



3

Specific Surveys for Balance of Payments and International Investment Position

Introduction

3.1 In Chapter 2, the essential elements in conducting a survey of businesses were discussed. Such surveys, whatever the topic, have many elements in common. This chapter discusses surveys of businesses for several specific topics in both the balance of payments and international investment position (IIP). While there are many elements in common, the specific purpose of the survey and the complexity of aspects of the balance of payments and IIP require consideration of particular design features.

Collections on Goods and Services Statistics

Goods

3.2 International merchandise trade statistics (IMTS) based on administrative records are the primary data source used by compilers in most economies for the compilation of the goods item in the balance of payments. However, in some economies compilers use an international transactions reporting system (ITRS), and in a few economies surveys of businesses are used to collect extensive data for goods.

3.3 As described in more detail in Chapter 11, there are a number of challenges in using the IMTS alone for the compilation of the goods component. In particular, adjustments may need to be made for coverage, classification, valuation, and timing differences between IMTS and trade in goods on a balance of payments basis. Targeted surveys of businesses can be used to support the adjustments from merchandise trade to trade in goods.

3.4 Similarly, if an ITRS is being used as the primary source for the compilation of trade in goods, then targeted surveys of businesses can be used to correct major cases in which the change of owner-

ship and the time of recording of payments do not coincide.

3.5 In addition to the ability to serve as a primary source for trade in goods, or informing adjustments to merchandise trade or ITRS-based trade data, surveys of businesses can be extended to collect information on goods trade-related components of the balance of payments. These components include the two service components associated with the physical movement of goods (manufacturing services on physical inputs owned by others, and maintenance and repair services n.i.e. [not included elsewhere]) and the financial account component on trade credit.

3.6 Model form 4 in Appendix 8 can be used for a comprehensive survey of businesses to compile trade in goods. If used to make adjustments to merchandise trade or ITRS statistics, the form can be tailored to address specific issues. Also, the compiler may need to approach only selected importers and exporters who trade in specific commodities or have large values or volumes of trade in order to achieve material improvements to the balance of payments accounts.

Consignment trade

3.7 Goods shipped on consignment are an example where the timing of a good crossing the customs border does not coincide with the change of ownership—ownership change will occur later than the time the goods cross the border, and it is only when the goods are sold that they should be included in the balance of payments. It would be useful, to ensure consistency of recording, to obtain data on opening and closing positions of goods located abroad that were held, prior to sale, by residents (the same applies to goods held in the resident economy by nonresidents). In each case, values of goods should be deducted from the

merchandise trade statistics in the period in which they cross the border, with the value of the sale added to the merchandise trade statistics in the period in which the sale occurs. Such adjustments would typically be made only when amounts involved are significant. However, the *BPM6* recommends that if it is impractical to make the adjustments as described earlier, the goods for consignment can be recorded in balance of payments by the time of recording in IMTS (*BPM6*, paragraph 10.29).

Merchandising

3.8 Merchandising transactions—that is, the purchase of goods by a resident from a nonresident combined with the subsequent resale of the same goods to another nonresident without the goods being present in the compiling economy—are recorded in the balance of payments as transactions in goods, classified as merchandising. 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 (not as merchandising). Examples of the treatment of goods under merchandising and manufacturing services on physical inputs owned by others are presented in Box 10.1 of the *BPM6*.

3.9 By the very nature of merchandising, 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 merchandising. It may be possible to identify such organizations through the maintenance of a business register that may be maintained by the collecting body or central statistical office (if different). Model form 5 requests data required for recording merchandising transactions in the balance of payments. Data should be collected on a gross basis, by commodity, and by partner economy, wherever possible.

Services

3.10 While international merchandise trade statistics are used primarily in the compilation of trade in goods in the balance of payments, some information may be available to assist in the compilation of trade in services. In particular, if total values of freight and insurance costs are available through the merchandise trade system, they can be used to estimate the purchase of freight and insurance services, which is

described further ahead. Similarly, information in the merchandise trade system may allow for the identification of companies who are undertaking manufacturing services on physical inputs owned by others, or supplying maintenance and repair services. However, it is likely that there will be only limited information in the merchandise trade system to support the compilation of trade in services.

3.11 An ITRS can be used for the compilation of trade in services statistics and is likely to have a good coverage across the full range of services. However, as with trade in goods, there may be challenges with differences between the time of delivery of the service and the time of payment, as well as from the “bundling” of the payment for services with payments for goods or financial instruments. Depending on the system, an ITRS may also suffer from undercoverage (payments for some services (e.g., telecommunication) are made on a settlement (net) basis) and present difficulties for classifying to the detailed service type (particularly if classifying by the extended balance of payments services classification recommended in the *Manual on Statistics of International Trade in Services, 2010 (MSITS 2010)*).

3.12 Surveys of businesses can provide the coverage across the full range of services. Model form 6 in Appendix 8 provides guidance on a comprehensive survey of services. As with surveys of businesses for trade in goods, the survey can also be used to collect information on trade credit. Capital account transactions reflecting the acquisition and disposal of nonproduced nonfinancial assets can be difficult to separate from charges for the use of intellectual property (services). As a consequence, the capital account transactions might also be collected in a comprehensive survey on trade in services.

3.13 Business surveys on services have proven successful in a number of economies. However, some general observations are in order. Surveys of businesses are designed to collect both credit (receipts) and debit (payments) items. On the receipts side, the particular service provided is likely to relate closely to the industry activity of the company approached; for example, the legal industry is most likely to provide legal services. This is less true on the import side, although there are likely to be greater associations of certain services with particular industries. Companies

engaged in international trade in services may be those undertaking other international business activities. Therefore, it is possible to identify a large part of the population involved in import of international trade in services by approaching companies involved in a direct investment relationship, companies that have large external assets and liabilities, and companies that have large transactions in goods.

3.14 The nature of individual services and the specialized providers associated with those services means that tailored forms may be appropriate. These instances are discussed in more detail ahead.

Manufacturing services on physical inputs owned by others

3.15 It is often possible to obtain information on manufacturing services on physical inputs owned by others from merchandise trade statistics. Merchandise trade statistics may provide the values of the goods that arrive in the economy where the processing is conducted (values of goods sent from the economy where the goods are owned) and, after processing, the values of goods that are returned to the economy where the goods are owned (values of goods received back by that economy). These transactions may be identified separately in the customs documents, but inconsistent valuation principles may be applied between goods entering and leaving the economy. Even where the valuation principle is the same, the difference between the import price and the export price may not accurately reflect the manufacturing services that have been provided—for example, most of the value of the processed goods may derive from research and development undertaken by the owner rather than the processing, or there may be holding gains or losses on the goods while they are in the processing economy.

3.16 Nevertheless, it is important to identify the merchandise trade values of goods imported/exported to be processed without ownership changing hands to ensure that these goods are excluded from trade in goods in the balance of payments. In addition, the *BPM6* recommends the compilation of supplementary items on the values of goods received and returned (for manufacturing services provided by the reporting economy) and the values of goods sent and returned (for manufacturing services acquired by the reporting economy).

3.17 In order to collect information on the value of the manufacturing services, it may be preferable to conduct a survey of businesses. The number of companies that undertake processing or send goods abroad for processing may be relatively few and could be identified from the customs documentation. Therefore, companies may be able to be surveyed about processing activities in a separate survey. Model form 7 in Appendix 8 contains a sample questionnaire on manufacturing services on physical inputs owned by others.

Maintenance and repair services n.i.e.

3.18 Similar to manufacturing services on physical inputs owned by others, maintenance and repair services often involve the movement of goods across a customs border, although the services can also be delivered in the economy of the owner of the goods.

3.19 Where the goods are being sent to the economy of the service provider and returned, the companies involved in the provision and purchase of the service may be identified through customs documentation. In these cases, there may also be other movements of goods across the customs border and the companies may be involved in survey of businesses on trade in goods more broadly. Model form 4 (for trade in goods) in Appendix 8 includes questions on repair services.

3.20 Alternatively, where the services are provided in the economy of the owner of the goods, the resident (either the provider of the services or the purchaser) may be identified from business registers maintained for balance of payments purposes. The general survey on trade in services (model form 6 in Appendix 8) would capture information on the value of the services provided.

Transport services

3.21 The international transport industry has many unique features that require special attention when balance of payments transactions are measured. Various modes of transport (including sea, air, rail, road, space, pipeline, and waterways) may be employed. A survey of businesses can be used, and may need to be targeted by the residence of the service provider, to measure the transactions associated with each mode. The point-of-valuation convention adopted for

transactions in goods adds to the complexity of recording transport industry transactions in the balance of payments. This is explained more fully in paragraphs 12.35–12.36.

3.22 As mentioned in Chapter 12, paragraph 12.27, to record transport and associated services correctly in the balance of payments, it is necessary to distinguish between owners and operators of mobile equipment, and the compiler should, when using international transport surveys, have a clear grasp of this distinction. International transport services are provided by operators, who may not necessarily be the owners, of the equipment. Owners can engage in balance of payments transactions (such as operational leasing) that are related to transportation.

3.23 A number of persons or companies may be approached for information relevant to the balance of payments. For services provided by equipment operated by residents, the resident company should be a good source of data. Local branches of nonresident operators often possess, or have access to, relevant information on the activities of their head offices. Agents for nonresident operators may have reliable information on services provided and expenses incurred by operators when agents are involved in the provision of services or the payment of expenses. A resident operator may also act as an agent for a nonresident principal, and the resident transport operator may be approached to report in this capacity. Additionally, importers may know the value of freight paid, and government authorities who collect various port charges may have the relevant data.

Model forms

3.24 Model form 8 in Appendix 8 requests the type of data that a compiler could collect from a resident transport operator. In part A of the model form, data items include selected transport earnings and selected expenses incurred abroad. Three categories of passenger fares are collected: nonresidents traveling on international routes of resident carriers (passenger transport service credits), nonresidents traveling on domestic routes (travel credits), and residents traveling on international routes. The last item is not a balance of payments item, but collection may be useful for compiling passenger fares earned by nonresident operators (passenger transport service debits) if total

fares paid by residents is collected through a household survey. Four freight items are collected: freight services on imports (which is not a balance of payments item, but as described ahead can be used with total freight services paid by residents on imports to derive transport debits as a residual), freight services on exports (transport credits), freight services to nonresidents on operations in the home economy (freight credits), and freight services on other foreign routes (transport credits, assuming that all freight services on foreign routes are provided to nonresidents). Remaining items included in the model form pertaining to earnings cover inward mail (transport credits), charter of vessels without crew (operational leasing credits), and other earnings. For the last item, the balance of payments classification should be determined by the description provided.

3.25 While all of the details that model form 8 requests for expenses are not required as standard balance of payments components, separate identification should ensure that complete data are reported. Details sought include expenses on fuel and provisions (goods debits), charters of vessels without crews (operational leasing debits), and advertising (miscellaneous business, professional, and technical service debits). Remaining expense items are included in transport. The more detailed items may also be of analytical interest to users of balance of payments statistics.

3.26 Part B of the form collects information on expected purchases of large equipment such as aircraft and ships. Part C obtains data on passenger fare ticket sales to residents on international routes.

3.27 Model form 9 in Appendix 8 seeks the type of data that a compiler may collect from resident companies providing goods and services to nonresident transport operators or acquiring services from them. Part A of the form seeks data on fuel and provisions (general merchandise credits), advertising (miscellaneous business, professional, and technical service credits), and a number of other items that are included in transport credits. The collection of detailed information should ensure complete reporting of items and may be of interest to users of balance of payments statistics as supplementary information. Part A collects information on transactions in which the resident companies provide services and settle directly with nonresident principals and information

on transactions in which resident companies arrange for services provided by other residents. Data are required on an accrual basis—that is, when the service was provided, not when it was settled.

3.28 Part B collects data on passenger ticket sales and passenger fare revenue, which are discussed further ahead. Part C collects details on various services—such as inland freight (to help estimate freight debits) and mail (postal and courier service debits)—provided by nonresident transport operators to residents.

3.29 In practice, model forms could be modified so that separate forms are designed for each mode of transport (in the case of resident operators reporting on form 8) and for each type of company being approached (in the case of form 9).

Passenger fares—travel revenue or ticket sales

3.30 The compiler has two broad options for measuring passenger fares; he or she may collect information on the basis of travel revenue or on the basis of ticket sales. In international transport surveys, data on both ticket sales and passenger fare revenue could be collected. This approach is adopted in model forms 8 and 9. Judgments can then be made about adjustments appropriate for deriving a reliable passenger fare earnings estimate.

3.31 Data on passenger fare commissions paid by nonresident operators are also collected via the model forms.

International shipping surveys

3.32 As with all surveys, the compiler must first determine the statistical unit for which data are to be collected. For international shipping activity, this is often more difficult than for other surveys. It is important that the place of registration not be assumed to be the residence of the operator. Moreover, as ships are often leased, it is important to know whether the lease is an operational or finance lease.

3.33 Lloyd's of London has developed an international Register of Ships¹ that lists a reference number, vessel name, country of registration (or national flag), owner's name and address, vessel description, type

(tanker, passenger cruise vessel, bulk carrier, etc.), and capacity for each vessel. A compiler could use register data in surveying operations of individual vessels or in linking individual vessels to owners or other principals. In a shipping register, the name of the lessor (typically a financial institution) is usually recorded for a vessel operated under a financial lease. It is important to recall that for balance of payments purposes, the operator (the lessee), not the legal owner, determines the provider of the services. Other names (and addresses) recorded as owners may, in fact, be nominees rather than actual owners.

3.34 It should be possible to collect accurate and relevant data from resident companies in respect of international transport transactions. There may be some complex operational arrangements, but, with clear instructions to the reporting companies involved, high-quality data can be obtained. Sometimes it may be difficult to identify all resident operators: the compiler may have to use an exploratory survey or attempt to identify operators from owners listed on a shipping register.

3.35 It may not be possible to obtain information from nonresident principals because a statistical compiling agency is generally not in a position to require nonresident companies to report. On the other hand, a significant part of the shipping may be handled by a small number of nonresident companies that have local branches or agents with thorough knowledge and records of nonresidents' earnings and expenses; such is most likely to be true for petroleum transport and the transport of major export or import commodities. Agents should be defined to include branches of nonresident companies acting on behalf of their head office principals, resident shipping operators who act as agents for nonresident principals, and importers and exporters who act as agents. Overlap may occur if more than one collection approach is adopted. For example, a petroleum importer may be both a branch of a nonresident enterprise and an acting shipping agent for its nonresident parent. Shipping agents could also be asked to report details of agent fees earned from nonresident principals.

3.36 In respect of inland freight charges earned by nonresident operators, only a small number of operators with relatively few clients (who may also act as agents for nonresident principals) may be involved.

¹The Register of Ships is available through purchase.

Therefore, collection of data may be a straightforward matter. If this activity is more widespread, an exploratory survey may be needed to identify the principals, their agents, or companies using the freight services.

3.37 In respect of other transport services (such as passenger services and mail) provided by nonresident operators, it should not be difficult to identify resident companies acquiring these services or arranging the sale of such services on behalf of nonresident principals. In many instances, the sales office may be a branch of the nonresident operator.

