compilers use IMTS as the main source of data to compile the goods account. However, IMTS cover goods entering (imports) or leaving (exports) the economic territory of an economy, which differs in some respects from the balance of payments concept of change of ownership between residents and nonresidents. Consequently, the compiler should be aware of the extent to which IMTS meet international statistical standards and the extent to which IMTS comply with the requirements of the *BPM6*, and thus make adjustments, as needed. The balance of payments compiler should note any deficiencies and encourage IMTS compilers to make any appropriate amendments to procedures. Alternatively, the balance of payments compiler may make any necessary coverage, classification, timing, and valuation adjustments to IMTS to align them more closely with balance of payments requirements.

11.5 Tables 11.1 through 11.4 present adjustments to IMTS that may be required. These adjustments should not be regarded as an exhaustive list, and the compiler should add any other items that may be considered important. Adjustments that have a material impact on the calculation of exports and imports should be made. If the compiler is unsure of the potential significance of some adjustments, investigating

and quantifying the possible magnitude is appropriate, particularly when a large adjustment may be in order. If adjustments are not made as a result of these investigations, publication of the findings may provide a suitable alternative.

11.6 The identification of potential adjustments should be undertaken in close consultation with IMTS compilers, who may have much of the data necessary to make the balance of payments adjustments. If such data are unavailable in IMTS, these statistics may nonetheless provide a starting point for identification of companies to be approached. Many of the adjustments may be made by approaching companies—typically on a selective basis—through enterprise surveys or through supplementary ITRS inquiries. In some circumstances, it may be more appropriate to approach official sources or partner economies. In making adjustments to IMTS, the balance of payments compiler should ensure that any relevant offsetting entries are identified and correctly treated in the balance of payments.

11.7 IMTS includes within its scope electronic commerce (e-commerce), covering those imports and exports of goods whose transactions were made using electronic means (e.g., goods ordered and paid for via the Internet). It is recognized that data collection for such goods may be challenging (e.g., when goods are shipped through parcel or courier service; see also “Travel” in Chapter 12); however, the compiler is encouraged to develop over time the necessary data collection and/or estimation procedures.

Coverage Adjustments

11.8 The balance of payments compiler may make coverage adjustments to IMTS by excluding from the balance of payments goods that have not changed ownership but have been recorded in IMTS. The compiler may also make adjustments to include in the balance of payments goods that have changed ownership but have not been recorded in IMTS. Adjustments may be necessary to do the following:

- Exclude goods that should, according to the guidelines for these statistics, be excluded from the balance of payments but are included in IMTS (e.g., government goods consigned to armed forces and diplomatic representatives abroad; transit trade; migrants’ personal effects, etc.)

- Exclude goods sent abroad (or imported) for processing without a change of ownership and goods returned after processing
- Include goods that should, according to the guidelines for these statistics, be included in the balance of payments but that might not be included in the IMTS (e.g., electricity, water, and gas; goods procured in ports by carriers away from the territory of residence of the operator; etc.)
- Include goods under financial lease that may be included in IMTS but recorded separately
- Include (or exclude) goods that are excluded (included) from (in) IMTS due to the use of special trade system but for which adjustments should be made in the balance of payments (e.g., goods entering the industrial and commercial free zones, inward processing zones, and customs warehouses)
- Adjust for goods (other than goods lost or destroyed) that may have crossed only one national boundary (e.g., fish caught by resident ships in international waters and sold abroad directly; goods used as inputs in the processing abroad that are procured by the owner from other economies and delivered directly to the processing economy, as well as the processed goods sold directly to other economies from the processing economy)
- Adjust for goods that were lost or destroyed after they crossed the national boundary of the exporter’s economy but before they crossed the frontier of the importer’s economy
- Record the change in stocks of goods associated with merchanting transactions
- Overcome general undercoverage problems such as smuggled goods and informal, cross border trade.

Each of these categories is explained in Table 11.1.

Classification Adjustments

11.9 Classification adjustments are required when certain transactions not appropriate for goods items in the balance of payments are classified as goods in IMTS. Generally, the most basic classification adjustment is the correction for services—insurance and freight transport services—that are included in the import price of the goods. This adjustment and other classification adjustments that may be appropriate to IMTS are explained in Table 11.2.

