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Financial Derivatives

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FINANCIAL DERIVATIVES

- 1.** Financial derivatives are financial instruments that are linked to a specific financial instrument or indicator or commodity, and through which specific financial risks can be traded in financial markets in their own right. Transactions in financial derivatives should be treated as separate transactions rather than as integral parts of the value of underlying transactions to which they may be linked. The value of a financial derivative derives from the price of an underlying item, such as an asset or index. Unlike debt instruments, no principal amount is advanced to be repaid and no investment income accrues. Financial derivatives are used for a number of purposes including risk management, hedging, arbitrage between markets, and speculation.
- 2.** Financial derivatives enable parties to trade specific financial risks -- such as interest rate risk, currency, equity and commodity price risk, and credit risk, etc -- to other entities who are more willing, or better suited, to take or manage these risks, typically, but not always, without trading in a primary asset or commodity. The risk embodied in a derivatives contract can be traded either by trading the contract itself, such as with options, or by creating a new contract which embodies risk characteristics that match, in a countervailing manner, those of the existing contract owned. This latter activity is termed *offsetability*¹, and occurs in forward markets. Offsetability means that it will often be possible to eliminate the risk associated with the derivative by creating a new, but “reverse”, contract that has characteristics that countervail the risk of the first derivative. Buying the new derivative is the functional equivalent of selling the first derivative, as the result is the elimination of risk. The ability to offset the risk on the market is therefore considered the equivalent of tradability in demonstrating value. The outlay that would be required to offset the existing derivative contract represents its value -- actual offsetting is not required to demonstrate value.
- 3.** Financial derivatives contracts are usually settled by net payments of cash, often before maturity for exchange traded contracts such as commodity futures. Cash settlement is a logical consequence of the use of financial derivatives to trade risk independently of ownership of an underlying item. However, some financial derivative contracts, particularly involving foreign currency, are associated with transactions in the underlying item.

¹ “Offsetability” should not be confused with an “offset” which is the legal right of a debtor to net its claims against the same counterparty. This *Manual* recommends that positions be recorded on a gross basis wherever possible.

4. The value of the financial derivative derives from the price of the underlying item: the reference price. Because the future reference price is not known with certainty, the value of the financial derivative at maturity can only be anticipated, or estimated. The reference price may relate to a commodity, a financial instrument, an interest rate, an exchange rate, another derivative, a spread between two prices, an index or basket of prices. An observable market price or index for the underlying item is essential for calculating the value of any financial derivative -- if there is no observable prevailing market price for the underlying item, it cannot be regarded as a financial asset. Transactions in financial derivatives should be treated as separate transactions, rather than as integral parts of the value of underlying transactions to which they may be linked. This is because a different institutional unit will be the party to the derivative transaction from that for the underlying transaction. However, embedded derivatives (see below para.5) should not be separately identified and valued from the primary instrument.

5. The following types of instruments are not financial derivatives for balance of payments purposes.

- **A fixed price contract** for goods and services is not a financial derivative instrument, unless, the contract is standardized so that the market price risk therein can be traded in financial markets in its own right.
- **Timing delays** arising in the normal course of business, which may entail exposure to price movements, do not give rise to transactions and positions in financial derivatives in the balance of payments. Such timing delays include normal settlement periods for spot transactions in financial markets, and those that arise in the normal course of trade in goods and services.
- **Insurance** is not a form of financial derivative. Insurance contracts provide individual institutional units exposed to certain risks with financial protection against the consequences of the occurrence of specified events, many of which cannot be expressed in terms of market prices. Insurance is a form of financial intermediation in which funds are collected from policyholders and invested in financial or other assets which are held as technical reserves to meet future claims arising from the occurrence of the events specified in the insurance policies: that is, insurance manages event risk primarily by the pooling, not the trading, of risk.
- Contingencies, such as **guarantees and letters of credit** are not financial derivatives. The principal characteristic of contingencies is that one or more conditions must be fulfilled before a financial transaction takes place. Typically, these contingencies are not instruments that facilitate the trading of specific financial risks.

- **Derivative features** embedded in standard financial instruments and inseparable from the underlying instrument are not financial derivatives for balance of payments purposes because the financial derivative element is an integral part of the instrument such that the underlying instrument and the derivative element involve the same counterparties. So, if a primary instrument such as a security or loan contains an embedded derivative, the instrument should be valued and classified according to its primary characteristics, such as a security or loan, even though the value of that security or loan may well be different from comparable securities and loans because of the embedded derivative. Examples are bonds that are convertible into shares and securities that carry the option of repaying the principal in a different currency from that of issuance.

Classes of Financial Derivatives

6. There are two broad types of financial derivatives as described in paragraphs 8 to 10, and provided that they can be valued separately from the underlying item to which they are linked, they should be included in the financial account of the balance of payments and in the international investment position, regardless of whether they are “traded” on- or off-exchange.
7. The two broad classes of financial derivatives are: forward-type contracts, including swaps, and option contracts.
8. Under a **forward** contract, the two counterparties agree to exchange a specified quantity of an underlying item (real or financial) at an agreed contract price -- strike price -- on a specified date. Futures contracts are forward contracts traded on organized exchanges. Futures and other forward contracts are typically, but not always, settled by the payment of cash or the provision of some other financial instrument rather than the actual delivery of the underlying item and therefore are valued and traded separately from the underlying item. If the forward-type contract is a swap contract, the counterparties exchange cash flows based on the reference prices of the underlying items in accordance with pre-arranged terms. Interest-rate, currency, and cross-currency interest-rate swaps are common types of swap contracts. (See paragraphs 25 and 26 for further discussion)
9. A forward contract is an unconditional financial contract that represents an obligation for settlement on a specified date. At the inception of the contract, risk exposures of equal market value are exchanged. Both parties are potential debtors, but a debtor/creditor relationship can be established only after the contract goes into effect. Thus, at inception, the contract has zero value. However, during the life of a forward contract, the market value of each party’s risk exposure may differ from the zero market values at the inception of the contract as the price of the underlying item

changes. When this occurs, an asset (creditor) position is created for one party and a liability (debtor) position for the other. The debtor/creditor relationship may change both in magnitude and direction over the life of the forward contract.