3.38 Data on services (such as stevedoring and provisioning) supplied to nonresident operators may be obtained by approaching suppliers of these services—if suppliers can distinguish between services provided to resident operators and those provided to nonresident operators. Similarly, government authorities could be approached to obtain details of fees charged. Alternatively, agents for nonresident operators could be asked to supply details of all expenses met by them on behalf of their principals.

3.39 It can be difficult to determine whether coverage of shipping operators is complete. In some economies, all vessels that enter and leave ports can be identified from lists supplied by port authorities or other sources. Such lists could be used to ensure that resident shipping companies and agents for nonresident shipping companies supply data in respect of each vessel entering and leaving a country's waters. Resident shipping companies and agents could report on the basis of each voyage, on the basis of a consolidated period, or on a vessel at a single port. When reporting is done on a consolidated basis, a list of vessels and ports visited should also be provided to ensure that there is no duplication or omission in reporting. It is not unusual for different agents to act for one vessel in different ports. Account should be taken of such arrangements when collection methodologies are determined.

3.40 To obtain a list of vessels owned or operated by residents and operating abroad during an entire reference period, the compiler could approach resident companies directly, consult the Lloyd's register, or consult trade journals. A combination of such methods is likely to give the best results and may identify resident operators previously unknown to

the compiler. Lists of ships could also be employed to facilitate sample surveys (at least for measurement of nonresident earnings and expenses), and the use of such lists could alleviate some of the reporting burden on shipping agents. Insufficient resources may make it difficult or impossible for the compiler to collect information on individual vessels. In such cases, the compiler must provide clear reporting rules for shipping operators and agents to follow to ensure complete coverage and avoid duplication.

3.41 Circumstances arising from flags of convenience should also be noted. Most economies have legislation on shipping registration. Some economies frame their legislation (usually by imposing fewer obligations and costs) to attract shipping company registrations and thus generate fees for national authorities. The general rules for determining a service provider's residence (see *BPM6*, Chapter 4) apply to shipping transport, with the result that the country of registration is not a criterion for determining the residence of the provider.

International airline surveys

3.42 The statistical unit in surveys of the international airline industry is generally the airline operator, and this fact presents no major problems. However, there may be a number of financing and leasing arrangements of which the compiler should be aware.

3.43 Financing of aircraft is often undertaken under financial lease arrangements. The treatment of financial leases is straightforward; therefore the compiler should have no difficulty in imputing a change of ownership to the airline operator when necessary and in measuring the transport activity appropriately. The treatment of financial leases is discussed in Chapter 10, paragraph 10.80.

3.44 It is common for airlines to lease aircraft without crews from one to another for several years at a time. These charters are usually known as "dry charters," and the charterer is regarded as the operator. Under such arrangement, the owner of the aircraft will be renting the plane to the dry charterer, and this rental agreement should be recorded under "operating rentals" (as a service debit if the owner is a nonresident). The dry charterer will earn transport credits in the balance of payments to the extent it provides transport services to nonresidents.

3.45 “Wet charters” are akin to “voyage charters,” and the plane is hired with a crew. In this case, the company responsible for the crew is regarded as the operator, and charter payments are recorded as payments for transport services.

3.46 There are some complex joint venture arrangements in the international airline industry. Various treatment options are outlined in Chapter 12, paragraph 12.34. Compilers in most economies where surveys are used to collect data on international airline operations normally approach resident airline carriers and the resident offices of nonresident airline carriers. Such collections tend to be relatively small and are usually readily managed. Model forms 8 and 9 can readily be tailored specifically to the airline industry.

3.47 While coverage of normal commercial operations should be easy to maintain, coverage of private charters and foreign military flights may be less easily measured. If these are missed, balance of payments service credits (such as airport fees in the compiling economy) could be understated. Monitoring such activity should be possible in conjunction with civil airline and defense authorities.

Rail transport

3.48 In Chapter 4 of the *BPM6*, the criteria for determining residence are set out. If these criteria are met for a rail operator, the company is treated as a resident of the economy. When a rail company operates outside its economy and meets the definition of a branch in the economy of operation,² a separate institutional unit is recognized and the railway system in the second economy would be regarded as a resident direct investment enterprise in the host economy. If the activity of the rail company does not allow for the recognition of a branch in the economy of operation, the rail company (in the home economy) is deemed to be providing transport services in the host economy. Obtaining these credits in the home economy should be relatively straightforward as the unit is a resident of that economy. For the travel debits, however, it is less easy: in this situation, the railway company may have an agent in the host economy that could be approached for the information.

²The factors used for identifying a branch are presented in the *BPM6*, paragraphs 4.26–4.28.

Other modes of transport

3.49 Other modes of transport include roads, waterways, pipelines, electricity cables, and space.

3.50 When a company providing road transport services operates in more than one economy, the separate operations of the company in each economy should be regarded as resident units of those economies if the criteria for recognizing a branch are generally met. Thus, it follows that it is the principal center of economic activity that determines the residence of the unit, not the location of the mobile equipment.

3.51 Unlike rail transport, road transport services may be provided by many companies and, as in the shipping industry, there may be many complex ownership and operation arrangements. Collection of complete data may be difficult, in practice, because of the large number of companies involved, the complex ownership and operating arrangements, and the necessity to split, for balance of payments purposes, inland freight (the carriage of goods within an economy or to the border) and international transport (the carriage of goods outside the exporting border). In addition, it may be difficult to distinguish services provided to nonresidents from those provided to residents. Although it may be difficult to obtain complete coverage of these activities, larger trucking and bus companies could be approached, and collection of the necessary data negotiated—these companies may be able to make a reasonably good estimate on the proportion of their business that is provided to nonresidents compared with residents. Such estimates may be easier for these companies to make for goods transport than for passenger transport. If the breakdown between passenger services provided to nonresidents compared residents is too difficult for these companies to make, it may be necessary for the compiler to undertake various on-site surveys of the passengers themselves. Data on freight rates and cost factors may be obtained, and these could then be applied to some benchmark data collected by national statistical authorities on road transport activity.

3.52 Transport by inland waterways should have many features in common with rail systems; relatively few operators are involved in most economies. However, in some economies, there are many operators, and in these economies the compiler could explore the possibilities for developing collection strategies

similar to those described for international shipping or for road transport.

Postal and courier services

3.53 Under the *BPM6*, postal and courier services are also included under transport. The data could be collected through survey of post offices; model form 6 from Appendix 8 could be used for this purpose.

Travel services

3.54 Surveys of businesses can be used to measure expenditure by residents traveling abroad (travel debits) or travel expenditure by nonresidents in the host economy (travel credits). Companies engaged in providing the means to pay for travel can provide information on both travel credits and debits, while companies that provide travel services to nonresidents can provide information on travel credits. Model form 10 in Appendix 8 requests the type of information that could be collected in a survey of businesses of international travel. It is important to distinguish between payments for international passenger services and international travel. The former are in the balance of payments under passenger services (part of transportation services), while the latter are included in travel. Surveys of businesses for travel purposes are often used to supplement or to provide indicator series where surveys of households may be too expensive to conduct on a frequent basis.

3.55 Businesses that provide the means to pay for travel include institutions involved in issuance of credit, debit, and cash cards, and traveler's checks, wire transfers, and the sale or purchase of foreign exchange (usually banks or similar financial institutions); travel agents; tour wholesalers; and retailers providing prepaid or package tours. Hotels and car rental companies may also be able to provide the information for (some) credits data. Surveys of such companies could be supplemented by estimates of travel expenditures paid with other instruments (e.g., cash expenditure).

3.56 Many travel charges are made through credit and debit cards, or through the use of automatic teller machines. Data on expenditures by nonresidents in host economies and by residents who travel abroad and use credit, debit, or cash cards are typically available from card-issuing companies. These businesses should be able to distinguish foreign payments and

receipts from domestic payments and receipts. As relatively few institutions issue credit and debit cards, this would be a small collection sample. Part A of model form 10 contains the type of questions that may be asked. Data should be collected before fees payable by, or to, nonresident companies are deducted.

3.57 Wire transfers may be used by individuals and travel organizers to pay for certain travel expenses. However, wire transfers are also used for other purposes (such as remittances), so it is important that the purpose of the transfer is clearly identified at the time of the transaction so that it can be properly classified.

3.58 Caution must, however, be exercised when credit or debit card information is used without supporting information on the transactions covered. Payments may relate to nontravel items (such as imports of goods) in the balance of payments, and the residence of cardholders (as perceived by the issuing company) may differ from balance of payments definitions. Equally, some travel debits that are paid for on credit or debit cards may be to a resident organizer or wholesaler, so there may be a need to survey these companies as well, and ensure there is no undercounting. Moreover, if travel transactions for car rental or accommodation, for example, are obtained directly from these businesses, it is important that such transactions be identified separately in data obtained from the credit or debit card companies so that these data can be adjusted to avoid double counting. Moreover, as such data sources are based on the time of the payment, and not necessarily the time of the travel, it would be useful to obtain some indicator as to when the travel took place or will take place. Nevertheless, in the absence of comprehensive surveys of individuals traveling abroad, data on credit or debit card expenditures can often serve as the basis for a useful estimate of part of travel expenditure.

3.59 To measure some prepayments, including package tour payments, it is necessary to identify wholesale and retail travel businesses. An exploratory survey could be used to identify companies receiving (or making) payments from (or to) abroad. Companies involved in this activity on a significant scale could be asked, subsequently, to complete a more detailed questionnaire. Gross amounts involved should be collected so that travel expenditure and commissions can be separately distinguished. The compiler, in establishing a survey of

wholesale and retail travel businesses, should pay particular attention to reporting rules so that no overlap or duplication of reporting occurs. Part C of model form 10 requests the type of information that could be collected.

3.60 With the increased use of credit, debit, and cash cards, traveler's checks are less important than they used to be. Nonetheless, they remain important for some individuals traveling abroad. Part B of model form 10 seeks data that could be collected on the value of the following:

- Traveler's checks (less refunds to original purchasers) that are issued abroad by nonresident companies on behalf of your enterprise and used during the recording period (travel credits)
- Traveler's checks that are issued by resident companies to residents and presented for collection by nonresident banks (travel debits)
- Traveler's checks (less refunds) that are issued to residents by resident companies on behalf of nonresident banks (travel debits)
- Traveler's checks that are sent for collection to nonresident banks—that is, traveler's checks issued abroad by nonresident institutions and purchased by resident companies from nonresident individuals traveling in the compiling economy (travel credits).

3.61 Gross data should be collected for all payment means, and fees and commissions should be collected separately and treated as financial services for traveler's checks, wire transfers, credit, debit, and cash card transactions.

3.62 Businesses that issue traveler's checks can identify the name of the bank or other agent—and the economy—that sold the traveler's checks (this information is encoded in the number printed on the traveler's check) and any refunds on unused checks. These businesses are also able to identify (or estimate) the value of traveler's checks used in each economy. Companies acting as traveler's check sales agents for issuing companies have information on locations at which traveler's checks are sold and on details about refunds. Staff of banks accepting traveler's checks know the values of checks sent abroad for collection by the banks. Therefore, for balance of payments compilation purposes, it should be possible to identify flows associated with traveler's checks.

3.63 As relatively few institutions (mostly banks) issue and redeem or buy and sell traveler's checks, data should be readily available. The compiler, in establishing a survey of traveler's check transactions, should pay particular attention to inclusion and exclusion rules so that all transactions are reported without duplications. The resident transactor undertaking the settlement with the nonresident party is usually designated as the reporting company in model forms.

3.64 Business surveys may also be used to measure actual travel services provided. Some compilers collect, from hotels and tourist resorts, data on numbers of nonresident individuals staying at these establishments, numbers of nights spent, and expenditures on accommodations and food. If conducting a regular survey to collect these data is not possible, it may be possible to obtain the numbers of visitors, hotel guests, and so forth and use an average from a benchmark survey (conducted annually) to estimate the subannual transactions. However, in economies with large seasonal travel flows, or with changes in the types of travelers in different seasons, an annual survey may mask important seasonal differences. In those instances, subannual surveys should be conducted whenever possible, or, if regular subannual surveys are not possible, it is preferable to conduct a benchmark survey once every three to five years that captures seasonal variations.

3.65 In economies where nonresident individuals stay at relatively few such establishments, a survey of hotels may be a good data source. A survey of businesses can also be used to obtain data from other establishments likely to provide significant services to nonresident travelers. Such services may be provided by restaurants, car rental companies, tour and transport operators, casinos, entertainment centers, and so forth. To obtain a profile of nonresident travel expenditure, the survey could collect the total value of services provided or partial information, which could be combined with information from other sources to measure travel credits. Part D of model form 10 contains the types of questions that could be used. The rules about which businesses should report must be clearly understood so that no overlap or duplication occurs. In the model form, data are collected on the basis of the institution that receives the payment rather than the institution that provides the service.

3.66 Expenditure by resident employees working abroad or nonresident employees working in the compiling economy should be treated as travel. These expenditures may best be obtained through surveys of households (see this chapter, Collections from Persons and Households).

Construction services

3.67 Construction covers the creation, management, renovation, repair or extension of fixed assets in the form of buildings, land improvements of an engineering nature, and other constructions such as roads, bridges, and dams. It also includes related installation and assembly work, site preparation and general construction, and specialized services such as painting, plumbing, and demolition.

3.68 Model form 11 could be used for collecting information on construction abroad and construction in the compiling economy. The former covers the construction work for nonresidents by residents and the goods and services acquired from the economy in which the construction activity is being undertaken, from the economy of the construction company, and from a third economy. The latter includes construction work for residents by nonresident construction companies, and goods and services acquired in the compiling economy by the nonresident construction companies.

3.69 The form also collects data on both short-term and long-term construction projects. However, only the short-term projects should be included under services, while long-term projects should be treated as foreign direct investment.

Insurance services

3.70 International insurance transactions include insurance placed abroad by agents and brokers, other insurance placed directly abroad, insurance received from abroad, reinsurance received from abroad, and reinsurance placed abroad. Also, it may be desirable to distinguish between insurance on goods, other casualty insurance, and life insurance. See Appendix 2, “Insurance Transactions and Positions,” for a discussion on how to classify a transaction in insurance into the service, income, transfer, and financial account components.

3.71 Model form 12 in Appendix 8 requests data that could be collected from businesses and used for

compiling insurance services and related balance of payments items. Part A of the form contains premium and claim items that may be collected from resident insurance companies.

3.72 In addition to the claims and premiums information that can be used to estimate the insurance services, model form 12 provides examples of the information that could be collected to assist the compilation of claims on technical reserves, income on technical reserves (and premium supplements), current transfers (secondary income), and capital transfers.

3.73 A list of insurance companies conducting both insurance and reinsurance business should be available from the authority that issues the licenses for insurance businesses to operate. Resident insurance companies should report details of premiums and claims in respect of business obtained from abroad and in respect of international reinsurance flows. In addition, these companies may be asked to report separate details of premiums and claims in respect of insurance written by them on imports (see paragraph 3.79).