Valuation Adjustments

11.10 Different valuation issues may have an impact on the compilation of goods. These issues include the following:

- Replacement, when actual values become available, of estimated values for certain exports
- Replacement of transfer prices with market prices
- Use of transaction values instead of customs values
- Correction for any biases in conversion rates

These adjustments are outlined in Table 11.3.

Timing Adjustments

11.11 As Chapter 5 states, the timing basis of IMTS may be the general trade system or the special trade system. The general trade system is preferable for international accounts statistics because it captures

transactions involving goods for the whole economy and is more consistent with the coverage of the corresponding financing entries; however, neither the general nor the special trade system will necessarily coincide with the principle of change of ownership used in the balance of payments. As a result, various timing adjustments of the type set out in Table 11.4 are to be made to IMTS by the balance of payments compiler. For certain goods, such as large items of transport equipment and bulk goods sold on consignment, the cost of obtaining data necessary for timing adjustments is relatively inexpensive,² and these adjustments can have a significant impact on the quality of the balance of payments.

²Customs data providing the time these items cross the border could be easily compared with the payments data obtained either for business surveys or from the ITRS.

Table 11.1 Use of International Merchandise Trade Statistics (IMTS) for Compilation of Goods: Adjustment for Coverage

Description	Source and method of compilation
Possible deductions from IMTS	
Government goods consigned to armed forces and diplomatic representatives abroad	If included in IMTS, these items should be removed by the balance of payments compiler. These items should be readily identifiable, except for migrants personal transfers that may not be identified from effects imported/exported by individuals undertaking short-term trips. The balance of payments compiler should request their additional specification in IMTS or should make adjustments using other data sources such as survey of travelers.
Goods for temporary admission	
Transit trade	
Migrants' personal effects	
Goods for processing (without a change of ownership)	Goods for processing without a change of ownership should be excluded by the balance of payments compiler. It is, nevertheless, recommended that the values of goods sent abroad/received from abroad for processing (raw materials) and goods returned to the economy of origin after the completion of processing (finished products) be identified as supplementary items in services account in economies where they are significant. As recommended by the <i>IMTS 2010</i> , paragraph 1.21, economies are encouraged to explicitly identify in their trade statistics these categories of goods, preferably by special coding. However, it is recognized that such identification may not be all-inclusive or the information may not be internationally comparable due to differences in national definitions or procedures followed.
Possible additions to IMTS	
Nonmonetary gold	These goods should be included in the balance of payments, goods account general merchandise, except for the nonmonetary gold, which should be included under the nonmonetary gold component. If excluded from the IMTS, these goods should be added by the balance of payments compiler. Data on some of these items may have to be collected in enterprise surveys or through a supplement to an ITRS.
Trade on government account Military goods	
Electricity and water	These goods are usually not captured by IMTS; however, if captured, they are excluded from IMTS but recorded separately (<i>IMTS2010</i> , paragraph 1.59). The <i>BPM6</i> includes these goods under general merchandise.
Postal items	
Illegal and smuggled goods (that are otherwise legal)	
Informal, cross border trade	These goods are carried across the border legally but are unregistered by the customs office.

Table 11.1 Use of International Merchandise Trade Statistics (IMTS) for Compilation of Goods: Adjustment for Coverage (concluded)