10. Under an **option-type** contract, the purchaser of the option, in return for an option premium, acquires from the writer of the option, the right but not the obligation to buy (call option) or sell (put option) a specified underlying item (real or financial) at an agreed contract price -- strike price -- on or before a specified date. A major difference between forward and options contracts is that, whereas either party to a forward is a potential debtor, the buyer of an option acquires an asset, and the option writer incurs a liability. However, the option may expire worthless; the option will be exercised only if settling the contract is advantageous to the buyer. The buyer may make gains of unlimited size, and the option writer may experience losses of unlimited size. Options are written on a wide variety of underlying items such as equities, commodities, currencies, and interest rates (including cap, collar, and floor²). Options are also written on futures, and swaps (known as swaptions), and other instruments such as caps (known as captions).

11. On organized markets, option contracts are usually settled in cash, but some option-type contracts are normally settled by the purchase of the underlying asset. For instance, warrants are financial contracts that give the holder the right to buy, under specified terms, a certain number of the underlying asset, such as equity shares and bonds. If warrants are exercised the underlying asset is usually delivered. Warrants can be traded apart from the underlying securities to which they are linked.

Recording of Financial Derivative Transactions and Positions

12. The statistical treatment of financial derivatives in the balance of payments involves four steps:

- Recognizing that the exchange of claims and obligations at the inception of a derivative contract is a true financial transaction that creates asset and liability positions that have, at inception, a zero value in the case of forward instruments, and a value equal to the premium in the case of options;
- Treating any changes in the value of derivatives as holding gains or losses.
- Recording transactions in secondary markets of marketable derivatives, such as options, as financial transactions;

² A cap places an upper limit, a floor a lower limit, and a collar upper and lower bounds on floating rate interest payments/receipts.

- Recording any payments at settlement as transactions in financial derivative assets or liabilities, as appropriate (i.e., no income arises from settlement of financial derivatives).

Valuation of Positions

13. A key characteristic of most derivative contracts is that transactors commit themselves forward to an agreed price at which they will or are willing to transact in an underlying item. From this the value of the financial derivative derives from the difference between the agreed contract price of the underlying item and the prevailing, or expected prevailing, market price, appropriately discounted, of that item, and in the case of options taking into account the potential volatility of the price of the underlying instrument, the time to maturity and interest rate. In the specific case of a swap contract based on a notional principal amount, its value derives from the difference between the expected gross receipts and gross payments, appropriately discounted: that is, its net present value.

14. Financial derivatives are valued at their market price on the recording date. Changes in prices between balance sheet recording dates are classified as revaluation gains or losses. If market value data are unavailable, other fair value methods to value derivatives, such as options models or discounted present values, may be used.

Payments at Inception

15. Purchasers of options pay a *premium* to the seller. The full price of the premium is recorded as acquisition of a financial asset by the buyer and incurrence of a liability by the seller. In some instances, the premium may be paid at after the inception of the derivative contract. In this case, the value of the premium payment is recorded as an asset at the time the derivative is purchased, financed by an imputed loan from the writer.

16. The creation of a forward-type contract does not involve the recording of a financial account transaction in financial derivatives as risk exposures of equal value are being exchanged, i.e., there is zero exposure and hence zero value for both sides.

17. Commissions and fees paid at inception or during the life of the derivative to banks, brokers, and dealers, are classified as payments for services. These are payments rendered for service activities provided within the current period, and are independent of the asset and liability relationships that are created by the derivative.

Resale of Derivatives in Secondary Markets

18. Resales of derivatives in secondary markets, whether exchange-traded or over-the-counter, are recorded as financial transactions at the market price.

Settlement Payments

19. Net settlement payments are financial transactions, similar to transactions at maturity of other financial instruments. At settlement, either a net cash payment is made, or the underlying item is delivered.

- When a financial derivative is settled in cash, a transaction in the derivative is recorded equal to the cash value of the settlement. No transaction in the underlying item is recorded. In most instances, the receipt of cash is recorded as a reduction in financial derivative assets, and the payment of cash is recorded as a reduction in financial derivative liabilities. However, when a contract involves on-going settlement, such as with an interest rate swap, a receipt of cash can be recorded as an increase in financial derivative liabilities if, at the time of the settlement payment, the contract is in a net liability position, and vice versa. If, because of market practice, compilers are unable to implement this approach, it is recommended that all cash settlement receipts be recorded as a reduction in financial assets, and all cash settlement payments be recorded as decreases in liabilities.
- When the underlying instrument is delivered, two transactions occur so that the transactions in both the underlying item and the derivative are recorded. The transaction in the underlying item is recorded at its prevailing market price on the day of the transaction while the transaction in the derivative is recorded as the difference between that market price for the underlying item and the strike price in the derivative contract times the quantity.

There may be practical difficulties in obtaining data to implement the preferred treatment.

Margins

20. Margins are payments of cash or collateral that cover potential or actual obligations under financial derivatives, especially futures or exchange-traded options. The provision of margin is a feature of financial derivative markets, reflecting concern over counterparty risk.

21 *Repayable margins* consist of deposits or other collateral deposited to protect a counterparty against default risk, but which remain under the ownership of the unit that placed the margin. Although its use may be restricted, a margin is classified as repayable if the depositor retains the risks and rewards of ownership, such as the receipt of income or exposure to holding gains and losses. At settlement, repayable margins, or the amounts of repayable margins in excess of any liability owed on the derivative, are returned to the depositor. In organized markets, repayable margin is sometimes known as *initial margin*.

22. Repayable margin payments of cash are deposits, not transactions in a derivative. The depositor has a claim on the exchange, broker or other institution holding the deposit. If securities are deposited, no entries are required because the entity on whom the depositor has a claim -- the issuer of the security -- is unchanged. Some countries may prefer to classify “repayable margins” within *other accounts receivable/payable* in order to reserve the term “deposits” for the monetary aggregates.