3.74 In regard to goods imports, data regarding premiums on insurance placed directly abroad and data on associated claims may be collected by approaching importers. However, if such data are not available from importers, an alternative is to deduct from the estimate of total insurance premiums on imports those insurance premiums on goods imports paid to resident insurance companies and collected from these businesses. In other words, for goods imports, insurance premiums paid to nonresidents can be derived as a residual. To obtain data on claims received by importers when data from importers are not available, data on premiums received and claims paid by resident insurance companies on goods imports could be used to calculate a claims to premiums ratio that can be applied to insurance placed with nonresidents. Care needs to be taken to avoid sample bias—that is, where the nature of the goods being insured is related to whether the imports are insured with resident insurers or nonresident insurers.

3.75 Data on insurance that covers insured items other than goods imports and is placed directly abroad could be obtained from a broad survey of businesses. Branches and subsidiaries of nonresident companies (direct investment enterprises) are

more likely to place insurance abroad than are other companies—especially when the head office of a multinational enterprise group takes out a global policy or self-insures and recoups premiums from subsidiaries and branches. Similarly, resident companies with foreign operations that do not meet the criteria for recognition of a branch may insure in the economy where the activity is taking place.

3.76 Care should be taken in the case where a multinational company self-insures. In this case, claims of the insured companies on their insurer (and the related income flows) are treated as direct investment debt instruments (asset/liability) (and direct investment income flows). Sometimes the direct investor—that is, the insurer—will reinsure with an unaffiliated reinsurer.

3.77 Insurance agents and brokers are usually required to register with insurance authorities; therefore, a list of these businesses should be readily available from official sources. An exploratory form could be used to identify agents and brokers placing insurance abroad. These agents and brokers would then be asked to complete a more detailed questionnaire. Data required on insurance transactions include details of premiums paid abroad and claims received. On model form 6, in the section to be completed by agents and brokers, insurance on goods imports is required as a separate category to ensure that it is not double counted. Insurance agents and brokers may satisfactorily report data on premiums paid abroad, but they may not be aware of claims received by residents. Therefore, the compiler may wish to adjust the claims data accordingly. The adjustment should be made in consultation with agents and brokers or by using a claims-to-premiums ratio that domestic insurers think is appropriate. If such an adjustment is made, the compiler should ensure that allowance is made for any claims information collected directly from the recipient—allowance should be made to the extent that such claims relate to premiums paid through resident agents.

3.78 Households may obtain insurance coverage for both life and nonlife from insurance companies abroad. Some may be obtained through agents or brokers in the resident economy, and the data may be obtained through a survey of businesses of these companies. However, households may obtain such coverage directly from nonresident providers. Such

coverage may be increasing, especially through the use of the Internet. Therefore, the compiler may need to undertake periodic household surveys (see this chapter, Collections from Persons and Households) or use bilateral data, if available, from those economies where residents place most of their direct insurance coverage.

Freight and insurance services on imports

3.79 Data for freight and insurance on imports may be required for a number of balance of payments purposes. If imports are recorded on a c.i.f. basis in merchandise trade statistics, data on freight and insurance are necessary to adjust imports to an f.o.b. basis. Data also are necessary to estimate freight and insurance premiums paid to nonresident insurers. A common practice is to collect data on resident carrier earnings from freight services on imports and data on insurance premiums paid to resident insurance companies on imports; to deduct these amounts from estimates of total freight services and insurance on imports; and thereby derive the residual figure for freight services and insurance premiums attributable to nonresidents. See Appendix 2 for a further discussion on how to classify a transaction in insurance into the service, primary income, secondary income, and financial account components.

3.80 This process requires information on the total payments for freight services and insurance on imports. It may be that customs documentation includes both c.i.f. and f.o.b. valuations on imports, allowing the calculation of total freight and insurance. Alternatively, an across-the-board survey of importers can be used to obtain the total value of freight and insurance. Importers may be asked to supply data on imports on an f.o.b. (or c.i.f.) basis and on freight and insurance components separately. These data may be requested for total imports or, preferably, for imports at each commodity level. Part B on import of goods in model form 4 in Appendix 8 includes questions on the value of freight services and insurance. A survey of importers could also seek information on how much of the freight services and insurance was paid to resident transport and insurance companies.

3.81 The survey of importers does not need to be conducted every quarter or even every year. Ratios can be calculated between the value of the goods being imported (either on a c.i.f. or f.o.b. basis) and the charges

for freight services and insurance. These ratios can then be applied to the value of similar goods in subsequent periods. A benchmark survey of importers conducted every three to five years may be sufficient if there is a relative degree of stability in the origin and composition of the imports. A subsample may be conducted on a more frequent basis in order to determine whether the ratios have changed significantly from those calculated from the benchmark survey.

3.82 If a comprehensive survey is not possible, the compiler could still approach selected companies to obtain data on freight and insurance for certain commodities, particularly those where charges may be a considerable part of the c.i.f. value (e.g., insurance charges on petroleum). Even though the compiler may still have to estimate freight and insurance for some commodities, the scope of estimation is reduced.

Pension services

3.83 International pension services include residents receiving pension services from nonresident pension fund operators, and services provided by domestic pension funds. Services are delivered continuously by pension funds (usually associated with employment), contributions are received, benefits are paid, and assets are invested and managed. As the recipient of pension services is always an individual, information will generally be difficult to collect through a survey of businesses for services debits. “Employment-Related Pension Schemes and Social Security Schemes” of Appendix 2 contains a discussion of the classification of the various transactions associated with employment-related pensions and social security.

3.84 Model form 13 in Appendix 8 requests data that could be collected from businesses and used for compiling pension service credits and related balance of payments items. Parts A and B of the form contain items for contributions to the fund and pensions paid out of the fund. The model form can also be used to collect data on secondary income, the technical reserves of the pension fund, and income on the technical reserves.

3.85 A list of pension fund operators should be available from the authority responsible for licensing pension funds to operate. Resident pension fund companies should report details on contributions to the fund, reserves held by the fund, and pensions paid

out of the fund to nonresidents. Fund operators may be readily able to identify nonresident members of the fund based on the addresses of the members.

3.86 There are some instances where there may be domestic sources of information on pension service debits. In some economies, it is possible for individuals to determine their own pension funding arrangements. In these cases, agents and brokers may offer services including the placement of funds abroad—these agents do not take the liability onto their own books, but rather arrange for the funds to be invested by nonresident pension funds. In model form 6, Part D requests information from brokers and agents on the placement of monies in nonresident pension funds. Regardless, the agents and brokers are unlikely to be aware of the pension benefits being paid out of the fund, so they are only a partial source of information. Ratios from domestic funds or actuarial assumptions can be used to estimate positions in the fund and pensions paid from the fund based on the partial information.

3.87 Branches and subsidiaries of nonresident companies (direct investment enterprises) may require their employees to participate in specific funds associated with the multinational group. Information may be available from the branches or subsidiaries on their payments to the foreign pension funds. While information on pensions paid out of the fund may not be known by the local enterprise, the estimation of pensions and positions in the fund may be based on local ratios or actuarial assumptions.

3.88 Most individuals who have claims on nonresident pension funds will deal directly with the fund or through a nonresident employer (in the case of some payments into the fund). Information on payments into the fund, claims on the fund, and pensions received may be available only from the resident, who, in this case, is an individual. Therefore, the compiler may need to undertake periodic household surveys (see this chapter, Collections from Persons and Households). Alternatively, the compiler may use bilateral data, if available, from those economies where residents are employed.

Financial services

3.89 Financial services include explicit fees associated with loans, deposits, asset management, brokerage fees, and the implicit service charge on loans and deposits reflected in the difference between the

interest charged (earned) on loans (deposits) and a reference rate, such as interbank rate. This implicit service charge is known as financial intermediation services indirectly measured, or financial intermediation services indirectly measured (FISIM).

3.90 Explicit fees are generally associated with external financial assets or liabilities. Model form 17 in Appendix 8 is an example of a comprehensive survey of financial claims and liabilities to nonresidents. This form also requests data on the explicit fees charged between residents and nonresidents on these positions.

3.91 Appendix 3 provides a discussion of the estimation of FISIM.

Other services

3.92 Collection of data on services such as communications, construction, certain financial services, computer and information services, royalties and fees, other business services, and other personal services are included under other services. The classification of services according to the *BPM6* appendix is presented in Table 3.1, along with the more detailed Extended Balance of Payments Services

Table 3.1 Classification of Services

Balance of Payments (<i>BPM6</i>) ¹	Extended Balance of Payments Services Classification (<i>EBOPS—MSITS 2010</i>)
1.A.b.1 Manufacturing services on physical inputs owned by others <i>1.A.b.1.1 Goods for processing in reporting economy</i> <i>1.A.b.1.2 Goods for processing abroad</i>	1 Manufacturing services on physical inputs owned by others <i>1.1 Goods for processing in reporting economy</i> <i>1.2 Goods for processing abroad</i>
1.A.b.2 Maintenance and repair services n.i.e.	2 Maintenance and repair services n.i.e.
1.A.b.3 Transport 1.A.b.3.1 Sea transport 1.A.b.3.1.1 Passenger <i>Of which 1.A.b.3.1.1.1 Payable by border, seasonal, and other short-term workers</i> 1.A.b.3.1.2 Freight 1.A.b.3.1.3 Other 1.A.b.3.2 Air transport 1.A.b.3.2.1 Passenger <i>Of which 1.A.b.3.2.1.1 Payable by border, seasonal, and other short-term workers</i> 1.A.b.3.2.2 Freight 1.A.b.3.2.3 Other 1.A.b.3.3 Other modes of transport 1.A.b.3.3.1 Passenger <i>Of which 1.A.b.3.3.1.1 Payable by border, seasonal, and other short-term workers</i> 1.A.b.3.3.2 Freight 1.A.b.3.3.3 Other 1.A.b.3.4 Postal and courier services For all modes of transport: 1.A.b.3.0.1 Passenger <i>Of which 1.A.b.3.0.1.1 Payable by border, seasonal, and other short-term workers</i> 1.A.b.3.0.2 Freight 1.A.b.3.0.3 Other	3 Transport Alternative 1: Mode of transport 3.1 Sea transport 3.1.1 Passenger <i>Of which 3.1.1.1 Payable by border, seasonal, and other short-term workers</i> 3.1.2 Freight 3.1.3 Other 3.2 Air transport 3.2.1 Passenger <i>Of which 3.2.1.1 Payable by border, seasonal, and other short-term workers</i> 3.2.2 Freight 3.2.3 Other 3.3 Other modes of transport 3.3.1 Passenger <i>Of which 3.3.1.1 Payable by border, seasonal, and other short-term workers</i> 3.3.2 Freight 3.3.3 Other 3.4 Postal and courier services 3.5 Space transport 3.6 Rail transport 3.6.1 Passenger 3.6.2 Freight 3.6.3 Other 3.7 Road transport 3.7.1 Passenger 3.7.2 Freight 3.7.3 Other 3.8 Inland waterways transport 3.8.1 Passenger

Table 3.1 Classification of Services (*continued*)

Balance of Payments (BPM6) ¹	Extended Balance of Payments Services Classification (EBOPS—MSITS 2010)
	3.8.2 Freight 3.8.3 Other 3.9 Pipeline transport 3.10 Electricity transmission 3.11 Other supporting and auxiliary transport services For all modes of transport: Alternative 2: What is carried 3a.1 Passenger <i>Of which 3a.1.1 Payable by border, seasonal, and other short-term workers</i> 3a.2 Freight 3a.3 Other 3a.31 Postal and courier services 3a.32 Other
1.A.b.4 Travel 1.A.b.4.1 Business 1.A.b.4.1.1 <i>Acquisition of goods and services by border, seasonal and other short-term workers</i> 1.A.b.4.1.2 <i>Other</i> 1.A.b.4.2 Personal 1.A.b.4.2.1 <i>Health-related</i> 1.A.b.4.2.2 <i>Education-related</i> 1.A.b.4.2.3 <i>Other</i> <i>For both business and personal travel:</i> 1.A.b.4.0.1 <i>Goods</i> 1.A.b.4.0.2 <i>Local transport services</i> 1.A.b.4.0.3 <i>Accommodation services</i> 1.A.b.4.0.4 <i>Food-serving services</i> 1.A.b.4.0.5 <i>Other services</i> <i>Of which 1.A.b.4.0.5.1 Health services</i> <i>Of which 1.A.b.4.0.5.2 Education services</i>	4 Travel 4.1 Business 4.1.1 <i>Acquisition of goods and services by border, seasonal and other short-term workers</i> 4.1.2 <i>Other</i> 4.2 Personal 4.2.1 <i>Health-related</i> 4.2.2 <i>Education-related</i> 4.2.3 <i>Other</i> Alternative presentation for travel (for both business and personal travel): 4a.1 <i>Goods</i> 4a.2 <i>Local transport services</i> 4a.3 <i>Accommodation services</i> 4a.4 <i>Food-serving services</i> 4a.5 <i>Other services</i> <i>Of which 4a.5.1 Health services</i> <i>Of which 4a.5.2 Education services</i>
1.A.b.5 Construction 1.A.b.5.1 <i>Construction abroad</i> 1.A.b.5.2 <i>Construction in the reporting economy</i>	5 Construction 5.1 <i>Construction abroad</i> 5.2 <i>Construction in the reporting economy</i>
1.A.b.6 Insurance and pension services 1.A.b.6.1 <i>Direct insurance</i> 1.A.b.6.2 <i>Reinsurance</i> 1.A.b.6.3 <i>Auxiliary insurance services</i> 1.A.b.6.4 <i>Pension and standardized guarantee services</i>	6 Insurance and pension services 6.1 Direct insurance 6.1.1 Life insurance 6.1.1 a <i>Gross life insurance premiums receivable (credits) and payable (debits)</i> 6.1.1 b <i>Gross life insurance claims receivable (credits) and payable (debits)</i> 6.1.2 Freight insurance 6.1.2 a <i>Gross freight insurance premiums receivable (credits) and payable (debits)</i> 6.1.2 b <i>Gross freight insurance claims receivable (credits) and payable (debits)</i> 6.1.3 Other direct insurance 6.1.3 a <i>Gross other direct insurance premiums receivable (credits) and payable (debits)</i> 6.1.3 b <i>Gross other direct insurance claims receivable (credits) and payable (debits)</i> 6.2 Reinsurance

Table 3.1 Classification of Services (*continued*)