Description	Source and method of compilation
Goods for repair	The values of goods for repair are excluded from the balance of payments. These goods will probably be excluded from IMTS but may be recorded separately. IMTS may therefore provide a source of information for balance of payments adjustments insofar as these goods are subsequently sent abroad, however there is no change of ownership and thus need to be excluded from goods in balance of payments. However, the balance of payments compiler may have to use enterprise surveys or an ITRS to obtain information on the values of repairs that are included in maintenance and repair services.
Goods under financial lease	These items should be included as goods in the balance of payments. IMTS may therefore provide a source of information for balance of payments adjustments. However, the balance of payments compiler may have to use enterprise surveys or a supplementary inquiry to an ITRS to obtain the full range of information required, particularly with regard to the treatment of lease payments.
Goods not crossing both borders Mobile equipment used in international waters or airspace; goods delivered to offshore installations; fuel, provisions, stores, ballast, and dunnage	Theoretically, these goods should be included in IMTS. However, in practice, many of these goods will be excluded from IMTS, and the balance of payments compiler will have to use other sources, such as enterprise surveys (possibly as part of enterprise surveys of transport companies) or a supplementary ITRS collection to obtain the necessary information for balance of payments adjustments.
Goods lost or destroyed after having crossed one national boundary	Goods that change ownership before being lost or destroyed should be recorded as imports by the acquiring economy. Goods that do not change ownership before being lost or destroyed should be deducted from the producing economy's exports. The information for balance of payments adjustments could, at least in significant cases, be obtained by approaching exporters, importers, or insurance companies through enterprise surveys.
Changes in stocks of goods that never cross the border of the owners economy	These changes in stocks (which arise from merchanting) should be included in goods (negative exports when acquired by the merchant, and positive exports when resold). These acquisitions and sales will probably not be included in the IMTS. In balance of payments, net export of goods under merchanting is reported; however, it is recommended to report also the gross value of goods acquired and sold under merchanting as supplementary information. Possible sources of data are enterprise surveys or an ITRS supplement.
Goods related to processing abroad without a change of ownership	Goods used as inputs in the processing abroad that are procured by the owner from other economies and delivered directly to the processing economy should be included in the imports of general merchandise of the owner economy. Similarly, the processed goods sold directly to other economies from the processing economy should be included in the exports of general merchandise of the owner economy. The most effective way of collecting the information for these adjustments is the enterprise survey.
Other coverage adjustments, such as general coverage deficiency or deficiencies from the use of the special trade system	Other coverage adjustments might be necessary if IMTS suffers from some general coverage deficiency. Such deficiencies are sometimes identified from partner economy analysis, and partner economy data could be used as the basis for appropriate balance of payments adjustments. The Canada/United States reconciliation is an example of this type of adjustment. In the case of the use of the special trade system, ¹ the imports and exports of goods in IMTS should be adjusted for: (1) the flows of goods that are not covered by the special trade system (i.e., goods entering/leaving the commercial and industrial free zones, premises of inward processing, and customs warehouses insofar as ownership of these goods has changed) and (2) the flows of goods that are covered by the special trade system but should not be included in balance of payments (i.e., goods entering/leaving the free circulation zone from/to zones mentioned in (1), insofar these are transactions between residents). Possible sources of data for adjustments are enterprise surveys.

Source: IMF staff.

¹See description of general and special trade systems in Chapter 5.

Table 11.2 Use of International Merchandise Trade Statistics (IMTS) for Compilation of Goods: Adjustment for Classification

Description	Source and method of compilation
Financial items: monetary gold, securities, bank notes, coin in circulation	These items should be excluded from IMTS by the IMTS compiler. If not, these items should be excluded from goods by the balance of payments compiler and included in the financial account. If included in IMTS, these items should be readily identifiable.
Conversion of imports from c.i.f. to f.o.b. valuation	Several methods may be used to make this adjustment, which reclassifies elements of IMTS goods data to services and secondary income. The service transactions should be included in the balance of payments' transportation (freight) and insurance services (only the estimated value of services should be recorded under insurance services) components, and the transfer element should be included in secondary income (net nonlife insurance premiums), to the extent that transport and insurance services have been provided by nonresidents.
IMTS goods forming part of balance of payments services transactions: customized and noncustomized media	The values of customized and noncustomized media provided with a periodic license fee (computer software provided on disks, audiovisual media, and so forth) should be excluded from goods in the balance of payments. The full values of these products, including their material content, should be included in appropriate services items. Only noncustomized media provided on physical media with right to perpetual use is included in goods.
Goods imported for projects by nonresident construction company	These goods are recorded as imports by the IMTS. However, the goods imported for construction projects by nonresident companies (where construction projects are not sufficiently substantial to constitute a branch of the company) are excluded from trade in goods in the balance of payments and included as part of the value of construction services. If included in IMTS, these goods might not be readily identifiable. The balance of payments compiler should make adjustments in both goods and construction services. The possible source of data for adjustments is the survey of construction companies conducting the construction or the survey of company financing the construction.