23. *Nonrepayable margin* is a transaction in a derivative paid to reduce a financial liability created under a derivative. Frequently, in organized exchanges, nonrepayable margin, sometimes known as variation margin, is paid daily to meet liabilities recorded under daily marking derivatives to market value. The entity that pays nonrepayable margin no longer retains ownership of the margin nor has the right to the risks and rewards of ownership, such as the receipt of income or exposure to holding gains and losses. A payment of nonrepayable margin is recorded as a reduction in financial derivative liabilities, (with the contra-entry of a reduction in a financial asset, probably currency and deposits); the receipt of nonrepayable margin is recorded as a reduction in financial derivative assets (with the contra-entry of an increase in a financial asset, probably currency and deposits).

24. Arrangements for margining can be complex, and procedures differ among countries. In some countries, repayable and nonrepayable margins are handled in a single account and it may be difficult to distinguish between them. The actual institutional arrangements must be reviewed, including which unit makes payment and the instruments used. The key test is whether the margins are repayable or involve an effective transfer of ownership between the units involved in the financial derivative contract.

Treatment of Selected Financial Derivatives

Specific Interest Rate Contracts

25. An **interest rate swap** contract involves an exchange of cash flows related to interest payments, or receipts, on a notional amount of principal, that is never exchanged, in one currency over a period of time. Settlements are often made through net cash payments by one counterparty to the other. **Forward Rate Agreements** (FRAs) are contracts in which the counterparties agree on an interest rate to be paid, at a specified settlement date, on a notional amount of principal of a specified maturity, that is never exchanged. FRAs are settled by net cash payments. Active financial markets exist in these contracts, allowing the generation of holding gains and losses. The **creation** of interest rate swaps and FRA contracts involve no entries in the financial account. Net cash settlement payments associated with interest rate swaps and with FRAs should be classified in the financial account under financial derivatives. Interest rate swaps usually involve on-going settlement during the life of the contract, whereas a FRA is usually settled at maturity of the contract.

Specific Foreign Currency Contracts

26. Foreign exchange swap contracts involve a spot sale/purchase of currencies and a simultaneous commitment to a forward purchase/sale of the same currencies.

Forward foreign exchange contracts involve a commitment to transact in specified foreign currencies at an agreed exchange rate in a specified amount at some future agreed date. **Cross-currency interest rate swap** contracts, sometimes known as currency swaps, involve an exchange of cash flows related to interest payments and an exchange of principal amounts in specified currencies at an agreed exchange rate at the end of the contract; sometimes, there is also an exchange of principal at the beginning of the contract and in these circumstances there may be subsequent repayments, which include both interest payments and the amortization of principal, over time according to pre-arranged terms. All these payments are recorded as transactions in financial derivatives.

27. For a foreign currency financial derivative contracts, it is necessary to distinguish between transactions in the financial derivatives contract, and the requirement to deliver and receive underlying principal associated with the contract. As with other forward-type contracts, the creation of a foreign currency financial derivatives contract does not lead to the recording of transactions under financial derivatives in the financial account: any initial sale or purchase of currency is a transaction that will be reflected in the **financial account, other investment** at the exchange rate agreed by the counterparties. The exchange rate for the forward sale/purchase of currencies under a foreign currency derivative contract is agreed by the two counterparties at the time of the establishment of the swap contract. The derivative contract acquires value as the prevailing market exchange rate differs from the agreed contract exchange rate. At the time of settlement, the difference between the values of the currencies exchanged, measured in the unit of account and at the prevailing exchange rate, should be allocated to transactions in financial derivatives. In other words, if in the unit of account and at prevailing market exchange rates, the value of currency received (recorded as an increase in *other investment, assets*) exceeds that of the currency paid (recorded as a decrease in *other investment, assets*), a reduction in financial derivative assets is recorded (with the contra-entry of an increase in another item in the financial account, probably currency and deposits). The opposite applies for the reverse situation, i.e., when the value of the currency received is less than that of the currency paid.

Credit Derivatives

28. The financial derivatives described in the previous sections are related to *market risk*, which pertains to changes in the market prices of securities, commodities, interest and exchange rates. Financial derivatives whose primary purpose is to trade **credit risk** are known as *credit derivatives*. They are designed for trading in loan and security default risk. Credit derivatives take the form of both forward-type and

option-type contracts, and like other financial derivatives, they are frequently drawn up under standard master legal agreements, and involve collateral and margining procedures, which allow for a means to make a market valuation.

29. Common types of credit derivatives include the following. **Total return swaps** involve the swapping of cash flows and capital gains and losses related to the liability of a lower-rated creditor for cash flows related to a guaranteed interest rate, such as an inter-bank rate, plus a margin. **Spread options** are contracts whose value is derived from the interest rate spread between a high quality credit and a lower quality credit; for example, if the spread narrows sufficiently, the option holder benefits from exercising the option. **Credit default swaps** involve the swapping of the risk premium inherent in an interest rate on a bond or loan for a cash payment in the event of default by the debtor. Some credit default swap contracts require that one party make only a *single* payment to another in order to be financially protected against a the risk of a catastrophe befalling a creditor. For such contracts, a reference price may not be readily available, and the single premium contracts would be more properly classified as a form of insurance rather than a financial derivative.

Selected Supplementary Information

30. As financial derivatives are risk transferring instruments, there may be interest from analytical and policy-making points of view in presenting transactions and positions in financial derivatives by type (option-type and forward-type) and category of risk embodied in the financial derivative, such as foreign exchange, interest rate, and other risk.

Other references to financial derivatives in BPM5

Chapter VII: Unit of Account and Conversion

132. In accordance with the principles, defined in this Manual and in the SNA, for time of recording and valuation, the most appropriate exchange rates to be used for conversion of balance of payments entries from transactions currencies into units of account are the market rates prevailing on the transaction dates. If those market rates are not available, the average rate for the shortest period applicable should be used. The midpoint between buying and selling rates should be used so that any service charge -- the spread between the midpoint and those rates -- is excluded. When forward contracts are utilized to hedge or protect transactors against changes in exchange rates, such transactions are conceptually distinct from those involved with the acquisition or sale of goods, services, or financial items from or to nonresidents. Execution of the contract is virtually simultaneous with the change of ownership or delivery of the underlying asset. If there is a difference between the prevailing exchange rate and the actual rate of conversion established by the forward contract (or

other financial derivative), that difference will be reflected in a separate transaction related to the contract (derivative).