Balance of Payments (BPM6) ¹	Extended Balance of Payments Services Classification (EBOPS—MSITS 2010)
	6.3 Auxiliary insurance services 6.4 Pension and standardized guarantee services 6.4.1 Pension services 6.4.2 Standardized guarantee services
1.A.b.7 Financial services 1.A.b.7.1 Explicitly charged and other financial services 1.A.b.7.2 Financial intermediation services indirectly measured (FISIM)	7 Financial services 7.1 Explicitly charged and other financial services 7.2 Financial intermediation services indirectly measured (FISIM)
1.A.b.8 Charges for the use of intellectual property n.i.e.	8 Charges for the use of intellectual property n.i.e. 8.1 Franchises and trademarks licensing fees 8.2 Licenses for the use of outcomes of research and development 8.3 Licenses to reproduce and/or distribute computer software 8.4 Licenses to reproduce and/or distribute audio-visual and related products 8.4.1 Licenses to reproduce and/or distribute audio-visual products 8.4.2 Licenses to reproduce and/or distribute other products
1.A.b.9 Telecommunications, computer, and information services 1.A.b.9.1 Telecommunications services 1.A.b.9.2 Computer services 1.A.b.9.3 Information services	9 Telecommunications, computer, and information services 9.1 Telecommunications services 9.2 Computer services 9.2.1 Computer software Of which 9.2.1 a Software originals 9.2.2 Other computer services 9.3 Information services 9.3.1 News agency services 9.3.2 Other information services
1.A.b.10 Other business services 1.A.b.10.1 Research and development services 1.A.b.10.2 Professional and management consulting services 1.A.b.10.3 Technical, trade-related, and other business services	10 Other business services 10.1 Research and development services 10.1.1 Work undertaken on a systematic basis to increase the stock of knowledge 10.1.1.1 Provision of customized and non-customized research and development services 10.1.1.2 Sale of proprietary rights arising from research and development 10.1.1.2.1 Patents 10.1.1.2.2 Copyrights arising from research and development 10.1.1.2.3 Industrial processes and designs 10.1.1.2.4 Other 10.1.2 Other 10.2 Professional and management consulting services 10.2.1 Legal, accounting, management consulting and public relations services 10.2.1.1 Legal services 10.2.1.2 Accounting, auditing, bookkeeping, and tax consulting services 10.2.1.3 Business and management consulting and public relations services 10.2.2 Advertising, market research, and public opinion polling services Of which 10.2.2.1 Convention, trade-fair and exhibition organization services

Table 3.1 Classification of Services (*concluded*)

Balance of Payments (<i>BPM6</i>) ¹	Extended Balance of Payments Services Classification (<i>EBOPS—MSITS 2010</i>)
	10.3 Technical, trade-related, and other business services 10.3.1 Architectural, engineering, scientific, and other technical services 10.3.1.1 Architectural services 10.3.1.2 Engineering services 10.3.1.3 Scientific and other technical services 10.3.2 Waste treatment and de-pollution, agricultural and mining services 10.3.2.1 Waste treatment and de-pollution 10.3.2.2 Services incidental to agriculture, forestry and fishing 10.3.2.3 Services incidental to mining, and oil and gas extraction 10.3.3 Operating leasing services 10.3.4 Trade-related services 10.3.5 Other business services <i>Of which 10.3.5.1 Employment services, i.e., search, placement, and supply services of personnel</i>
1.A.b.11 Personal, cultural, and recreational services 1.A.b.11.1 Audiovisual and related services 1.A.b.11.2 Other personal, cultural, and recreational services	11 Personal, cultural, and recreational services 11.1 Audio-visual and related services 11.1.1 Audio-visual services <i>Of which 11.1.1.a Audio-visual originals</i> 11.1.2 Artistic related services 11.2 Other personal, cultural, and recreational services 11.2.1 Health services 11.2.2 Education services 11.2.3 Heritage and recreational services 11.2.4 Other personal services
1.A.b.12 Government goods and services n.i.e.	12 Government goods and services n.i.e. 12.1 Embassies and consulates 12.2 Military units and agencies 12.3 Other government goods and services n.i.e.
<i>1.A.b.0.1 Tourism-related services in travel and passenger transport</i>	4.0 <i>Tourism-related services in travel and passenger transport</i> C.1 Audio-visual transactions <i>Of which C.1.1 Licenses to use audio-visual products</i> C.2 Cultural transactions C.3 Computer software transactions <i>Of which C.3.1 Licenses to use computer software products</i> C.4 Call-centre services C.5 Total services transactions between related companies C.6 Total trade-related transactions C.7 Environmental transactions C.8 Total education services

¹Italicized items are supplementary items.

classification described in the *MSITS 2010*. The transactions in services that can be collected by survey of businesses are listed in model form 6 in Appendix 8, and the notes in that form describe the services that should be reported.

3.93 The design of surveys of services should follow the description provided in Chapter 2. While a

thorough approach to population identification is required, such as through a screening question in a general questionnaire sent to all businesses on a business register, or through taxation records (where such data sharing agreements exist between the agency in charge of compiling balance of payments and IIP statistics and the tax authorities), a list of the types of

companies just mentioned is a useful starting point. “Creating or Updating a Survey Frame” in Chapter 2 discusses population identification more thoroughly. There are some areas in which the boundaries of international service activity must be established. For example, the boundary for construction services is a complex issue, which is discussed in Chapter 12.

Foreign embassies

3.94 Transactions between foreign embassies and their host economies are balance of payments transactions. These transactions may take the form of employment of local workers and purchases of goods and services. The purchases of goods and services by staff of the embassy and assets and liabilities (e.g., bank accounts) in the host economy will also generate balance of payments transactions and IIP.

3.95 Model form 14 in Appendix 8 requests data that could be collected from embassies and used for compiling the trade in goods and services, primary income, secondary income (current transfers), capital transfers, and financial account transactions associated with the presence of the embassy in the host economy. Similar information should be available for official expenditure of the embassies of the compiling economy from official records of the external affairs ministry.

3.96 Foreign embassies do not come under the jurisdiction of the host economy, so that legislation compelling businesses and individuals to respond to statistical requests will not apply to the collection of these data. Good response rates from embassies will require the development of good relationships and sound form design to ease the reporting burden. However, in practice often it is not feasible for the compiler to establish open relationship with foreign embassies, and the compiler should consider other approaches for compiling data on the foreign embassies’ transactions in the compiling economy (e.g., applying ratio of costs per embassy staff).

3.97 Care needs to be taken to ensure that the distinction between employing local individuals as staff and contracting local services is applied correctly. Paragraphs 11.12–11.13 of the *BPM6* list the criteria for determining whether an individual is to be treated as an employee or as a self-employed person providing services.

Collections on Primary and Secondary Income Statistics

3.98 The primary and secondary income components cover a range of balance of payments transactions. Some of these transactions may be associated with other transactions in the balance of payments (e.g., social contributions in the secondary income account being associated with compensation of employees in the primary income account, or investment income being associated with transactions and positions in external assets and liabilities). These relationships can assist in identifying the companies that need to be covered by surveys on primary and secondary income statistics, and can also guide the information to be requested in the surveys.

Transactions Associated with Foreign Workers

3.99 Business surveys of employers and employment agencies engaging foreign workers, as well as data available from banks, may be used as sources to measure the balance of payments transactions associated with foreign workers. Foreign workers include border workers (those crossing a border from a residence in one economy to a place of employment in another economy on a daily or other short-term regular basis), seasonal workers (undertaking seasonal work often associated with agriculture or tourism), and short-term migrants (e.g., on working holidays of less than one year’s duration). They also include foreign workers that are employed under long-term contracts (more than one year) and are considered residents of host countries.

3.100 The residence of workers needs to be carefully ascertained, particularly given that these individuals may have close links to both the economy in which they work and other economies where they maintain residences. Paragraphs 4.116–4.120 of the *BPM6* discuss the criteria for identifying the residence of households, and paragraph 4.125 discusses the residence of cross border workers in particular.

3.101 In designing a survey of employers, the compiler should take into account the scope and nature of information known to employers. Total wages, salaries, duration of the employment contracts, and supplements should be known. Employers probably do not know workers’ actual expenditures in the domestic economy or amounts remitted to home economies.

Some employers may be able to provide information on actual cash remittances. Any approach to collecting information from employers should request data on values of wages, salaries, and supplements and on numbers of foreign workers employed on a short- and long-term basis. Such data may be used in the development of a profile of foreign workers, which would be helpful for estimating transactions that are of interest to the compiler.

3.102 Employers should also be aware of pension fund arrangements, where appropriate, for their foreign employees. Employers' contributions to these funds on behalf of short-term foreign workers together with employees' contributions should be included in the compensation of employees. The contributions paid by the employers and employees to both pension schemes and social security schemes are recorded as current transfers; however, for the former they are also recorded in the financial account as pension entitlements while for the latter no financial account entries need to be registered (see *BPM6*, paragraphs 12.37–12.39). In both cases, the social security benefits are recorded in the secondary income account as payable (in the economy of social security fund) and as receivable (in the economy of employee). Taxes withheld from the wages and salaries of foreign workers are recorded as current taxes in the secondary income account.

3.103 Taxes withheld from the wages and salaries of short-term foreign workers should be available to be collected from the employers; however, the cross border pension services are better captured from the resident pension funds.

3.104 Care needs to be taken to ensure that the distinction between employing short-term foreign workers and contracting foreign services is applied correctly. Paragraphs 11.12–11.13 of the *BPM6* list the criteria for determining whether an individual is to be treated as an employee or as a self-employed person providing services. In particular, responsibility for the payment of social contributions is one indicator of employment—if the resident business is responsible for the social contributions, it is likely that the nonresident is a foreign worker, whereas if the nonresident is responsible for social contributions, it is more likely that the nonresident is self-employed and the resident business is contracting services (with payments to be recorded as trade in services).

3.105 Domestic banks may, in special circumstances, have information on foreign workers that could be used in calculating compensation of employees and personal transfers (e.g., workers' remittances) and changes in nonresident bank deposits. Another potential source of information is employment agencies, which may be responsible for recruiting foreign workers to be employed in the domestic economy. Any approach to collecting information from employment agencies should request data on values of wages and salaries, duration of the contracts, remittances and the like, and numbers of foreign workers employed. If employment agencies do not have actual data, staff may know numbers of workers placed, employment conditions, contractual arrangements, and so forth, and such information may be useful for constructing a data model on foreign workers.

3.106 Business surveys may also be used to measure the balance of payments transactions of residents working abroad. A number of sources could be approached for information. The compiler could survey employment agencies that recruit residents to work abroad. The amount of detail and the scope of information possessed by such organizations may vary, but data on wages and salaries paid in cash and in kind, duration of the employment, living expenses, and remittances to home economies could be available. Data may also be available by industry and economy. Information on the numbers of workers involved and, if possible, data on their wages and salaries should be collected. Adjustments may have to be made to ensure that, in the overall measure of wages and salaries, employers' contributions to insurance and pension schemes are included. In some instances, industry associations may have information on the numbers of employees working abroad and their approximate remuneration.

3.107 Such aforementioned surveys of businesses may also need to be conducted in conjunction with periodic household surveys (see this chapter, Collections from Persons and Households). Such household surveys could capture not just the amounts of compensation of employment but also expenditures by resident workers abroad (from resident households) or by nonresident workers in the resident economy where the employees have an abode without it becoming their predominant center of economic interest. Such expenditures should be classified as travel. The survey should also cover remittances sent abroad by workers that are not citizens of the compiling economy who

reside there for one year or more (residents of host economy), or remittances received from nonresident workers abroad (citizens of the compiling economy who reside abroad for one year or more and are residents of their host economies).

3.108 Information on employees working abroad and their compensation may also be available from tax authorities, where such data sharing agreements exist between the statistical agency and the tax authorities.

3.109 Special bank tabulations of data may be available to measure components of compensation of employees and personal transfers. In some economies, arrangements exist for banks to establish special accounts for certain types of clients, such as foreign nationals working in a host economy or citizens working abroad. These accounts may be a useful source of information on such balance of payments items as employee compensation and personal transfers. Monitoring of bank accounts held by embassies, by military establishments of foreign governments, and by international institutions may be a useful way to measure transactions with the compiling economy of certain foreign governments and international institutions.

3.110 Domestic pension funds and social security schemes may have information on the contributions that they receive in regard to foreign workers (social contribution credits) and the social benefits that they pay out to beneficiaries (social benefit debits). In addition to actual contributions and payments, pension funds will have access to information on the investment income due to the nonresident members of the fund (investment income debits) and any explicit fees and charges levied on members' funds (netted from social contribution credits). See Appendix 2, "Employment-Related Pension Schemes and Social Security Schemes," for further discussion of pension schemes and social security schemes, including the calculation of the adjustment item.

3.111 Where individuals are classified as residents in the economy in which they work, but they have close economic ties to another economy (e.g., they have family residing in another economy), they may regularly remit payments to the other economy, or have their salary paid directly into accounts in that economy. In addition to collecting information on border workers, information may be collected also on the remittances by these workers.

Investment Income

3.112 All of the instruments on which investment income is earned or paid are recorded in the financial account and IIP. The identification of companies earning or paying investment income will be an important dimension of the survey of businesses to collect data on transactions and positions in financial assets. Collections covering external assets and liabilities are discussed ahead. Model form 17 in Appendix 8 requests information for the compilation of investment income in a comprehensive survey of transactions, positions, and income accruing on external assets and liabilities.

Private Aid and Charitable Organizations

3.113 Religious organizations and other organizations involved in collecting or distributing goods, services, and funds to be used for development or other assistance can be approached for information on related balance of payments transactions. Sometimes the compiler may collect relevant data from an umbrella organization formed for the purpose of coordinating these types of activities.

3.114 Model form 15 in Appendix 8 requests information from private aid and charitable organizations for the compilation of current transfers in the secondary income account. In addition to grants to related institutions, disbursements of aid in cash or kind, and investment grants, information is requested on sources of income (including donations and gifts from nonresidents and income from investment in external assets) and on foreign staff employed within the organization.

3.115 Lists of charitable organizations will usually be available from the tax authorities where there are special taxation arrangements for donations to the organizations. Not all charitable organizations will have transactions of interest to the compiler, so exploratory surveys can be used to identify those needing to be surveyed on a regular basis.

Other Primary and Secondary Income Items

3.116 Exploratory surveys used to identify businesses with operations abroad may identify resident companies with foreign operations that do not meet the criteria for the identification of branches (e.g., small construction projects). These operations remain of interest to the compiler; in addition to provision and purchase of goods and services in the host

economy, there may be primary and secondary income transactions associated with the operations. The number of companies operating in this way is usually small, and so the population is manageable from a survey perspective.

3.117 When companies have activities abroad that do not constitute branches, there may still be land and offices being rented. The rent paid for the use of land without structures is a primary income transaction to be recorded as rent debits.³ Also, while not meeting the criteria for a branch, the operations may still be subject to taxation obligations in the economy where they are taking place. To the extent that a tax obligation is accruing, data on primary income (taxes on production or value-added taxes) and secondary income (taxes on income) debits should be collected.

3.118 Data collected on credit transactions might have a better coverage because the activities involved are conducted offshore but not through a formally organized branch. As the criteria for identifying branches have not been met (e.g., the offshore activity does not have its own balance sheet and it is not possible or meaningful to compile these data), the resident company would have the relevant information that could be collected. As far as rent is concerned, commercial real estate agents may have some information that is able to be used to support the estimation of credits.