Source: IMF staff.

Table 11.3 Use of International Merchandise Trade Statistics (IMTS) for Compilation of Goods: Adjustment for Valuation

Description	Source and method of compilation
Replacement of estimates with actual values	The values of certain exports may not be known at the time of export (e.g., aid goods); therefore, the values may have to be estimated. The IMTS compiler should make the necessary adjustments when actual data become available. If not, the balance of payments compiler should make the necessary adjustments by approaching exporters through enterprise surveys or by using an ITRS. In the absence of a market price for the aid goods, the donors estimate of the value of the goods will often be quite different from that of the recipient. The suggested rule of thumb is to use the value assigned by the donor as a basis for valuation.
Replacement of transfer prices with market prices	Mainly for practical reasons, the <i>BPM6</i> recommends that the balance of payments compiler make this type of adjustment only in unusual circumstances and that corresponding changes be made to the distributed income or financial transactions of the direct investors/direct investment enterprises affected. The replacement of transfer prices might be made by the IMTS compiler in IMTS; if not, a special approach in enterprise surveys or an ITRS may be necessary. If the IMTS compiler does make adjustments, the balance of payments compiler should be made aware of these so that the necessary adjustments to other balance of payments items can be made. The issue of transfer pricing is discussed further at the end of this chapter.

Table 11.3 Use of International Merchandise Trade Statistics (IMTS) for Compilation of Goods: Adjustment for Valuation (concluded)

Description	Source and method of compilation
Replacement of customs values used in IMTS with transactions values	In some circumstances, the value for duty recorded by customs officials may differ from the actual transaction price. It is in particular the case of contracts establishing a quotation period often months after the goods have changed hands. In these cases, an adjustment should be made in the balance of payments to reflect the transaction price. In line with the market valuation principle, the transaction price is considered the best proxy to use, regardless of whether this price is known at the time of change of ownership (see BPM6, paragraph 3.73). The required information could come from customs records, if both valuations are recorded, from a sample investigation of import entries, or from an ITRS, if it allows the identification of the payments under such contracts.
Corrections for inappropriate exchange rates used in IMTS	The impact of inappropriate exchange rates could be assessed by sampling import and export entries. The results of such investigations could be used to adjust balance of payments statistics.

Source: IMF staff.

Table 11.4 Use of International Merchandise Trade Statistics (IMTS) for Compilation of Goods: Adjustment for Timing

Description	Source and method of compilation
Replacing IMTS with data from the books of companies	Adjustments may be made when it is known that the period in which a change in economic ownership occurs does not coincide with the period in which the transaction is recorded in IMTS. Such adjustments are typically made only when significant amounts, such as for large items of transport equipment or other high-value capital goods or the supply of certain types of goods (electricity, oil, etc.), are involved. Enterprise surveys or a supplementary approach through an ITRS can be used to obtain the information necessary for these adjustments. In the case of the high-value capital goods, the enterprise surveys should be used to determine the time of ownership change, which could be a progressive change based on stage payments or in full on delivery.
Consignment trade adjustments and adjustments for goods sold from stocks	Goods shipped abroad on consignment should be deducted from exports recorded in IMTS and replaced with the actual sales of goods from stocks held abroad by residents. Similarly, goods shipped to the compiling economy on consignment should be deducted from imports recorded in IMTS and replaced with actual sales from stocks held in the compiling economy by nonresidents. Such adjustments are typically made only when the amounts involved are significant. Enterprise surveys or an ITRS can be used to obtain the information necessary for these adjustments.
Adjustments to correct IMTS recorded on the basis of processing dates	In economies where IMTS are based on the date on which customs entries are processed rather than on a general or special trade basis, adjustments may be made (or, at least, supplementary data published) to show the impact of not using the preferred methodological basis. Such adjustments may be made by analyzing changes in customs processing rates, including the stockpile of entries that remains unprocessed. When a special trade system is used, adjustments should be made to the balance of payments to include the goods at the moment when they enter/leave the industrial and commercial free zones, premises for inward processing, or customs warehouses. ¹

Source: IMF staff.