Chapter VIII: Classification and Standard Components of the Balance of Payments

176. The classification of standard components in the financial account is based on these criteria:

All components are classified according to type of investment or by functional breakdown (direct investment, portfolio investment, other investment, financial derivatives, reserve assets).

For the category of direct investment, there are directional distinctions (abroad or in the reporting economy) and, for the equity capital and other capital components within this category, asset or liability distinctions.

For the categories of portfolio investment, other investment, and financial derivatives there are the customary asset/liability distinctions.

Particularly significant for portfolio investment, other investment, and financial derivatives is the distinction by type of instrument (equity or debt securities, trade credits, loans, currency and deposits, other assets or liabilities, other assets and liabilities). In this Manual, traditional and new money market and other financial instruments and derivatives are included in portfolio investment and financial derivatives.

For portfolio investment, other investment, and financial derivatives there are distinctions by sector of the domestic creditor for assets or by sector of the domestic debtor for liabilities. These distinctions serve to facilitate links with the income accounts, the international investment position, the SNA, and other statistical systems.

The traditional distinction, which is based on original contractual maturity of more than one year or one year or less, between long- and short-term assets and liabilities applies only to other investment. In recent years, the significance of this distinction has clearly diminished for many domestic and international transactions. Consequently, the long- and short-term distinction is accorded less importance in the SNA and in this Manual than in previous editions. However, because the maturity factor remains important for specific purposes--analysis of external debt, for example--it is retained in the Manual for other investment.

178. Portfolio investment covers transactions in equity securities and debt securities; the latter are subsectorized subclassified into bonds and notes, and money market instruments, and financial derivatives (such as options) when the derivatives generate financial claims and liabilities. Various new financial instruments are covered under appropriate instrument classifications. (Transactions covered under direct investment and reserve assets are excluded.)

Chapter XIII: Other Services

258. Financial services cover financial intermediary and auxiliary services (except those of insurance enterprises and pension funds) conducted between residents and nonresidents. Included are intermediary service fees, such as those associated with letters of credit, bankers' acceptances, lines of credit, financial leasing, and foreign exchange transactions. (For the latter, the spread between the midpoint rate and the buying/selling rate is the service charge.) Also included are commissions and other fees related to transactions in securities -- brokerage, placements of issues, underwritings, and redemptions; ~~and arrangements of swaps, options, and other hedging instruments; commissions and fees paid for the arrangement of financial derivatives contracts; commissions of commodity futures traders; and services related to asset management, financial market operational and regulatory services, security custody services, etc.~~ Service charges on purchases of International Monetary Fund resources are included among an economy's financial service payments, as are charges (similar to commitment fees) associated with undrawn balances under stand-by or extended arrangements with the IMF.

Chapter XIV: Income

274. Investment income (property income in the SNA) covers income derived from a resident entity's ownership of foreign financial assets. The most common types of investment income are income on equity (dividends) and income on debt (interest). Dividends, including stock dividends, are the distribution of earnings allocated to shares and other forms of participation in the equity of incorporated private enterprises, cooperatives, and public corporations. Dividends represent income that is payable without a binding agreement between the creditor and the debtor. Among other types of income on equity are (i) earnings of branches and other unincorporated direct investment enterprises and (ii) direct investors' shares of earnings of incorporated direct investment enterprises. (The latter type of earnings, which are not formally distributed, are earnings other than dividends.) Shares of reinvested earnings attributed to direct investors are proportionate to the participation of the direct investors in the equity of the enterprise. Also, in principle, there is imputed income to households from net equity in life insurance reserves and in pension funds. This imputed income is included indistinguishably under other investment. Interest, including discounts in lieu of interest, comprises income on loans and debt securities (i.e., such financial claims as bank deposits, bills, bonds, notes, and trade advances). ~~Net interest flows arising from interest rate swaps also are included (See paragraph 406).~~ Interest is payable in accordance with a binding agreement between the creditor and the debtor.
280. Portfolio investment income comprises income transactions between residents and nonresidents and is derived from holdings of shares, bonds, notes, and money market instruments ~~and associated with financial derivatives~~. This category is subdivided into income on equity (dividends) and income on debt (interest). See Chapter XIX for

details on new financial instruments and treatment of financial derivatives, such as options. The financial instrument classification scheme for portfolio investment income is consistent with that in the financial account and with that in the international investment position. Subsectoring into domestic institutional sectors (monetary authorities, general government, banks, and other) is included under Selected Supplementary Information. (See table following Chapter VIII.) A variety of other supplementary disaggregations by foreign sector, etc., may be desirable for specific analytical purposes.

Chapter XVI: Structure and Characteristics of the Capital and Financial Account

315. ~~However, options and other~~ Financial derivatives are included among financial items, ~~in accordance with the treatment of these items in the SNA. These instruments which~~ is consistent with their treatment in the SNA. There are active financial markets in these instruments, and they can be valued by reference to the market prices of the derivatives themselves or to the market prices of the ~~commitments~~ real or financial items underlying the derivatives. ~~Thus,~~ Both parties to a derivative contract recognize a financial instrument: one party recognizes a liability and the other recognizes a claim. Alternatively, this value could be viewed as the amount one party must pay to the other party in order to extinguish the contract. As a result, derivatives satisfy the definition (see paragraph 314) of foreign financial assets and liabilities. A full discussion of financial derivative instruments appears in Chapter xxx.

330. Portfolio investment

Cross-border investment in equity and debt securities (other than direct investment) is both quantitatively and analytically significant. Such cross-border investment therefore warrants separate recording and coverage, particularly in view of the trend towards free international movement of capital and the growth of new financial instruments and new market participants. Coverage of this category is expanded to reflect these developments and to include money market debt instruments ~~and financial derivatives~~, as well as longer-term debt and equity securities.