3.119 Insurance net premiums and claims due are generally recorded as secondary income transactions, although in some circumstances, claims may be treated as capital account transactions. Model form 12 in Appendix 8 requests data that can be used to compile insurance premiums and claims items in addition to the services and financial accounts transactions. Surveys of businesses concerning insurance are described more fully in “Collections on Goods and Services Statistics,” in this chapter, and in “Insurance Transactions and Positions,” in Appendix 2.

3.120 Model form 16 requests information on current transfers, grants, and technical assistance. Part A of the form seeks information on transfers in cash and in kind received by the government and the pri-

vate sector, including nongovernment organizations. The information can be used for the compilation of current transfers in the secondary income account and capital transfers in the capital account. Part B of the form pertains to technical assistance of project work/staffed missions received by the economy.

Collections on External Assets and Liabilities

3.121 Surveys of businesses may be used to measure positions; financial transactions; investment income; financial services; and withholding taxes associated with liabilities to, and claims on, nonresidents. Data on positions of external assets and liabilities are required for the IIP statement; data on financial transactions are required for the financial account of the balance of payments. Remaining items are required for the current account: investment income (for inclusion in the primary income item), financial services (for inclusion in services), and withholding tax (for inclusion in secondary income).

3.122 Companies may not always be aware that some of their liabilities (which take the form of tradable securities issued in the domestic market) may be managed by domestic financial intermediaries on behalf of nonresidents. The measurement of these external liabilities is also complicated by the existence of secondary markets. Collection issues associated with international securities are examined further in the section “Collections on International Activity Associated with Securities,” in this chapter.

3.123 The compiler often conducts survey of businesses to measure financial flows, positions, investment income, associated financial services, and withholding taxes. Through these surveys, many different approaches are taken. The compiler may conduct an across-the-board survey of external assets and liabilities; or use surveys of businesses to measure certain components, such as direct investment and loans from nonresidents, and use other methods, such as an ITRS, for the remainder.

Model Forms

3.124 Model form 17 in Appendix 8 seeks the type of data on external assets and liabilities that the compiler could collect through a survey of businesses. This comprehensive form could be sent to any type of

³The rent paid for the lease of structures and offices is classified as operating leasing in services account. See also “Other Business Services: Operating Leasing” in Chapter 12 and “Rent” in Chapter 13.

company (a direct investor, a direct investment enterprise (DIENT), a public company, or any other type of company) for completion.

3.125 The form contains a classification framework for financial flows, positions, reconciliation items, investment income, and explicit fees and charges on transactions. These classifications are consistent with the standard components of the *BPM6*. Model form 17 should be of assistance to the compiler who must record wide-ranging international financial transactions and wishes to compile comprehensive data. Less detailed forms (covering only a subset of information from the model form, or collecting data on several instruments together) may be used by the compiler for economies that have less developed financial structures. As separate forms could, in practice, be used for different types of companies, model form 17 could be divided into several forms; it also could be used for collecting data for the IMF's Coordinated Portfolio Investment Survey (CPIS).

3.126 One specific example where a form can be tailored for specific companies or instruments is the collection of data on direct investment (DI). Model form 18 in Appendix 8 is an example of a form tailored in this way. Direct investment is of analytical interest in its own right, and is the subject of separate collection by the IMF in the Coordinated Direct Investment Survey (CDIS).

3.127 In the model form 17, data are requested separately on external assets and external liabilities. In turn, there are separate items for positions (both opening and closing), transactions (increases, decreases, and net), other changes (exchange rate, price, and other), associated income, withholding taxes and explicit fees and charges on transactions. The collection of additional items on withholding taxes and explicit financial fees within the same form as information on financial positions, transactions, and related income flows can emphasize that reporting of these transactions is required on a gross basis before fees and taxes are deducted.

3.128 Assets and liabilities are separately classified as representing claims by direct investors on DIENTs, claims by DIENTs on direct investors, claims on fellow enterprises, or claims on other nonresident companies.

3.129 In collecting information on equity claims of direct investors on DIENTs, sufficient information is

requested to enable the calculation of reinvestment of earnings and reinvested earnings in the direct investment relationship (see ahead).

3.130 Data are requested by the partner economy to support the development of bilateral statistics.

Reconciliation of Positions and Flows Data

3.131 Model form 17 collects data in a reconciliation statement—opening and closing positions and the reasons for change between the two positions (transactions, valuation changes due to exchange rate and price changes, and other changes in volume). In addition, the statement includes investment income because it is important to link investment income with corresponding position data. Any data collection of positions, financial flows, and investment income should be built around these basic relationships. By collecting data in the form of a reconciliation statement and linking it to related income items, the compiler should ensure the consistency of data collected.

3.132 Changes in positions will arise from transactions such as the provision of financing (e.g., a new equity investment, a loan drawing, or the purchase of a security) less the repayment of financing (e.g., share buyback, repayment of a loan, or collection of an account receivable). In model form 17, the provision of financing is referred to as an increase, and repayment/withdrawal is called a decrease.

3.133 Other changes in the value of a financial asset and liabilities may occur without any transaction. For example, the value of an asset denominated in one currency may change when the value is expressed in another currency and the relative values of the two currencies change. A write-off of debt by the creditor and a movement in the market price of a tradable instrument are other examples.

Validation of the reconciliation statement

3.134 In a statistical collection, the nontransaction components of changes in levels may also reflect errors, other discrepancies, or changes in the treatment of items. For example, in sample surveys, the rotation of units in and out of collections may introduce sampling errors if the sample is not an accurate representation of the universe. Also sometimes reporters who discover that previously reported transactions and

position data are incorrect do not provide revised data. If such differences have significant impacts on survey results for past periods, revised figures should be produced. The compiler should attempt to measure the causes of the other changes item and keep the statistical error component within acceptable bounds.

3.135 As shown in model form 17, the collection of investment income ensures that investment income, financial flows, and position items are consistently classified; in addition, the collection of investment income facilitates income yield analysis, which enables the compiler to verify the quality of data reported on investment income and to identify possible misreporting of income or positions. Published data on income yields are useful for purposes of analysis. Investment income on loans assets and deposits liabilities of deposit-taking corporations should be adjusted by the compiler for FISIM. (Further discussion of FISIM is provided in Appendix 3.)

Reinvested Earnings and Reinvestment of Earnings

3.136 In addition to the usual reconciliation format, model form 17 collects information on the total equity value of DIENTs, their total operating profit, tax payable on the income, and dividends or profits remitted during the period. The difference between the profits accruing and the dividends or profits remitted to the direct investor is the reinvested earnings (returned earnings) (primary income account) accruing to the direct investor. An offsetting transaction, reinvestment of earnings, is to be recorded in the financial account.

3.137 For resident direct investors, model form 17 requests information on dividends or profits remitted in the reference period and the before-tax operating profit attributable to the equity holding in the non-resident DIENT. The difference between these two values is reinvested earnings credits accruing to the resident direct investor. An offsetting transaction, reinvestment of earnings, is to be recorded in the financial account.

3.138 When collecting data in a reconciliation statement, care must be taken with the treatment of reinvestment of earnings as a financial transaction, particularly for listed companies. These companies could consider that the retention of earnings has impacted

on their valuation through a price change (as reflected by an increase in their share price on equity markets) rather than as a transaction. After the compiler has calculated reinvested earnings and the offsetting reinvestment of earnings has been included as a financial accounts transaction, a similar offsetting adjustment will need to be made to price changes to retain the consistency of the reconciliation statement. This adjustment may impact the validation of price changes on equity reported by such companies (which should be made prior to adjustment) mentioned earlier.

Classification of Positions, Financial Transactions, and Investment Income

3.139 It is important that forms used to obtain information from businesses for classifying transactions and positions are consistent with requirements of the *BPM6*. As financial transactions, investment income, and the IIP are classified in similar ways, the use of the reconciliation statement to collect information on the external assets and liabilities of a company facilitates consistent classification of balance of payments and IIP items.

3.140 Model form 17 is designed to permit classification of transactions into the standard components of the *BPM6*. In addition, the form also allows for certain supplementary classifications, such as partner economy data (see Appendix 5), currency denomination of instrument, and sector of nonresident counterparty.

Conversion of Foreign Currency Positions and Transactions to the Unit of Account

3.141 In surveys of businesses, as in other balance of payments collections, instructions should be given to reporters on how to convert positions and transactions expressed in foreign currencies to the unit of account (alternatively, some compilers may prefer to collect data denominated in original currencies and undertake the conversions themselves—in which case, it is important that the reporter identifies the different currencies, the amounts associated with each, and when the transactions took place). The instructions should follow the recommendations of paragraph 3.104 of the *BPM6*, which states that: positions of external assets and liabilities should be converted to the unit of account at the midpoint market rate of exchange applicable to the date of measurement of position data; and transactions should

be converted on the basis of the midpoint rate applicable to the transaction date. If the actual rate of exchange is unavailable for transactions (e.g., the compiler is performing the conversion and does not have access to information on the date of the transaction), an average for the period in which the transaction took place could be used, but the shorter the period the better—therefore, an average of the rate for the day on which the transaction took place is preferable to an average for the week.

Surveys of Banks and Other Financial Institutions

3.142 In some economies, data collected by compilers of money and banking statistics, or by compilers of other financial statistics, on surveys of businesses (of banks and other financial institutions) are used to compile some components of the balance of payments and IIP statements.

3.143 Such surveys generally collect balance sheet data and request classification by instrument and sector of creditor (in the case of banks' liabilities) and debtor (in the case of banks' financial assets). The sector classification enables the analyst to identify financial flows between banks and the monetary authorities and between banks and other sectors. Also, these surveys typically identify claims on, and liabilities to, residents and nonresidents; therefore, the data may be used as a basis for compiling certain balance of payments and IIP statistics.

3.144 While these surveys can be a good source of data, for several reasons, the balance of payments compiler should take care in using data collected through them. One reason for caution is that, while survey data are collected on a balance sheet—or position—basis, the balance of payments requires data on a transactions basis (Box 10.2 describes a method for compiling flow data from positions data). Using position data to derive transactions is nearly always a second-best solution. It is usually preferable, if possible, to obtain transactions data directly—for example, for loans to and from nonresidents, data could be collected on drawings and repayments—and to use changes in balance sheets (even with adjustments) only when it is not possible to obtain transactions data. However, obtaining transactions on currency and deposits is usually not possible as the volumes are often very high. In that case, changes in positions can be used, provided there are

sufficient other data also available to make the appropriate adjustments.

3.145 A second reason for caution is that data provided on foreign and domestic currencies are sometimes used as proxies for residency. That is, foreign currency denominated claims (and liabilities) are regarded as claims (liabilities) on (to) nonresidents, while domestic currency claims (and liabilities) are regarded as claims (liabilities) on (to) residents. These assumptions are often incorrect, and the compiler should strive to collect data on a balance of payments residence basis.

3.146 Furthermore, balance sheet information may be provided on the basis of historical cost rather than market value. The difference could have implications for compilation of both the balance of payments and the IIP. This is important not only for the determination of the current market position of the asset or liability, but also it is an important adjustment to the data if transactions are being derived from changes in positions. If historical cost data are provided, the balance of payments compiler should approach banks and/or other institutions for information to adjust valuations to the preferred market value basis.

3.147 The reference period used in some economies may not be consistent with balance of payments periodicity. For example, bank accounting periods may end on a particular day of the week, such as the last Wednesday of the month, rather than the last day of the month. The occurrence of large daily fluctuations in the external liabilities and assets of banks may lead to significant timing discrepancies in the balance of payments.

3.148 Some bank collections do not provide details of either nonresident investment in the equity of the bank or of the bank's equity in companies abroad. This omission may be important, especially when the bank is partially owned by nonresidents or has branches and subsidiaries located abroad. In these cases, the balance of payments compiler may have to collect data on equity separately.

3.149 The treatment of offshore banking units may not be consistent with balance of payments requirements; therefore, the compiler may have to collect information directly from offshore units. According to the *BPM6*, offshore banking units are resident entities of the economies in which they are incorporated,

registered, or have their legal domicile. The same data collected from other resident banks on financial flows, positions, income, services, and so forth should be collected from them.

3.150 Some of the other classifications, such as partner economy data or currency composition of financial assets and liabilities, required by the balance of payments compiler may not be available from these surveys. Therefore, the compiler should approach banks and other financial corporations separately for this information.

3.151 The surveys for use in the compilation of money and banking statistics may not be designed for balance of payments purposes and therefore may not satisfy the requirements of the balance of payments compiler. A good approach (described previously in this chapter) may be to include banks and other financial institutions in a survey of businesses of external assets and liabilities. In such circumstances, balance of payments and money and banking data compilers should attempt to coordinate their requirements so that the same definitions of instruments and of residency are used. It is highly desirable that positions reported in the balance of payments and money and banking surveys should be compared on a bank-by-bank basis to ensure consistent reporting and treatment as far as possible. Differences existing between the two data sources should be reconciled; if necessary, any difference between treatments in the two sets of statistics should be drawn to the attention of users from time to time—special articles could be published to call attention to and, if possible, quantify the various differences between these data sources.

Collections on International Activity Associated with Securities

3.152 Earlier in this chapter, “Collections on External Assets and Liabilities” discusses surveys of businesses that are used to approach principals to measure liabilities to, and claims on, nonresidents. However, additional collection arrangements may be required in economies in which (1) securities are issued by residents and acquired by nonresidents—particularly if the securities are held by resident custodians on behalf of the nonresident principals; (2) securities are issued by nonresidents and acquired by residents; or (3) portfolio managers place funds abroad on behalf of

clients. Similarly, an economy that uses an ITRS may have to make special arrangements to collect data on transactions that involve resident intermediaries acting on behalf of nonresidents. This section examines the role of financial intermediaries in transactions (and positions) in securities with nonresidents and their impact on the balance of payments, and outlines ways in which the compiler may collect appropriate balance of payments data on securities traded/held between residents and nonresidents.

3.153 The term “intermediaries” is used broadly to include deposit-taking corporations, security dealers, and custodians—which may also be deposit-taking corporations—as well as companies that manage large share or bond registers in respect of their own shares or bonds. The term “securities” includes shares in corporations, bonds, notes, and money market instruments (see *BPM6*, Chapter 5, for a fuller description of securities). An important feature of a security is the fact that it is designed to be traded.

3.154 International security markets are complex, and the compiler may require a number of data sources to compile the balance of payments statistics related to these markets. Also, security transactions between residents of securities issued by nonresidents are not included in the balance of payments. However, such changes in holdings should be captured in the other changes in financial assets and liabilities account in order that the correct sector holdings be recorded in the IIP and the CPIS, as well as to ensure consistency with the national accounts. In practice, however, it may not be possible to identify such transactions between residents as the parties involved may not know, and may have no reason to know, which the counterparty is. Under such a situation, it may be unavoidable that transactions between residents in securities issued by a nonresident are included in the balance of payments. As such transactions should in theory often cancel each other out, there is no net effect in the financial account of the balance of payments. Likewise, in principle, the converse applies: that is, transactions between nonresidents in a security issued by a resident should not be included in the balance of payments but should be included in bilateral positions data. However, the resident compiler often is unaware of these transactions. Accordingly, the compiler may wish to use counterpart asset data in

the CPIS as a possible source of information to use for estimating bilateral holdings.