¹For more details on special trade systems see Chapter 5 of this *Guide*.

ITRS as a Primary Source for Compilation of Goods

11.12 Some economies use an ITRS as the primary source for compilation of goods in the balance of payments. In most cases, goods are recorded in an ITRS when payments for the goods are made. As described in Chapter 4, there are a number of adjustments that a compiler should make to record transactions involving

goods that may also be made under the headings of coverage, classification, timing, and valuation adjustments. These adjustments are set out in Table 11.5.

Enterprise Surveys as Primary Sources for Compilation of Goods

11.13 “Collections on Goods and Services Statistics” in Chapter 3 discusses the use of an enterprise

Table 11.5 Use of International Transactions Reporting System (ITRS) for Compilation of Goods

Adjustments	Source and method of adjustments
<p>Coverage adjustments</p> <p>Exports and imports financed by loans; goods covered by foreign aid programs; goods transferred between companies in a direct investment relationship for noncash consideration; durable goods and valuables by travelers; and other goods not recorded in ITRS</p>	<p>The balance of payments compiler needs to identify such goods and make the necessary adjustments (see Collections on Goods and Services Statistics in Chapter 3). The data for adjustments could come from official sources (e.g., for foreign aid), partner economies, enterprise surveys, or as a supplement to the ITRS itself. Durable goods (such as cars and electrical goods) and valuables (such as jewelry) purchased by travelers are included in general merchandise. The compiler should avoid double counting as they could be included in ITRS in travel.</p>
<p>Classification adjustments</p> <p>Exports converted to f.o.b. valuation (exports may be valued in an ITRS on a variety of bases)</p>	<p>The data for this adjustment could be extracted from the ITRS if reporters are asked to provide a dissection of the value of exports. Alternatively, data on freight and insurance premiums could be obtained from resident transport operators and insurance companies in respect of payments made by exporters to these institutions. These data, as well as data on payments by exporters to nonresident transport operators, which should be identifiable from the ITRS, should then be deducted from the value of exports recorded in the ITRS to estimate the value of exports f.o.b. However, in some cases ITRS data do not include transport and insurance costs to the exporting border. The compiler should assess the ITRS data on payments for export of goods by consulting the exporters regarding the common practice of payments for such transactions.</p> <p>The first part of this adjustment can be added to the freight and insurance services credits items in the balance of payments.</p> <p>The treatment of freight transport is described in paragraphs 12.35–12.37.</p>
<p>Imports converted to f.o.b. valuation (imports may be valued in an ITRS on a variety of bases)</p>	<p>The data for this adjustment could be extracted from the ITRS if reporters are asked to provide a dissection of the cost of imports. Alternatively, estimates of total international freight and insurance on imports could be independently estimated (see Table 12.2). Freight on imports earned by resident transport operators and insurance premiums paid to resident insurance companies—which could be derived from enterprise surveys—and freight and insurance payments made directly by importers to nonresidents—which could be obtained from the ITRS—should be deducted from the total value of international freight and insurance to derive an estimate of the value of freight and insurance included in amounts paid by the importer to the nonresident exporter. This estimate should then be deducted from the value of imports recorded by the ITRS to arrive at an estimate of imports f.o.b.</p> <p>The earnings of nonresident carriers and insurance companies can be included in the freight and insurance debits items in the balance of payments.</p>

Table 11.5 Use of International Transactions Reporting System (ITRS) for Compilation of Goods (concluded)