Financial Derivatives

Transactions in options and forwards, including swaps, have grown in importance in recent years, particularly activity outside organized exchange markets. Inclusion of financial derivatives as a separate functional category recognizes both this importance and the different nature of these instruments compared with other financial instruments; no capital is advanced to be repaid, nor does any interest accrue on financial derivatives. In previous printings of the fifth edition of this manual, financial derivatives data were included as a sub-category within portfolio investment. Compilers may continue with this approach if activity is too small to justify presenting data on financial derivative activity in a separate functional category, but should separately classify derivatives if amounts are significant.

332. For portfolio investment, the type of instrument is the primary classification (i.e., equity and debt securities). Debt securities are broken down into bonds and notes, and money market instruments, ~~and financial derivatives~~. Although the sectoral breakdown for portfolio investment is secondary, there is no implication that, in certain instances, such a breakdown may not be of equal interest to the compiling economy. The same holds true for financial derivatives and other investment.

Chapter XVIII: Direct Investment

New paragraph Financial derivatives cover transactions in forwards, which include swaps, and options between direct investors and subsidiaries, branches, and associates. Transactions are recorded on a directional basis. (For a fuller description of the treatment of financial derivative transactions see chapter xxx).

- 372 Intercompany transactions.....Deposits and other claims and liabilities related to usual banking transactions of depository institutions and claims and liabilities of other financial intermediaries are classified, as appropriate, under *portfolio investment*, ~~financial derivatives or other investment~~. The stock of

Chapter XIX : Portfolio Investment

Coverage

385. Portfolio investment includes, ~~in addition to~~ equity securities and debt securities in the form of bonds and notes, ~~and money market instruments and financial derivatives such as options~~. Excluded are any of the aforementioned instruments included in the categories of *direct investment* and *reserve assets*. The expanded coverage in transactions reflects changes in international financial markets in recent years and includes the introduction of many new financial instruments within the framework of continuous innovation.

Classification and Definitions

387. The categories of financial instruments classified and defined in the Manual are generally consistent with those in the SNA. The major portfolio investment components, classified under assets and liabilities, are equity securities and debt securities, both usually traded (or tradable) in organized and other financial markets. Debt securities are subdivided into bonds and notes, ~~and money market instruments; and financial derivatives, including varieties of new financial instruments~~.
389. Debt securities cover (i) bonds, debentures, notes, etc.; ~~and (ii) money market or negotiable debt instruments; and (iii) financial derivatives or secondary instruments, such as options, that usually do not extend to actual delivery and are utilized for hedging of risks, investment, and trading purposes~~.

390. Bonds, debentures, notes, etc. usually give the holder the unconditional right to a fixed money income or contractually determined variable money income. (Payment of interest is not dependent upon the earnings of the debtor.) With the exception of perpetual bonds, bonds and debentures also provide the holder with the unconditional right to a fixed sum as a repayment of principal on a specified date or dates. Included are nonparticipating preferred stocks or shares, convertible bonds, and bonds with optional maturity dates, the latest of which is more than one year after issue.³ This category also includes negotiable certificates of deposit with maturities of more than one year; dual currency bonds; zero coupon and other deep discounted bonds; floating rate bonds; indexed bonds; and asset-backed securities, such as collateralized mortgage obligations (CMOs) and participation certificates. (Mortgages are not classified as bonds but are included under loans.)
392. Certain financial instruments give the holder the qualified right to receive an economic benefit in the form of cash, a primary financial instrument, etc. at some future date. These instruments are referred to as derivatives or secondary instruments in that they are linked to either specific financial instruments or indicators (foreign currencies, government bonds, share price indices, interest rates, etc.) or to particular commodities (gold, sugar, coffee, etc.) that may be purchased or sold at a future date. Derivatives also may be linked to a future exchange, according to a contractual arrangement, of one asset for another. The instrument, which is a contract, may be tradable and have a market value. When that is the case, the characteristics of the instrument as a contingent asset or liability (not to be recorded in the balance of payments or in SNA sectoral balance sheets) change and give rise to treatment of the instrument as an actual financial asset or liability in the financial account. Among derivative instruments are options (on currencies, interest rates, commodities, indices, etc.), traded financial futures, warrants, and arrangements such as currency and interest rate swaps.
393. Transactions in derivatives are treated as separate (mainly financial) transactions rather than being included as integral parts of underlying transactions to which they may be linked as hedges. There are several reasons for this treatment, which is consistent with that in the SNA. The counter party to a derivative transaction will be a different transactor than the transactor for the underlying transaction being hedged. Also, the two parties to the derivative transaction may have different motives—hedging, dealing in the instrument involved, or acquiring the derivative as an investment. Even if both parties are hedging, the hedging may be associated with different financial or other assets. If derivative transactions were included as integral parts of underlying transactions, such treatment would lead to asymmetries of measurement in the balance

³ The conversion (into equities) option may be considered a tradable derivative (i.e., an asset separate from the underlying security). See paragraph 392. Separation of the value of a transaction into the value of the bond and the value of the option may be effected by reference to transactions in similar bonds traded without options.

of payments accounts. For example, the counter party to a derivative contract that hedges an underlying position with a resident may also be a resident. In such an instance, the inclusion of the derivative as part of the underlying transaction would result in the incorrect inclusion of transactions in the balance of payments.