Data Requirements

3.155 It is useful to think of data requirements in terms of a data model. The data model should contain information on positions, financial and income flows, financial service flows, and withholding taxes. Also, the data model should distinguish the following categories of information:

- The type of instrument
- The issuer of the instrument—that is, the company with the liability
- The economy of residence of the issuer
- The sector of issuer
- The owner of the instrument
- The sector and economy of residence of the owner
- The economy (market) in which the instrument is issued
- The issue price
- The currency in which the instrument is denominated
- The date of maturity (for a debt instrument)
- The coupon rate (if any)
- Whether the interest is fixed or floating rate, and if the latter, what determines the change(s) in interest rate
- The frequency and date(s) of the coupon payments.

3.156 Other useful information that could be obtained is as follows:

- Any embedded (put or call) options
- Any convertible features (such as from debt into equity)
- Whether the instrument has a reducing balance (such as with some asset-backed securities, such as mortgages).

3.157 Additional information needs to be obtained on securities involved in a repurchase agreement or securities lending transaction—for example, if lending is with or without cash collateral.

3.158 The *BPM6* classifies securities into equity (such as ordinary shares and voting stock); long-term debt securities (such as bonds, debentures, certifi-

cates of deposit and notes with original maturities of more than one year, and nonparticipating preference shares); and short-term debt securities (such as bills and notes with original maturities of one year or less).

3.159 Ascertaining issuers and owners of securities is essential to identify external assets and liabilities. For the balance of payments, the compiler should measure securities that are issued by residents and acquired (and held) or relinquished by nonresidents and, similarly, securities that are issued by nonresidents and acquired (and held) or relinquished by residents.

3.160 The economy (market) in which a security is issued (the domicile of the issue) can be an important piece of information. It may be a decisive factor in determining the appropriate collection mechanism, and it may be of analytical interest. It should be remembered, however, that the domicile of the issue does not determine the residence of either the issuer or the holder of the security—the security may be issued in an economy other than that of either the issuer or the holder. Securities that are issued abroad by residents, and held by residents, are not within the scope of the balance of payments or IIP as they are resident-to-resident transactions despite being intermediated through a foreign market. However, there may be explicit fees and charges levied on either (or both) the issuer or the purchaser by nonresidents associated with the security.

3.161 Depository receipts are securities that represent ownership of securities listed in other economies. Depository receipts listed on one exchange represent ownership of securities listed on another exchange, and ownership of the depository receipts is treated as if it represents direct ownership of the underlying security. Generally, depository receipts are listed on an exchange in an economy other than that in which the underlying securities are listed. The treatment of depository receipts is the same as where the issuer of the security has listed directly onto the nonresident exchange—local holders of the depository receipts have a claim on the issuer that is within the scope of the balance of payments and IIP.

3.162 Data on the currency in which the instrument is denominated is important for analytical purposes and may facilitate compilation if the compiler must estimate certain data items (such as flows or

income) from other data items (such as positions). In particular, the interest or coupon rates on debt instruments are likely to be related to the currency of denomination as well as the creditworthiness of the issuer.

3.163 For certain types of securities, it may not be possible to obtain data from a single source. Rather, the compiler may have to use information from different sources and collate data to ensure consistency. Anomalies appearing in collated data should be investigated and resolved. In fact, such anomalies may point to important gaps in data. Therefore, the collation process may be a useful tool for improving the overall quality of the balance of payments.

3.164 To measure transactions in securities, it is highly desirable to collect gross data on new issues and redemptions, and on secondary market sales and purchases. Such information is especially useful for international debt analysis—as in the calculation of debt service ratios.

3.165 Security transactions should be recorded apart from related fees and commissions, which should be included in financial service items (or secondary income, in the case of taxes) in the balance of payments. Similarly, when data on interest receivable and payable are collected, withholding taxes should be included in the gross amounts of income recorded, and offsetting entries should be included in withholding taxes in the secondary income account.

Identifying Security Issuers and Owners

3.166 Institutional arrangements for security transactions vary from economy to economy. However, some features seem to be generally applicable.

3.167 Prior to issuing a security, the issuing company—or a security broker acting on behalf of the issuing company—usually must approach a government regulatory body or quasi-official body, such as a stock exchange, to obtain certification that the security issue meets certain statutory requirements. Each security is usually assigned a unique reference number, and certain information about the security is published. This information consists of the identity of the issuer, the type of security, coupon payments, maturity, and currency of denomination. (In the case of equities, not all of these categories apply.) It would therefore be possible for the compiler to develop a database containing in-

formation about each security issued—or at least about those issued in the home economy. This database could be useful for checking information reported by respondents or for estimating items that may not be directly measurable. If, in some economies, a unique reference number is unavailable, the compiler may wish to devise a coding system. “Portfolio Investment” in Chapter 10 provides more details on a security-by-security database.

3.168 Security ownership may be documented. In most cases, financial institutions (such as custodians or other major financial intermediaries) will maintain records of the security owners’ details. In some economies, primary registers of security owners are held by companies issuing the securities or by security dealers authorized by issuers. In many European economies, banks maintain primary registers of security owners. Security registers are usually in the form of electronic files—paper records are increasingly rare. The register may identify the owner as a resident individual or company, a resident nominee holding a security on behalf of a client, or a nonresident owner or nominee. The resident nominee may be regarded as holding a second register—which, in turn, records the names and addresses of owners. From the second register, one can determine whether the security owners are resident individuals, resident companies, resident nominees acting on behalf of clients, and/or nonresident owners or nominees. (The word “nominee” is used in a broad sense to cover portfolio managers, trustees, custodians, fund managers, banks performing similar functions, etc.) It is possible for a security to be recorded in a number of secondary registers that are maintained by nominees; however, each security must ultimately be attributable to a resident or nonresident company or other entity. However, where a security is a bearer instrument, such information is usually not readily available and the balance of payments compiler will need to use alternative sources of information to attribute such an instrument to its owner.

3.169 It may be possible for resident organizations managing primary or secondary registers to identify (for each security that they manage) the issuer, the number of units held, and the value of a security or securities on issue, and whether they are held on behalf of residents or nonresidents. From these registers, it should also be possible to identify income

transactions with nonresidents and financial fees and withholding taxes paid by nonresidents.

3.170 Some purchasers of shares or other securities may not wish to have their names recorded on the primary register of a company and therefore arrange to have a nominee registered as the nominal owner. Sometimes the purpose is to mask the identity of a shareholder who is planning some takeover action, although many economies have enacted legislation requiring a shareowner with a beneficial interest greater than a certain threshold, such as 10 percent, to declare his or her ownership interest.

3.171 More often, the use of a nominee is a matter of administrative convenience. For example, if an investor maintains a portfolio, it may be convenient to have all holdings administered by a portfolio manager (or bank) that may also perform the functions of a nominee. The nominee receives annual reports, ballot papers, income payments, and so forth from the holder of the primary register. In turn, the nominee acts according to the general instructions of the investor.

3.172 Often, nominees also act on their own behalf; therefore, any approach to resident nominees should capture both own-account and client claims that are relevant to the balance of payments. However, under “Know Your Customer” legislation in many economies, nominees are required to know for whom they are acting. So, if the compiler approaches a nominee (which may or may not be a custodian), it is important to stress that the data on transactions and positions should be reported on the basis of the customer.

3.173 When securities issued by nonresidents are owned by residents, it will generally be necessary to approach either the owner of the security or a resident custodian to obtain data required to compile the balance of payments and the IIP because the security register will typically not be available to the balance of payments compiler. However, for securities issued by nonresidents in the compiling economy’s financial markets, a register may be maintained in the compiling economy. This register could provide information such as the value of, and the income earned on, securities owned by residents.

3.174 It may not be necessary to approach resident owners of nonresident securities when securities are part of portfolios managed by resident fund manag-

ers, trustees, and so forth. In these cases, fund managers should be able to provide relevant information on transactions, positions, and income, as well as related information (such as withholding taxes collected by foreign governments and any financial services provided by nonresidents). Such companies may use local and foreign custodians.

Identifying the Transactors

Issuance and redemption of securities

3.175 Security issuance and redemption are frequently managed by security brokers; in many European economies, this function is carried out by banks. Intermediaries arranging a security issue act on behalf of clients. Also, it is not uncommon for issuers to bypass brokers and make direct placements with investors.

3.176 From their computer-based records, security brokers should be able to identify securities that they have issued and redeemed and the acquirers and relinquishers of these securities. Security dealers may also have own-account transactions that are relevant to the balance of payments. In addition, security brokers may deal with resident nominees acting for nonresident principals. Therefore, it is important that any collection of information from security brokers encompass all of the previously described transactions and that care is taken when reporting rules are specified. For direct placements or direct redemptions of securities by issuers, data should be reported by the parties involved.

Secondary market transactions

3.177 In most markets, secondary market transactions—that is, purchases and sales of existing securities—are largely arranged by brokers. In many European economies, this function is usually undertaken by banks. In a typical transaction, one broker acts for the buyer and another for the seller of a security. There may also be off-market transactions in which buyer and seller come together directly without a broker.

3.178 Security brokers should be able to identify from their (largely computer-based) records the securities they have bought and sold and the residence of clients on whose behalf they acted. In any collection of data on security transactions, care should be taken

to include own-account transactions of dealers and off-market transactions.

3.179 When a resident enterprise buys or sells a security through a nonresident broker, it is generally the resident principal who should be approached for balance of payments information as there often is no other means presently available for collecting the data. In the absence of any other information, it may be appropriate to assume that all transactions by residents through nonresident brokers are balance of payments transactions.

Data Sources

3.180 For economies that do not have established secondary security markets, the collection of security data should be relatively simple. Should a company issue securities abroad or acquire securities issued abroad, relevant data can be collected from the company issuing or acquiring the security. Model form 19 in Appendix 8, discussed further in this part, is suitable for this purpose. However, additional collection arrangements may be required in economies in which:

- Securities are issued by residents in domestic financial markets and acquired by nonresidents—particularly if the securities are held by resident nominees on behalf of nonresident principals.
- Securities are issued by nonresidents in domestic financial markets.
- Portfolio managers (banks or other fund managers) place funds abroad.

3.181 There are two primary approaches to obtain data on cross border positions in securities. The first method is to have an “end-investor” survey. Such surveys approach resident enterprise that are likely to be major holders of securities issued by nonresidents (such as deposit-taking corporations, insurance corporations and pension funds, mutual funds / unit trusts, or similar entities) or who manage securities portfolios on behalf of others. End-investors should be requested to identify those securities that are managed by resident portfolio managers to make sure that there is no double counting.

3.182 The end-investor approach will ensure that the respondent covers all its holdings, whether held in the compiling economy or in another economy. With this approach, securities in repurchase agreements and securities lending would be attributed to

their economic owner (for the recommended treatment of securities under repurchase agreements and securities lending arrangements, see *BPM6*, paragraphs 5.52–5.54). However, this approach is unlikely to cover holdings by smaller investors, especially households. This could become a major shortcoming as households increase their cross border investment in securities through the use of the Internet and other changes in financial markets that make it easier for households to buy securities directly, without using the services of a local broker.

3.183 The alternative approach is to use a survey of custodians. Such an approach has the advantage of covering all residents, including households that use the services of resident custodians. However, it will not capture those resident holdings that are held in custody abroad and it is often difficult for custodians to identify a security that is under a repurchase agreement or a securities lending arrangement.

3.184 A possible way around this problem is to combine the two approaches: to survey custodians and end-investors. To avoid double counting, end-investors could be asked to report only their holdings with nonresident custodians. End-investors could also be asked to identify those securities that are under a repurchase agreement or securities lending. If the securities are reported on a security-by-security basis by both the custodians and the end-investors, it may be possible to run (electronic) checks to see that these have been treated correctly by both respondents. In using the combined approach, the compiler should carefully define the boundary between the collections to ensure that no duplication or omission of reporting occurs. Typically, a combined approach would be successful only if security registers and intermediaries can identify the types of owners. However, none of these approaches will capture households’ holdings of securities issued by nonresidents that are held directly or held with nonresident custodians. These may be an important, and probably growing, element in cross border holdings.

3.185 The foregoing approaches may also be used for transactions, which would produce better reconciliation between transactions, other flows, and balances. However, they may involve too much respondent burden, as well as being somewhat resource-intensive for the compiling agency, especially for subannual data

needs. Moreover, they may be too time-consuming for data processing. An alternative is to approach brokers for transactions data, as indicated earlier. They should be able to provide data for many of these transactions at a significantly lower resource cost and in a much more timely fashion, especially for subannual data. Even so, if data on transactions, other flows, and balances can all be obtained from the same source on an annual basis that would mean that the integration of the data would be maintained. Such annual

reconciliation could then be used to improve the quality of the subannual data.

3.186 Table 3.2 illustrates a set of collection arrangements. These suggest a particular approach, but other approaches (such as the use of an ITRS for some or all of the data) are possible. It is important for collection rules to be clearly defined so that there are no omissions or duplications in the recording of security transactions.

Table 3.2 Sources of Data Associated with International Securities

Place of issuance	Data item required	Source
Securities issued by residents		
1. In domestic capital markets	Nonresident holdings (position of liabilities); income payable to nonresidents (debit); fees and withholding taxes payable by nonresidents (credit)	Primary and secondary registers of securities (e.g., Central Securities Depository), or custodians
	Issues to and purchases by nonresidents (increase of liabilities); redemptions from and sales by nonresidents (decrease of liabilities); brokerage and other fees payable by nonresidents (credit)	Security brokers, investment dealers, domestic stock exchange; adjustments to include off-market transactions
2. In foreign capital markets through a nonresident intermediary	Nonresident holdings (position of liabilities); issues (increase of liabilities) and redemptions (decrease of liabilities); income and fees payable to nonresidents (debit); withholding taxes payable by nonresidents (credit)	Resident enterprise issuing securities, domestic stock exchange or other official bodies informed about new issues by quoted companies, BIS international securities database
	Net purchases or sales by residents	Resident enterprise issuing securities (from analysis of registers), resident companies involved in transactions, or security brokers
3. In foreign capital markets through a resident intermediary or managed (on behalf of the issuer) by resident investment managers	Nonresident holdings (position of liabilities); issues (increase of liabilities) and redemptions (decrease of liabilities); income payable to nonresidents (debit); withholding taxes payable by nonresidents (credit)	Resident enterprise issuing securities or resident investment managers, resident custodians
	Net purchases or sales by residents	Resident companies issuing securities or resident portfolio manager (from analysis of registers); resident companies involved in transactions
Securities issued by nonresidents		
4. In domestic capital markets	Resident holdings (position of assets); income receivable by residents (credit)	Resident owners of securities or primary and secondary registers of securities, resident custodians
	Issues to and purchases by residents (increase of assets); redemptions from and sales by residents (decrease of assets)	Resident owners of securities or security brokers, adjustments to include off-market transactions

Table 3.2 Sources of Data Associated with International Securities (concluded)

Place of issuance	Data item required	Source
Securities issued by residents		
5. In foreign capital markets; owned by residents; not managed by resident investment managers	Resident holdings (position of assets); issues to and purchases by residents (increase of assets); redemptions from and sales by residents (decrease of assets); income receivable by residents (credit); brokerage, other fees, and withholding taxes payable by residents (debit)	Resident owners of securities or resident nominees
6. In foreign capital markets; owned by residents; managed by resident investment managers	Resident holdings (position of assets); issues to and purchases by residents (increase of assets); redemptions from and sales by residents (decrease of assets); income receivable by residents (credit); brokerage, other fees, and withholding taxes payable by residents (debit)	Resident investment managers, resident owners of securities, or resident nominees

Source: IMF staff.