Adjustments	Source and method of adjustments
Valuation adjustments Replacement of transfer prices with market prices	The <i>BPM6</i> recommends that the compiler should make this type of adjustment in certain circumstances, with corresponding changes to the distributed income or financial transactions of the direct investors/enterprises affected. The replacement of transfer prices could be made by a special approach in enterprise surveys or the ITRS. The issue of transfer pricing is discussed further in “Treatment of Transfer Pricing” in this chapter.
Timing adjustments Trade credit	The ITRS may collect as supplementary information data on date of change of ownership of goods (or some similar basis such as date of shipment), which could be used as a basis for these adjustments. The value of goods that change ownership in a different period to the period in which payment is made should be deducted from reported trade for the period in which payment is made and added to reported trade for the period in which change of ownership occurred. Offsetting adjustments should be made to the trade credit items in the financial account. The disadvantage with this approach is that the adjustments can be made retrospectively only in cases of trade credit and advances other than prepayments. An alternative approach would be to conduct an enterprise survey of significant exporters and importers to measure trade credit and advances, and use this information to adjust reported trade from an ITRS.

Source: IMF staff.

survey to measure merchandise trade in the absence of IMTS or an ITRS. The material describes a model form that a compiler may use to collect across-the-board data on goods exported and imported.

11.14 The *Guide* does not recommend one collection system over others. However, the compiler who use enterprise surveys (in lieu of IMTS or an ITRS) as the data source for goods items in the balance of payments must be particularly careful that adequate coverage is maintained—particularly in economies that are growing significantly, undergoing liberalization of trading relations, or are transitioning to a market-based economy.

Subclassification of Commodities

11.15 As listed in the *BPM6*, standard components of the balance of payments contain a limited subclassification of goods. Nevertheless, the balance of payments compiler could disseminate these data at a more detailed breakdown. Some goods are more durable than others. Some goods may be sold quickly; others may be stored to await stronger demand. Exports and imports of foods follow patterns of production and

demand that differ greatly from those of investment goods. It is also important that the balance of payments compiler disseminate the data using a subclassification that is nationally appropriate.

Estimation in the Absence of Data Across-the-Board Estimation

11.16 While prepared to estimate many balance of payments items, some compilers prefer having customs data available before estimating goods trade. Therefore, the timing of balance of payments publications is often predicated on the availability of data from IMTS, an ITRS, or enterprise surveys (whichever is the main source) on goods transactions. However, the compiler may have to estimate goods when basic data do not exist, are untimely, or reflect poor coverage.

11.17 One approach to estimation consists of gathering available data, using known relationships between national accounts aggregates, and estimating the balance of payments goods item as a residual. For example, in an economy with a simple economic structure, it may be possible for the compiler to collect

data on exports from a few major exporters and data on services from a few large companies and the official sector. These data may then be used with other national accounts aggregates³ to derive imports of goods and services as a residual.

11.18 Another approach uses—especially for major agricultural and mineral products—supply and use framework of commodity flows.⁴ Because, for a specific period, the closing position of a commodity equals the opening position plus production and imports less consumption and exports, any component can be derived as a residual from the others. For example, if a compiler knows the volumes of production, consumption, and changes in position and if there are no imports, export volumes may be derived as residuals. Price data may then be applied to these estimates to derive current values of exports.

11.19 Although IMTS may provide preliminary broad aggregate data for more recent periods, some data required to complete balance of payments accounts may be missing. The balance of payments compiler may, with relative ease, be able to estimate missing components by taking into account the relationship between those components and various aggregates for past periods. For example, there may be a reliable relationship between exports of a particular agricultural commodity and the size of the harvest. If the latter is known, this relationship could be used, in the absence of data, to estimate exports. Another method of estimation would consist of assuming that trade in missing components has increased (or decreased) at the same rate as measured trade; the rate of increase (or decrease) would then be applied to the estimate for the previous period to obtain an estimate of the missing component for the current period.

11.20 Preliminary data may be subject to known biases, and the balance of payments compiler may adjust for these biases to reduce the size of subsequent revisions to data. In evaluating preliminary results

from IMTS, the compiler may find some anomalies. Less than complete data validation procedures may have been applied to preliminary IMTS, and the balance of payments compiler may have data from other sources that cast some doubt on the validity of certain components of IMTS.⁵ In these circumstances, the balance of payments compiler may have to obtain more reliable data from exporters and importers or even to estimate certain components.