Selected Recording Issues

395. The expanded coverage, which includes traditional and new money market and derivative instruments and innovative long-term securities, of *portfolio investment* raises issues concerning the recording of balance of payments entries associated with these instruments. Such issues are discussed, for selected instruments, in subsequent paragraphs.
398. Among money market and derivative instruments and arrangements, and the treatment of short-term notes issued under NIFs, options, warrants, swaps, traded financial futures, and forward rate agreements are noted subsequently.
401. Options are contracts that give the purchaser of the option the right, but not the obligation, to buy (a call option) or to sell (a put option) a particular financial instrument or commodity at a predetermined price (strike price) within a specific time span or on a specified date. Some leading types of options are those on foreign currencies, interest rates, equities, commodities, specified indexes, etc. The buyer of the option pays a premium (the option price) to the seller (writer or issuer) for the latter's commitment to sell or purchase the specified amount of the underlying instrument or commodity or to provide, on demand of the buyer, appropriate remuneration. By convention—in this Manual and in the SNA—that commitment is treated as a liability of the seller and represents the current cost to the seller of buying out his contingent liability.
402. Conceptually, the payment of the premium referred to previously includes two elements: the purchase price of a financial asset and a service charge. In practice, it often is not possible to identify the service element separately. If the latter can be distinguished, it should be entered under financial services. If not, it is recommended that the full premium be recorded in the balance of payments as the acquisition of a financial asset by the buyer and as an incurrence of a liability by the seller. Subsequent trading (sales) of options is recorded in the financial account, as is the exercise or purchase/sale of the underlying financial instrument. If an option actually proceeds to delivery, which is not the usual case, the acquisition or sale of the underlying asset (real or financial) should be recorded at the prevailing market price in the appropriate balance of payments component. Offsetting the entry would be the actual amount payable or receivable; the difference between that amount and the prevailing market price is reflected in an entry that extinguishes the option contract. If an option contract is closed out prior to delivery, the actual amount payable or receivable is offset by the

entry extinguishing the option contract. When initial margin payments and subsequent increases or decreases are payable by the parties to options, the payments should be recorded as both assets and liabilities in the financial account under other investment, currency and deposits in the *financial account*. Payments into, and withdrawals from, these accounts sometimes may be reflected in transactions in the traded options to which the accounts relate and, if so, are recorded under option transactions in the *financial account*.

403. Warrants (a particular form of option) are tradable instruments giving the holder the right to buy from the issuer of the warrant (usually a corporation) a certain number of shares or bonds under specified conditions for a designated period of time. Warrants can be traded apart from the underlying securities to which the warrants are linked and thus have a market value. The treatment of warrants is the same as that for other options, and the issuer of the warrant is considered, by convention, to have incurred a liability, which is the counterpart of the asset held by the buyer and reflects the current cost of buying out the issuer's contingent liability.
404. Another variety of tradable warrant (usually issued by investment intermediaries) is a currency warrant, the value of which is based on the amount of one currency required to purchase another currency at or before the expiration date of the warrant. Currency warrants and cross-currency warrants with payments denominated in third currencies should be treated in a similar manner to other warrants.
405. A swap is a contractual arrangement involving two parties who agree to exchange, over time and according to predetermined rules, streams of payment on the same amount of indebtedness. The two most prevalent varieties of swaps are interest rate swaps and currency swaps. An interest rate swap involves an exchange of interest payments of different character (e.g., fixed rate and floating rate, two different floating rates, fixed rate in one currency and floating rate in another, etc.). A currency swap involves an exchange of specified amounts denominated in two different currencies and subsequent repayments reflecting principal and/or interest. (Central bank currency swap arrangements that are usually undertaken for exchange rate policy purposes and that involve the temporary exchange of deposits as of a particular date and the reversal of the transaction at a future date are referred to in paragraph 434.)
406. Balance of payments entries for streams of interest payments associated with swap transactions are recorded, on a net basis, in the current account, and streams of principal repayments are recorded in the financial account. Although neither party to a swap arrangement is considered to be the provider of a service to the other, any payment to a third party involved in arranging the swap is recorded under financial services.
407. A futures contract is an agreement between two parties to exchange a real asset for a financial asset, or to exchange, on a specified date at a predetermined rate, two

financial assets. Traded financial futures, including those for interest rates, currencies, commodities, equities, or other indices, are recorded in the financial account in a similar manner to options. Transactions associated with non-traded financial futures are likely to occur infrequently and are recorded under the other assets or other liabilities components of other investment.

408. A forward rate agreement (FRA) is an arrangement according to which two parties agree on an interest rate to be paid, on a specified settlement date, on a notional amount of principal that is never exchanged. At that time, the settlement payment (i.e., the difference between the rate agreed upon and the prevailing market rate at the time of settlement) is recorded as a transaction in the balance of payments. The buyer of the FRA receives payment from the seller if the prevailing rate exceeds the rate agreed upon, the seller receives payment from the buyer if the prevailing rate is lower than the rate agreed upon. These payments are recorded as interest income in the current account of the balance payments. Because there is only a notional (not an actual) underlying asset, there are no entries in the financial account.
442. Foreign exchange includes monetary authorities' claims on nonresidents in the forms of currency, ECUs, currency bank deposits, government securities, other bonds and notes, money market instruments, financial derivatives, equity securities, and nonmarketable claims arising from arrangements between central banks or governments. (Foreign exchange covers claims that are shown as the foreign exchange component of the series for international liquidity published by the Fund in International Financial Statistics.) The instrument breakdown of the foreign exchange component of reserve assets is needed in the context of the Fund's compilation of global aggregates of the main components of the world financial account and for analyses of the global discrepancy in those aggregates. (The Fund adheres to strict confidentiality requirements regarding information concerning instruments.)

Chapter XXIII: International Investment Position

465. Within the functional categories and in concordance with the income components of the current account and the financial account in the balance of payments, *direct investment* is subdivided into equity capital plus reinvested earnings, and other capital (intercompany debt), and financial derivatives. Claims on, and liabilities to, affiliated enterprises are shown separately. *Portfolio investment* is classified primarily by instrument--equity securities and debt securities, and financial derivatives--and secondarily by appropriate sectors. *Other investment* also is classified first by instrument and then by sector. Included are trade credits, loans, currency and deposits, and other assets and liabilities (such as capital subscriptions to international, nonmonetary organizations and miscellaneous accounts receivable and payable). Financial derivatives are also classified by sector. Supplementary information by type of instrument (forward-type or option-type) and risk category is recommended.

Reserve assets are largely interchangeable from a functional standpoint. (See paragraphs 437 through 443.)