3.187 Some comments on Table 3.2 are necessary. Data on transactions in securities issued in domestic financial markets both by residents (category 1) and nonresidents (category 4) may best be collected in surveys of security registers and intermediaries, such as brokers. Alternatively, in the case of category 4, resident owners of the securities could be surveyed as sources of data. However, if there are numerous resident owners or if the owners are difficult to survey, this approach may not produce the best results. These problems are particularly likely to occur if resident households have significant holdings of securities issued domestically by nonresidents.

3.188 For securities issued abroad by resident companies (categories 2 and 3), most of the necessary information could be collected from the resident companies issuing the securities. However, when a resident intermediary is involved in the issue or when a resident institution manages the register on behalf of the issuer, it may be preferable to survey these organizations for some or all of the data items. Also, it would be important to define reporting rules clearly. There may be an assumption that securities issued abroad are wholly acquired by nonresidents or that any resident acquisition is small enough to ignore. However, this assumption sometimes may not be valid, in which case data on acquisitions by residents should be collected so that nonbalance of payments transactions can be deducted from the total reported by the issuing

company. Such information on resident ownership of securities issued abroad by residents could be obtained from issuing companies (or the security register manager), residents involved in the transactions, or resident security dealers. For bearer securities, the first-mentioned approach would not be feasible.

3.189 Data on securities issued abroad by nonresidents and acquired by residents could be collected using either the end-investor approach or the custodian approach (or a combination of these) as described earlier. Apart from any other reason, these approaches are more cost-effective (the number of companies to approach will probably be relatively small, in comparison with the number of owners) and the quality of the responses is likely to be much higher (these companies will more likely have the information required in a more readily accessible format). These observations are particularly true for securities owned by households that use resident custodians. However, as noted earlier, such surveys cannot measure investments made directly abroad by the resident household sector.

3.190 It may not be possible to collect the full range of information outlined in the “Data item required” column of Table 3.2. However, it may be possible to estimate missing items by using other information. For example, if it is not possible to collect data on financial transactions, it may be possible to derive these from positions information. On the other hand, it

may also be possible to derive positions from transactions. Techniques that can be used to make these derivations are discussed in Chapter 10, though they must be regarded as very much second-best alternatives. Investment income may be derived from information on the scheduling of coupon payments and current market prices, or from known (or assumed) relationships between positions and income. Techniques for estimating income are described in Chapter 13.

3.191 All the collection approaches set out in Table 3.2 are based upon the assumption that owners and intermediaries can distinguish between resident and nonresident issuers and holders. Many institutions may not readily know which companies are residents and which are nonresidents. To overcome this problem, at least as far as the issuing company is concerned, having the data reported on a security-by-security basis will allow the compiler to determine the residence of the issuer, especially if the compiler maintains its own register of issues, or has access to one in which it has confidence.

3.192 To determine the residence of the holders of securities, companies and intermediaries could be asked to enter codes or flags in their databases to identify resident and nonresident clients. In many cases, the distinction may be made with reference to some type of legislation or official administrative arrangement that “classifies” companies as residents or nonresidents for particular purposes. For example, companies that are exempt from value-added tax or those that pay withholding taxes may be regarded as nonresidents—although such “classifications” may be made on the basis of address. Some cases may not always be clear, and the compiler should provide guidelines to owners and intermediaries, and advise them of the residence status of particular companies. It is important for the compiler to have a good understanding of institutional arrangements and the nature of record-keeping practices in order to give the best advice to companies.

3.193 Alternatively, the compiler may have to examine security registers directly. This task could be immense and may be only a periodic option. The aim should be to capture large transactions and holdings, and this activity should be supplemented by properly designed sample surveys to measure smaller holdings and transactions.

Model Collection Form

3.194 Model form 19 could be used to collect data on securities issued by resident companies and owned by nonresidents and securities issued by nonresidents and owned by resident companies. However, different approaches may be preferred and additional collection forms may be necessary for some types of securities. Whichever methodology is adopted, instructions should be added to model form 19 to specify clear rules about what should be included and omitted from the survey form. If resident companies hold bearer securities that are issued internationally by other resident companies, model form 19 could be amended to collect the necessary information for clarifying data reported by the issuing company.

3.195 Similarly, ITRS forms may be used to collect data on security transactions. However, in economies where international intermediation is significant, the rules of the ITRS must clearly define which institutions should report which transactions. Also, it will generally be necessary to supplement the ITRS with a collection of data on positions.

3.196 Model form 19 has been designed to collect data from intermediaries (such as brokers, nominees, custodians, and/or institutions responsible for managing security registers) and is based on a number of assumptions. Via the form, intermediaries are asked to report—for each combination of security and owner—details of positions, transactions (issues, redemptions, sales, and purchases), income, fees, and withholding taxes. However, in practice, it may not be possible to obtain the full range of information about each combination from one respondent. For example, for securities issued by resident companies, nominees might have details on positions but not on transactions—which, in turn, may have to be reported by brokers. Other cases will arise as reflections of circumstances in the compiler’s economy, and the compiler should take care to ensure that reporting instructions are clear and appropriate. It is particularly important that duplication of reporting be avoided or, if this is not possible, identified so that any double counting can be eliminated.

3.197 For resident companies issuing securities, reporters are asked to provide an identification or reference number and an owner code for each combination of security and owner. The reference code, when

linked to a database on security issues, would establish the type of security, the currency of denomination, the redemption date, coupon payments, and so forth. The owner code would identify the economy of residence (and, perhaps, sector) of the nonresident party.

3.198 For nonresidents issuing securities, reference numbers of securities and resident owner codes would be provided. Security reference numbers would permit identification of sectors and economies of residence of nonresident parties, and resident owner codes would permit identification of sectors and industry codes of resident owners.

3.199 With regard to security reference numbers, it is possible that these could be specially established by the balance of payments compiler. The disadvantage with this task, though, is that it would be onerous to maintain the list and communicate the information to respondents. A better alternative would be to use a domestic, or preferably international, security reference system that has been accepted by organizations most likely to be approached in the collection of information.

3.200 Security reference numbers—when properly utilized—allow the compiler to develop comprehensive information about each security traded internationally. Such information would be of assistance in identifying and rectifying any errors, duplications, or omissions in reporting.

3.201 The categories of securities reported are broadly consistent with Table 3.2. They include the following:

- Securities issued in the domestic economy by residents and owned by nonresidents
- Securities issued in the domestic economy by nonresidents and owned by residents
- Securities issued abroad by residents and owned by nonresidents
- Securities issued abroad by nonresidents and owned by residents

3.202 Model form 19 does not contain precise rules (such as who should report what) about reporting arrangements or define the relationship between model forms 17 and 19. The individual compiler is left to determine these arrangements. The model form also collects data on the intermediary's own account.

3.203 It is assumed that intermediaries will report data electronically. While not stated on the model

form, it should be possible to introduce, if the use of such techniques reduces reporting and processing costs, suitable thresholds or sampling techniques for smaller holdings and transactions. These techniques are discussed in further detail in Chapter 2.

Overcoming Possible Problems

3.204 It may appear that model form 19 represents a highly ambitious approach. However, a number of economies collect data on this basis.⁴ Respondents, whether end-investors, portfolio managers, or custodians, could be asked to provide an electronic file of all their holdings, which reduces the burden on the respondents to sort the information requested. However, it can place considerable burden on the compiling agency, and for economies with relatively small securities activity or with limited resources for balance of payments / IIP purpose, this may not be a viable option. That being the case, requesting data on an aggregated basis may be sufficient, especially if there are other data checks embedded in the information (such as a reconciliation between opening and closing balances, via financial transactions and other changes, and income transactions). Failing that, certain assumptions about undercoverage, income, other changes, and so forth may need to be made to develop a complete set of financial and income transactions and position data, but these assumptions should be reviewed and verified from time to time (preferably no less frequently than annually).

3.205 When data come from two or more sources, such as both nominees and brokers, it may be difficult to collate the information. By collecting the data on a security reference number basis, it should be possible to resolve most inconsistencies between positions and transactions through accurate validation and careful querying procedures. When data come from different sources, it may be necessary to develop several types of forms to collect appropriate information.

⁴One of the important developments in the collection of data on cross border transactions and positions in securities has been the CPIS. This survey prompted many economies to set up collection systems that would be a considerable improvement over their previous approaches. Many of the participants in the CPIS collect data on a security-by-security basis. These data, when compared with databases on securities issued in and outside their own economies, have resulted in major improvements in the data quality of these economies' balance of payments and IIP.

3.206 Some compilers may not have the necessary authority to collect all data required or may prefer not to collect detailed information. In these instances, an intermediary (such as a securities exchange) could be asked to prepare tabulations that the compiler would otherwise prepare. At a minimum, the compiler should attempt to obtain items that are classified by sector of issuer and owner's economy of residence (for securities issued by residents) and issuer's economy of residence and sector of owner (for securities issued by nonresidents and held by residents). The use of analyses undertaken by intermediaries to provide the compiler with various tables is akin to the use of an ITRS that does not give the compiler access to individual records. In these situations, the compiler should attempt to ensure that those who undertake the basic compilation (in the case of an ITRS, commercial banks, and, in the case of securities, intermediaries) have a thorough understanding of the requirements and the type of approach that the compiler wishes to be taken.

3.207 There may be numerous problems in collecting information on international security transactions, which constitute one of the most complex areas of the balance of payments. However, more accurate data are likely to be collected if the compiler is very familiar with institutional arrangements and record-keeping practices, has the necessary legislative authority to require that suitable information be reported, can persuade the industry to provide necessary data, and is in a position to analyze data closely to correct any apparent anomalies. One should not underestimate the research necessary to gain an understanding of institutional arrangements in each economy. Intermediary companies are often complex, and the compiler may wish to review the activities of the intermediary in some detail, to determine whether it performs one of the many functions that the compiler should measure. Chapter 2, which examines the issue of form design and testing, is particularly applicable to collections from intermediaries.

3.208 One particular challenge for security-by-security collections is the stapling of securities. In some instances, different securities are "stapled" together so that transactions can take place only in the combination of the securities—the individual securities cannot be traded in isolation. The securities can be treated as a single security when the issuers of the components of the staple are resident in the same economy, are classified to the same institutional sector, and the se-

curities are classified as the same instrument (equity, long-term debt securities, or short-term debt securities). Where any of these do not hold, the compiler should attempt to "unstaple" the securities, in which case estimates will need to be made of the value of each of the components as there is no observable market valuation.

Collections of Data on Financial Derivatives

3.209 A financial derivative contract is a financial instrument that is linked to another specific financial instrument or indicator or commodity and through which specific financial risks (such as interest rate risk, foreign exchange risk, equity and commodity price risks, credit risk, and so on) can be traded in their own right in financial markets.

3.210 Transactions of resident companies that have derivative contracts with nonresidents can be covered through a survey. Respondents will include mostly banks and other financial corporations, and some large nonfinancial corporations.

3.211 Model form 20 could be used to collect information on holdings of and transactions in financial derivatives contracts with nonresidents. The data are collected by types of derivative instruments (options, futures and forwards, and swaps). The reporting instructions explain how the forms are to be completed.

Collections from Persons and Households

3.212 This section discusses collections of data from individuals and households, which are groups of persons with common economic interests, for measurement of various household sector transactions in the balance of payments. It describes migration statistics and similar statistics on movements of persons across national borders, surveys collecting data on travel expenditure, and other household surveys. The household sector transactions included in the balance of payments and the categories where they typically fall are presented in Table 3.3.

3.213 Sources described elsewhere in this *Guide* could be used to collect data for the household sector. For example, many household transactions should be included in a well-designed ITRS. However, the ITRS must be designed to capture and classify small value transactions that are typical of households.

Table 3.3 Recording of Household Transactions in Balance of Payments

Category	Recording
Import of goods and services by households (e.g., via Internet)	Is recorded in the current account under the respective category of goods and services
Expenditure on goods and services by persons traveling abroad	Is recorded in the current account under passenger fare and travel items
Expenditure by students studying in economies other than their home	Is recorded in the current account under travel services, and, if the student is financed under a foreign aid program, an offset entry is included in the secondary income account as miscellaneous current transfers
Health care services provided to nonresident patients	Are recorded in the current account, under travel
Employment earnings of residents who work abroad for nonresident employers for less than 12 months	Are included in the primary income account, under compensation of employees
Expenditures made by these workers on goods and services in host economies	Are included in the current account, under travel
Employment earnings by persons who work for a nonresident entity such as a foreign embassy	Are included in the primary income account, under compensation of employees
Remittances, by residents, of funds to households abroad (e.g., by foreign workers living in an economy for 12 months or more)	Are included in the secondary income account, under personal transfers
Pensions and social security contributions by residents to nonresident governments or pension funds	Are included in the secondary income account, under social contributions
Pensions and social security payments received by residents from nonresident governments or pension funds	Are included in the secondary income account, under social benefits
External financial investments by households	Are included in the financial account and the IIP
Migrants' financial assets and liabilities that remain in the economy of origin Migrants' personal effects that are imported	Are not included in the balance of payments but should be included in the other changes in financial assets and liabilities account, under other volume changes for the relevant functional category and instrument (and, by extension, be included in the relevant category of the IIP), until such time as these assets are liquidated (and the proceeds sent to the migrants' new economy of residence) or the liabilities are redeemed. When that happens, these transactions should be included in the financial account of the balance of payments. Are excluded from goods in the current account (as no change of ownership took place and, consequently, no transaction has occurred)

Source: IMF staff.

Surveys of businesses of transportation companies could be used to measure passenger fares; survey of businesses of the travel industry to measure travel; official sources or surveys of businesses of health and education institutions to measure health and education services provided to nonresidents; surveys of employers and employment agencies to measure compensation of employees and possible personal transfers (such as workers' remittances); various official

sources and surveys of pension funds to measure pensions and social security transactions; and fund managers to measure financial investment abroad by households. In addition, the compiler may be able to approach some partner economies to collect required data. However, such sources may not always be adequate for the compiler's purposes, and conducting personal and household collections may be necessary. In addition, household collections may be

a useful check on the validity of data collected from other sources.

3.214 The remainder of this section reviews the primary types of household collections (migration statistics, alternative statistics on across-the-border movements, surveys of individuals traveling, and other household collections) that could be available to the balance of payments compiler.