Other Estimations Required

11.21 The compiler may have to adjust imports valued on a c.i.f. basis to an f.o.b. basis. Methods for doing so are discussed in “Transport” in Chapter 12. The compiler may make other adjustments to overcome coverage, timing, and valuation errors resulting from periodic examinations of trade data. For example, the compiler could, by using the supply and use framework for selected commodities or periodic estimates obtained from customs officials, make adjustments for smuggling (undercoverage).

11.22 In making the c.i.f./f.o.b. adjustment, the compiler should keep the following considerations in mind:

- (1) The economy of origin of the imports—If the customs points of two territories are the contiguous, the c.i.f. and f.o.b. valuations are the same, so no adjustment is necessary.
- (2) The distance that the good has to travel—The longer the distance, generally the greater the freight cost and usually the greater the insurance charge. Not all imports would have the same c.i.f./f.o.b. adjustment.
- (3) The changing composition of goods over time—As the composition of imported goods changes, the weights attached to each commodity will need to be adjusted as the freight and insurance charges will differ depending on the commodity.

³Based on the formula for compiling the gross domestic product by expenditure: $GDP = \text{Final consumption} + \text{Capital formation} + \text{External trade balance (exports-imports)}$.

⁴Within the context of compiling the goods and services account in the national accounts, an unknown component could be derived residually from the equation: $\text{Domestic production} + \text{Imports (goods and services)} + \text{Taxes} = \text{Intermediate consumption} + \text{Final consumption} + \text{Capital formation} + \text{Exports (goods and services)}$.

⁵To prepare preliminary IMTS, some validation procedures (such as comparing day-to-day consistency of reporting, querying returns that look unusually large, checking on nonresponse, etc.) should be undertaken. However, more detailed checking of value/quantity relationships, which usually reveals errors in the reporting of physical quantities rather than values, is sometimes skipped at the preliminary estimation stage.

11.23 The compiler could make additional estimations to improve the coverage of trade data. For this, customs officials may be involved in estimating undercoverage by examining the customs procedures. For example, if the baggage of 1 in 20 persons (selected at random) arriving in an economy is examined, and y value of goods is discovered undeclared by these persons, an estimate of undercoverage could be derived as 20 times the value of y . It would be more difficult (but still possible) to estimate undercoverage if selection procedures were based upon nonrandom factors.

Treatment of Transfer Pricing

11.24 Between companies in a direct investment relationship, transactions may occur wherein values shown in the books of transactors are significantly distorted from market values. A company may sell goods to a related company for prices unrelated to the cost of production or the acquisition cost of the goods. Such a sale might be made, for example, to transfer profits from one economy to another for tax reasons or because the economy of the direct investment enterprise (DIENT) imposes restrictions on the repatriation of income. In other instances, transfer prices may be used as a means by which a direct investor makes a financial investment in a DIENT.

11.25 The *BPM6* recommends that the compiler make an adjustment to transaction prices in the balance of payments when actual transaction prices of transfers of real resources between companies in a direct investment relationship differ from values that could have been expected if the companies had been independent. However, the *BPM6* cautions that such adjustments should be made only in the unusual circumstance when significant distortions are encountered and information to make a reliable adjustment is available (see *BPM6*, paragraph 3.77).

11.26 When adjustments are made to one side of a balance of payments transaction, offsetting adjustments must be made to preserve equality between credit and debit entries. For adjustments arising from the use of nonmarket transfer prices, adjustments should be made to goods or services trade, direct investment income, and financial account transactions.

11.27 The following example illustrates these adjustments. In a certain economy, a DIENT produces

copper. If this copper is sold to unrelated companies, the DIENT could expect, on the basis of the production cost of the copper, to earn 50 units per ton. However, as the government of the economy has imposed restrictions on repatriation of income to nonresidents, the DIENT sells to its direct investor 1,000 tons of copper at only 10 units per ton. In this case, non-market transfer pricing is used to repatriate income.