468. *Portfolio investment* (equity securities, debt securities, and financial derivatives) is valued at current market prices at the appropriate reference dates. For equities that are listed in organized markets or are readily tradable, the value of outstanding stocks should be based on actual prices. The value of equities that are not quoted on stock exchanges or otherwise traded regularly should be estimated by using the prices of quoted shares that are comparable as to past, current, and prospective earnings and dividends. Alternatively, the net asset values of enterprises to which the equities relate could be used to estimate market values if the balance sheets of the enterprises are available on a current value basis. For debt securities that are listed in organized markets or are readily tradable, the outstanding value of stocks also should be determined on the basis of current market prices. For debt securities that are not readily tradable, the net present value of the expected stream of future payments/receipts associated with the securities could be used to estimate market value. (The net present value of any future receipt is equal to the value of that receipt when discounted at an appropriate interest rate.)
469. Financial derivatives in the investment position are valued at current market prices at the appropriate reference dates. It is recommended that gross asset and gross liability data be compiled by summing respectively the values of all individual contracts in an asset position and the values of all individual contracts in a liability position. If market value data are unavailable, other fair value methods to value derivatives, such as options models or discounted present values, may be used. Principles for valuation of financial derivatives in the investment position are, in some respects, less definitive than for other portfolio investment instruments. There are ongoing efforts by national and international accounting bodies to define standards for the measurement and recording of derivatives. Thus, in the *Manual*, a thorough treatment of derivative valuation is not attempted--particularly in view of continued innovations in this area. Rather, brief valuation guidelines that are consistent with those in the SNA and applicable to a number of existing derivatives are presented subsequently.
470. Traded options, warrants, and traded financial futures -- all of which are treated as financial assets -- are included in the position at market values on the appropriate accounting dates. For an option, the market value recorded is either the current value of the option -- that is, the prevailing market rate -- or the amount of the premium paid as a proxy. The counterpart liability is attributable, by convention, to the writer of the option and is valued at the current value cost of buying out the rights of the option holder. For a warrant, the counterpart liability of the issuer is the current value cost of buying out the exercise rights of the holder. A contract for a currency swap A forward is recorded at market value; when payments are effected, the value of the asset and associated liability is amortized and subsequently reflected in the position on the appropriate accounting date. The market value of a forward contract can switch between a net asset position and a net liability position between accounting dates

depending on price movements in the underlying item(s) from which the forward derives its value. All price changes, including those that result in such switches, are treated as revaluations. Hence, in the absence of settlement payments, when such a switch in position occurs, the value of the gross asset (liability) position at the close of the previous accounting period is revalued to zero, and the gross liability (asset) position revalued from zero to the value at the end of the present accounting period.

Balance of Payments: Standard Components

	Credit	Debit
1. Current Account		
<i>A. Goods and services</i>		
a. Goods		
1. General merchandise		
2. Goods for processing		
3. Repairs on goods		
4. Goods procured in ports by carriers		
5. Nonmonetary gold		
5.1 Held as a store of value		
5.2 Other		
b. Services		
1. Transportation		
1.1 Sea transport		
1.1.1 Passenger		
1.1.2 Freight		
1.1.3 Other		
1.2 Air transport		
1.2.1 Passenger		
1.2.2 Freight		
1.2.3 Other		
1.3 Other transport		
1.3.1 Passenger		
1.3.2 Freight		
1.3.3 Other		
2. Travel		
2.1 Business		
2.2 Personal*		
3. Communications services		
4. Construction services		
5. Insurance services**		
6. Financial services		
7. Computer and information services		
8. Royalties and license fees		

* See Supplementary Information table on page xx for components.

** Memorandum items: 5.1 Gross premiums

** Memorandum items: 5.2 Gross claims

Balance of Payments: Standard Components

	Credit	Debit
9. Other business services		
9.1 Merchanting and other trade-related services		
9.2 Operational leasing services		
9.3 Miscellaneous business, professional, and technical services*		
10. Personal, cultural, and recreational services		
10.1 Audiovisual and related services		
10.2 Other personal, cultural, and recreational services		
11. Government services, n.i.e.		

B. Income

1. Compensation of employees
2. Investment income
 - 2.1 Direct investment
 - 2.1.1 Income on equity
 - 2.1.1.1 Dividends and distributed branch profits**
 - 2.1.1.2 Reinvested earnings and undistributed branch profits**
 - 2.1.2 Income on debt (interest)
 - 2.2 Portfolio investment
 - 2.2.1 Income on equity (dividends)
 - 2.2.2 Income on debt (interest)
 - 2.2.2.1 Bonds and notes
 - 2.2.2.2 Money market instruments ~~and financial derivatives~~
 - 2.3 Other investment

C. Current transfers

1. General government
2. Other sectors
 - 2.1 Workers' remittances
 - 2.2 Other transfers

* See Supplementary Information table on page xx for components.

** If distributed branch profits are not identified, all branch profits are considered to be distributed.

Balance of Payments: Standard Components

Credit Debit

2. Capital and Financial Account

A. Capital account

- 1. Capital transfers
 - 1.1 General government
 - 1.1.1 Debt forgiveness
 - 1.1.2 Other
 - 1.2 Other sectors
 - 1.2.1 Migrants' transfers
 - 1.2.2 Debt forgiveness
 - 1.2.3 Other
- 2. Acquisition/disposal of non-produced, nonfinancial assets

B. Financial account

- 1. Direct investment
 - 1.1 Abroad
 - 1.1.1 Equity capital
 - 1.1.1.1 Claims on affiliated enterprises
 - 1.1.1.2 Liabilities to affiliated enterprises
 - 1.1.2 Reinvested earnings
 - 1.1.3 Other capital
 - 1.1.3.1 Claims on affiliated enterprises
 - 1.1.3.2 Liabilities to affiliated enterprises
 - 1.1.4 Financial Derivatives
 - 1.1.4.1 Claims on affiliated enterprises
 - 1.1.4.2 Liabilities to affiliated enterprises
 - 1.2 In reporting economy
 - 1.2.1 Equity capital
 - 1.2.1.1 Claims on direct investors
 - 1.2.1.2 Liabilities to direct investors
 - 1.2.2 Reinvested earnings
 - 1.2.3 Other capital
 - 1.2.3.1 Claims on direct investors
 - 1.2.3.2 Liabilities to direct investors
 - 1.2.4 Financial Derivatives
 - 1.2.4.1 Claims on direct investors
 - 1.2.4.2 Liabilities to direct investors
 - 2. Portfolio investment
 - 2.1 Assets
 - 2.1.1 Equity securities
 - 2.1.1.1 Monetary authorities