Migration Statistics

3.215 Migration statistics are designed to measure the number of persons crossing an economy's frontier; these statistics usually distinguish between visitors, other short-term individuals traveling abroad, and migrants. A visitor is defined as person staying, or intending to stay, in an economy other the one in which the person is normally a resident for less than 12 months for purposes other than to be employed by a resident employer.⁵ Other short-term individuals traveling abroad include border, seasonal, and other short-term workers and nomads. Migrants are persons moving permanently or for periods of 12 months or longer; the persons do not need to be resident for 12 months before being classified as residents (exceptions to the 12-month rule are made for students and medical patients who may be in an economy for longer than 12 months and not change residency if they intend to return to their home economy at the completion of their studies/treatment). The intention of doing so at the time of entry into the economy is usually sufficient. Migration statistics should not include movements of military personnel or civilian government employees and their dependents living abroad because they are considered residents of their home economies.

3.216 Visitors, other short-term individuals traveling abroad, and migrants are all of interest for balance of payments purposes. For visitors and other short-term individuals traveling abroad, the objective is to measure their earnings and expenditures abroad (for residents) or in host economies (for nonresidents). For balance of payments purposes, migrants are regarded as having changed residence. Migrants are of interest because they are likely to move financial assets (and liabilities) when they move from one economy to another, or they may maintain financial assets and liabilities in their former economies of residence. These aspects of migration do not represent transactions (until such time as the assets/liabilities are liquidated / paid off,

when they should be recorded in the financial account of the balance of payments), but they should be measured for inclusion in the other changes in financial assets and liabilities account, and by extension, in the IIP.

3.217 Data on the number and characteristics of migrants and visitors and other short-term individuals traveling abroad are usually obtainable from international migration statistics, guidelines for which may be found in *Recommendations on Statistics on International Migration*, Revision 1, 1998, in the United Nations Statistical Papers.

3.218 International migration statistics may be based on measurements of persons as they cross national borders or arrive at airports, population registers, or field surveys. Recording of persons at border crossings and at airports is likely to provide better data on visitors and other short-term individuals traveling abroad than population registers and field surveys. Whatever the data source used, the compiler should be aware of its limitations.

International guidelines on migration statistics

3.219 The *Recommendations on Statistics on International Migration* represent an update on the 1976 recommendations. These guidelines define categories of arrivals and departures that migration statistics should measure. In the guidelines, emphasis is placed on measuring the length of stay and on using 12 months as the dividing line between short-term and long-term migrants.

3.220 The guidelines identify four broad methods for measuring migration—administrative registers, other administrative sources, border collection, and household-based field inquiries. The guidelines also contain discussion of the relative merits and challenges of each approach to measuring migration.

Measuring the number and characteristics of arrivals and departures

3.221 Data on border crossings are typically produced as a by-product of an administrative process designed to identify and control persons entering and leaving an economy. The essential procedure requires such persons to complete and submit a migration card or form. Data collected may include the person's name, sex, nationality, date and country of birth, passport number, marital status, intended address in host economy, flight number or other transport details, intended

⁵ See *Tourism Satellite Account: Recommended Methodological Framework 2008*.

or actual length of stay, and purpose of visit. These data are required for migration officials to check the identity of the person traveling, as well as to administer migration policy. The information may also be used for statistical purposes; for this reason, requests for additional data may be added to migration cards or forms. The compiler may, from time to time, have the opportunity to influence the design of these documents and should take advantage of these opportunities to facilitate data collection for balance of payments purposes. Data from these cards or from population registers or field inquiries are the basis of migration statistics.

3.222 From the compiler's viewpoint, the information shown in Table 3.4 is generally required to compile various balance of payments transactions data. For each category shown in the table, data may also be required on economy of destination or origin, purpose of journey, and so forth. Also, supplementary data may be required on nonresident students or patients who stay in host economies for periods of 12 months or longer, or on national students or patients who leave for a month or longer, in order to treat these cases correctly in the balance of payments.

	Residents visiting abroad	Nonresidents visiting compiling economy
Arrivals	Number of arrivals and actual length of stay abroad from migration records Actual expenditure while abroad from survey	Number of arrivals and expected duration of visit from migration records Anticipated expenditure while visiting compiling economy from survey
Departures	Number of departures and expected length of stay abroad from migration records Anticipated expenditure while abroad from survey	Number of departures and actual length of stay from migration records Actual expenditure while visiting compiling economy from survey
Field inquiries	Actual expenditure while abroad	Not applicable

3.223 Model forms 21 (returning residents) and 22 (departing nonresidents) request information that can be useful for compiling estimates of travel expenditure. Further information on the use of surveys of individuals traveling abroad is provided ahead.

3.224 These data, together with data on patterns of expenditure and compensation of employees, could form the basis for a data model to estimate various balance of payments items. In particular, travel services can be estimated by multiplying the actual number of visitors and other short-term individuals traveling abroad (residents visiting abroad) by the estimate of per capita expenditure from surveys of actual expenditure. Preliminary estimates for a period can make use of data on the expected length of stay and anticipated expenditure.

Alternative Statistics on Across-the-Border Movements

3.225 An economy's official migration statistics are usually compiled, in conjunction with the migration authorities, by the central statistical agency. However, these statistics—especially in relation to visitors and other short-term individuals traveling abroad—may not always be available, so the compiler may require another source of data on short-term movements. As an alternative to migration statistics, the compiler could investigate using data, to be provided by transport companies, on the number of passengers moving across an economy's borders by means of various transport modes (such as aircraft, ship, train, or bus). Data on passengers traveling by road may also be available from official sources. For island economies and economies where the majority of across-the-border movement of persons is via organized transport, data from transport companies can be an effective source for measuring such movements. Data on the number of nonresidents registering at hotels may also be available as a source of information on some visitors and other short-term individuals traveling abroad (although hotel registrations will double count such travelers staying at more than one hotel and miss those who do not stay at hotels). The compiler should become aware of these sources and seek to influence their development when they prove useful in balance of payments compilation.

Surveys of Individuals Traveling Abroad

3.226 Surveys in various forms are conducted by many economies to measure activities of individu-

als traveling abroad. Some surveys may be designed purely to meet balance of payments requirements for measuring travel and possible other forms of expenditure and income. Other surveys with broader purposes may contain information on travel expenditure and therefore be of interest to the compiler. Individuals traveling may be surveyed when they arrive or depart or sometime after they have returned to their home economies. Table 3.4 sets out various categories of surveys and whether these surveys measure anticipated or actual expenditure (and receipts).

3.227 Surveys of arrivals measure actual expenditures abroad of residents returning home and anticipated expenditures of nonresident visitors and other short-term individuals traveling in the economy. Conversely, surveys of departures measure actual expenditures of departing nonresident visitors and other short-term traveling individuals and anticipated expenditures of departing resident visitors and other short-term traveling individuals. Surveys of returned individuals from travel abroad collect data from residents sometime after they return home. In some economies, these surveys include questions on employment income (compensation of employees) and other possible balance of payments transactions, such as transfers and financial account transactions.

3.228 Survey methodology may take a number of forms. If a survey is made in respect of arrivals or departures, it may take place on board aircraft or in passenger terminals. If conducted in passenger terminals, access to passengers in airline lounges will need to be negotiated as these passengers are likely to have different characteristics to those not located in lounges—for example, a higher proportion of individuals in lounges may be business travelers. The survey may be conducted by distributing and collecting forms or by personal interview. Surveys of returned visitors and other short-term traveling individuals may be conducted by mail or by personal or telephone interview. In these surveys, returned visitors and other short-term traveling individuals can be identified from migration cards or similar sources. Surveys may be carried out by an official statistical organization, another government agency, or a private agency working on behalf of an official agency.

3.229 A number of economies, particularly those whose primary territory consists of one or more islands,

conduct surveys based on interviews of departing nonresident visitors and other short-term traveling individuals. In some economies, this approach is also used to measure expenditure by returning residents. These surveys are often conducted on behalf of the national tourist authority by a private survey company. The primary purpose of the survey is to gather information on travel activities and attitudes of departing (or returning) visitors and other short-term traveling individuals to facilitate tourism analysis and policy development. Interviews include many questions; those of particular interest to the balance of payments compiler concern travel expenditure by, and earnings of, nonresident visitors and other short-term traveling individuals in the host economy and similar information for residents returning from abroad. Travel expenditure may be broken down into a number of categories, including expenditure at hotels and restaurants and on transportation, entertainment, shopping, and other services. Additionally, travel expenditure may be classified by type of payment used (e.g., package tour, credit cards, cash, wire transfers, and traveler's checks) to reconcile such data with data from other sources.

3.230 Some economies use surveys of international air passengers to provide information on travel and passenger fare receipts and payments. Cooperating airlines distribute questionnaires (to be completed on a voluntary basis) to all passengers on selected flights, collect completed forms, and return the forms to the balance of payments compiler. Like surveys based on interviews, these typically serve the interests of the tourism industry as well as those of the balance of payments compiler. Key items for the compiler include destination or origin, expenditures in host economies, length of stay, and passenger fares. Information is combined with migration statistics to produce final results. However, where the data are obtained on a voluntary basis, such as surveys conducted on aircraft, the compiler should be conscious of potential bias in the results. These can be addressed through the use of estimation techniques.

3.231 As surveys of visitors are typically sample surveys, results should be expanded to determine aggregate results for the population of visitors and other short-term individuals traveling abroad. Aggregates can be obtained by number raising (i.e., results for each person sampled are expanded by the inverse of

their chance of selection adjusted for nonresponse) or by using a poststratified estimator (the results are expanded by the ratio of the number of persons in the population in a particular category—as identified from migration statistics—to the number of persons in the sample in the category). A poststratified estimation procedure should produce more accurate results but can be subject to bias. Less rigorous sampling techniques may be acceptable if the survey is simply designed to derive per capita estimates for input into data models rather than actual aggregate travel expenditure. In any case, the compiler should either gain some familiarity with statistical theory and mathematical aspects of sample design and selection and/or seek professional assistance from mathematical statisticians. Sample surveys are discussed further in Chapter 2.

3.232 In surveys of visitors, group travel, which is largely associated with families, requires particular attention. It is important to determine whether a visitor or other short-term individuals traveling abroad is a member of a traveling group. As sample expansion procedures usually are based on the individual as the statistical unit, it is necessary to assign group travel expenditure to individuals. It is possible to adopt a variety of procedures, but the procedures must be consistent. One procedure is to prorate all group expenditure to adults in the group (an adult could be defined as a person of more than a certain age). A related issue is the expenditure of children. In many surveys of visitors, children are not included in the sample. As children (other than students) often travel in groups with adults, their omission should not be a concern, especially if there are alternative methodologies for measuring students' expenditures when amounts are significant. Procedures should be developed, however, for assigning the expenditure of nonstudent children traveling in a group. For example, all expenditure of children could be assigned to the head of the household or to another adult. Also, it is important that the absence of children be taken into consideration in any sample estimation.

3.233 One problem with surveys of visitors is memory recall. This difficulty can be partly overcome in interview surveys by encouraging the interviewee to consult records and/or by providing suitable prompts. During the interview, the interviewer may encourage the interviewee to consult credit card slips, traveler's checks records, and so forth. Economies

that conduct surveys of individuals traveling abroad sometime after their return almost always collect expenditure information classified by type of payment, rather than by types of goods and services acquired, because the financial records required to support this approach are more likely to be retained by individuals traveling abroad than the recollection of which items were acquired.

3.234 Another problem, particularly for package tours, is the splitting of expenditures into passenger fare (included in transport, except for any transport provided internally to the economy visited) and travel components such as accommodation and meal costs, transfers between airport and hotel, or site entry charges. To overcome this problem, survey questionnaires may seek the total value of a trip—that is, passenger fares plus those travel costs that are covered by the package cost. The balance of payments compiler could then estimate the travel expenditures by deducting from the total value of the trip an estimate of international passenger fares obtained from another source, such as a survey of businesses of transportation companies (described in Collections of Goods and Services Statistics, this chapter). Alternatively, the balance of payments compiler could consult with travel industry representatives to break down trip expenditure into the two components. If the package tours have been arranged by nonresident organizers, the balance of payments compiler may explore the likely breakdown between transport and travel costs with resident organizers.

3.235 In collecting the information from individuals traveling abroad (regardless of whether for package tours), it is important that the compiler ascertain the residence of the transport company to determine whether the services provided would be included in the compiler's economy's balance of payments. For example, if a resident airline is providing transport services to residents, this is not a balance of payments transaction. Similarly, if a nonresident airline is providing transport services to nonresidents; these services are not included in the compiling economy's balance of payments. On the other hand, where a resident airline is providing transport services to nonresidents, this is a transport credit for the resident economy. Where a nonresident airline is providing transport services to residents, this is a transport debit for the resident economy.

3.236 The compiler should play an active role in the development and monitoring of survey of visitors conducted by other agencies. Particular attention should be paid to the wording of questions, the location of questions on forms or the sequence of questions in interviews, the training of interviewers, and data validation and sampling techniques. It is desirable that individual records (or completed forms) from surveys be given to the compiling authority for validation checks of data, examination of collection procedures, review of possible sample problems (such as outliers), and expansion of sample results via, for example, a poststratified estimation procedure used in conjunction with international migration statistics.

Other Collections

3.237 Many economies conduct household expenditure surveys (e.g., to arrive at weights for consumer price indexes). These surveys could be used to estimate travel expenditure abroad, which is a component of household expenditure. Experience with this approach is not particularly encouraging as the sample of persons who travel abroad is usually not large enough to provide robust estimates for balance of payments purposes. This problem with sampling sparse populations can be addressed if there is a special supplementary survey to expand the number of responding households. However, in the absence of alternative data sources or a larger sample, this approach could be used to generate broad estimates of travel and also to provide estimates of remittances to persons abroad (the survey could include a supplementary question on this issue).

3.238 Another strategy to improve the proportion of the sample that provides information of interest to the compiler is to limit the sample in some way. For

example, it may be limited to areas close to borders (for border workers and seasonal workers); to workers employed in particular industries (for seasonal workers and short-term workers—for example, on fly-in-fly-out contracts); or to lists of immigrants available from the relevant authority. The survey could target transactions of particular interest to the compiler, including income from employment, taxes paid in the economy of employment, social contributions paid, social benefits received, travel expenditure, or financial transactions and positions (for border workers, etc.). In addition or instead, transport and travel associated with visits to the economy of former residence, remittances, financial assets and liabilities, and social benefits received (for immigrants) could be covered. Model form 23 in Appendix 8 requests data that would be of specific interest for these populations.

3.239 A further population of particular interest is that of nonresident students, who can be identified from the visa-issuing authority or from education institutions. Surveys can be used to seek information on where the students source their funds and to identify their expenditure patterns.

3.240 Closely related to household expenditure surveys are household income surveys, which obtain information on household sources of income. The balance of payments compiler could investigate the possibility of using (particularly in the absence of alternative data sources) these surveys to measure personal transfers received from relatives working abroad and employment income earned from household investments made abroad. As the number of households may not be sufficiently large to provide robust estimates of balance of payments data, a supplementary survey may be conducted to endeavor to address the sparseness of the population of interest.