11.28 Table 11.6 shows examples of transfer pricing adjustments in the balance of payments.

Merchandising

11.29 Merchandising transactions—that is, the purchase of goods by a resident (of the compiling economy) from a nonresident combined with the subsequent resale of the same goods to another nonresident without the goods being present in the compiling economy—should be recorded in the balance of payments as transactions in goods. This is a change from the *BPM5*, where merchandising was to be recorded as a service. The change in treatment is in line with the change of ownership rule that underpins the balance of payments conceptual framework. If there is a change in the physical form of the goods during the period they are owned by the merchant, as a result of manufacturing services, then the transaction should be classified as general merchandise, and not as merchandising.

11.30 For the economy of the merchant, goods acquired under merchandising should be recorded as a negative credit in the balance of payments in the period the merchant acquires the goods, and when they are sold they should be recorded in that period as goods sold under merchandising as a positive credit. In most instances, the difference between the acquisition and sale (shown as “net exports of goods under merchandising”) covers merchants’ margins, holding gains and losses, and changes in inventories of goods under merchandising. As a result of losses or increases in inventories, net exports of goods under merchandising may be negative in some cases. Where the merchant is an organizer of a global manufacturing process, the selling price may cover elements such as providing planning, management, patents and other know-how, marketing, and financing. Particularly for high-technology goods, these nonphysical contributions may be large in relation to the value of the materials and assembly.

Table 11.6 Adjustments to Balance of Payments in Cases of Transfer Pricing

Direction of flow of goods	The transaction price is less than market value		The transaction price is greater than market value	
	Economy of direct investor	Economy of direct investment enterprise	Economy of direct investor	Economy of direct investment enterprise
Direct investment enterprise to direct investor	Increase goods imports by difference in prices; add difference in prices to direct investment income—dividends—credits	Increase goods exports by difference in prices; add difference in prices to direct investment income—dividends—debits	Decrease goods imports by difference in prices; add difference in prices to financial account—direct investment—net acquisition of financial assets—equity	Decrease goods exports by difference in prices; add difference in prices to financial account—direct investment—net incurrence of liabilities—equity
Direct investor to direct investment enterprise	Increase goods exports by difference in prices; add difference in prices to financial account—direct investment—net acquisition of financial assets—equity	Increase goods imports by difference in prices; add difference in prices to financial account—direct investment—net incurrence of liabilities—equity	Decrease goods exports by difference in prices; add difference in prices to direct investment income—dividends—credits	Decrease goods imports by difference in prices; add difference in prices to direct investment income—dividends—debits

Source: IMF staff.

11.31 The economy that sold the goods to the economy of the merchant and the economy that purchased the goods from the economy of the merchant record their merchandise trade in the usual way—that is, as exports and imports of general merchandise, respectively, and not as merchanting transactions.

11.32 By the very nature of merchanting, the goods involved do not cross the customs boundary of the economy of residence of the merchant. Therefore, the data need to be collected directly from the companies involved in merchanting. It may be possible to identify such companies through a business register that may be maintained by the collecting body or the central statistical office (if different). Model form 5 in Appendix 8 includes data required for recording merchanting transactions in the balance of payments. Data should be collected on a gross basis, by commodity, and by partner economy, wherever possible.

Nonmonetary Gold

11.33 Nonmonetary gold covers all gold other than monetary gold (gold bullion to which the monetary authorities have title and is held as reserve assets).

Excluded are jewelry, watches, and so forth that contain gold, which are included under general merchandise. Merchanting of nonmonetary gold is also included under the nonmonetary gold item (*BPM6*, paragraph 10.49).

11.34 IMTS is a source of data for nonmonetary gold. It adopts the same definition of monetary and nonmonetary gold provided in the *BPM6*. It is recognized, however, that in practice it might be difficult for the IMTS compiler to differentiate between monetary and nonmonetary gold. IMTS and balance of payments compilers should consult each other and the monetary authorities to ensure appropriate and consistent treatment. Moreover, it must be noted that IMTS records movements of gold and not necessarily change of ownership.

11.35 The data from IMTS must be complemented by data on transactions in nonmonetary gold between residents and nonresidents that involve no physical movement of gold. This could be obtained, for example, from a special survey of gold traders or gold holders. ITRS may also be used to validate the information.