Balance of Payments: Standard Components

	Credit	Debit
2.1.1.2 General government		
2.1.1.3 Banks		
2.1.1.4 Other sectors		
2.1.2 Debt securities		
2.1.2.1 Bonds and notes		
2.1.2.1.1 Monetary authorities		
2.1.2.1.2 General government		
2.1.2.1.3 Banks		
2.1.2.1.4 Other sectors		
2.1.2.2 Money market instruments		
2.1.2.2.1 Monetary authorities		
2.1.2.2.2 General government		
2.1.2.2.3 Banks		
2.1.2.2.4 Other sectors		
2.1.2.3 Financial derivatives		
2.1.2.3.1 Monetary authorities		
2.1.2.3.2 General government		
2.1.2.3.3 Banks		
2.1.2.3.4 Other sectors		
2.2 Liabilities		
2.2.1 Equity securities		
2.2.1.1 Banks		
2.2.1.2 Other sectors		
2.2.2 Debt securities		
2.2.2.1 Bonds and notes		
2.2.2.1.1 Monetary authorities		
2.2.2.1.2 General government		
2.2.2.1.3 Banks		
2.2.2.1.4 Other sectors		
2.2.2.2 Money market instruments		
2.2.2.2.1 Monetary authorities		
2.2.2.2.2 General government		
2.2.2.2.3 Banks		
2.2.2.2.4 Other sectors		
2.2.2.3 Financial derivatives		
2.2.2.3.1 Banks		
2.2.2.3.2 Other sectors		
3. Other investment		
3.1 Assets		
3.1.1 Trade credits		
3.1.1.1 General government		
3.1.1.1.1 Long-term		

Balance of Payments: Standard Components

	Credit	Debit
3.1.1.1.2 Short-term		
3.1.1.2 Other sectors		
3.1.1.2.1 Long-term		
3.1.1.2.2 Short-term		
3.1.2 Loans		
3.1.2.1 Monetary authorities		
3.1.2.1.1 Long-term		
3.1.2.1.2 Short-term		
3.1.2.2 General government		
3.1.2.2.1 Long-term		
3.1.2.2.2 Short-term		
3.1.2.3 Banks		
3.1.2.3.1 Long-term		
3.1.2.3.2 Short-term		
3.1.2.4 Other sectors		
3.1.2.4.1 Long-term		
3.1.2.4.2 Short-term		
3.1.3 Currency and deposits		
3.1.3.1 Monetary authorities		
3.1.3.2 General government		
3.1.3.3 Banks		
3.1.3.4 Other sectors		
3.1.4 Other assets		
3.1.4.1 Monetary authorities		
3.1.4.1.1 Long-term		
3.1.4.1.2 Short-term		
3.1.4.2 General government		
3.1.4.2.1 Long-term		
3.1.4.2.2 Short-term		
3.1.4.3 Banks		
3.1.4.3.1 Long-term		
3.1.4.3.2 Short-term		
3.1.4.4 Other sectors		
3.1.4.4.1 Long-term		
3.1.4.4.2 Short-term		
3.2 Liabilities		
3.2.1 Trade credits		
3.2.1.1 General government		
3.2.1.1.1 Long-term		
3.2.1.1.2 Short-term		
3.2.1.2 Other sectors		
3.2.1.2.1 Long-term		

Balance of Payments: Standard Components	Credit	Debit
3.2.1.2.2 Short-term		
3.2.2 Loans		
3.2.2.1 Monetary authorities		
3.2.2.1.1 Use of Fund credit and loans from the Fund		
3.2.2.1.2 Other long-term		
3.2.2.1.3 Short-term		
3.2.2.2 General government		
3.2.2.2.1 Long-term		
3.2.2.2.2 Short-term		
3.2.2.3 Banks		
3.2.2.3.1 Long-term		
3.2.2.3.2 Short -term		
3.2.2.4 Other sectors		
3.2.2.4.1 Long-term		
3.2.2.4.2 Short-term		
3.2.3 Currency and deposits		
3.2.3.1 Monetary authorities		
3.2.3.2 Banks		
3.2.4 Other liabilities		
3.2.4.1 Monetary authorities		
3.2.4.1.1 Long-term		
3.2.4.1.2 Short-term		
3.2.4.2 General government		
3.2.4.2.1 Long-term		
3.2.4.2.2 Short-term		
3.2.4.3 Banks		
3.2.4.3.1 Long-term		
3.2.4.3.2 Short -term		
3.2.4.4 Other sectors		
3.2.4.4.1 Long-term		
3.2.4.4.2 Short-term		
4. Financial Derivatives		
4.1 Assets		
4.1.1 Monetary authorities		
4.1.2 General government		
4.1.3 Banks		
4.1.4 Other sectors		
4.2 Liabilities		
4.2.1 Monetary authorities		
4.2.2 General government		
4.2.3 Banks		

Balance of Payments: Standard Components

	Credit	Debit
4.2.4 Other sectors		
4 5. Reserve assets		
4 5.1 Monetary gold		
4 5.2 Special drawing rights		
4 5.3 Reserve position in the Fund		
4 5.4 Foreign exchange		
4 5.4.1 Currency and deposits		
4 5.4.1.1 With monetary authorities		
4 5.4.1.2 With banks		
4 5.4.2 Securities		
4 5.4.2.1 Equities		
4 5.4.2.2 Bonds and notes		
4 5.4.2.3 Money market instruments and financial derivatives		
4 5.4.3 Financial derivatives		
4 5.5 Other claims		

Selected Supplementary Information

- 1.Liabilities constituting foreign authorities' reserves
 - 1.1 Bonds and other securities
 - 1.1.1 Monetary authorities
 - 1.1.2 General government
 - 1.1.3 Banks
 - 1.1.4 Other sectors
 - 1.2 Deposits
 - 1.2.1 Monetary authorities
 - 1.2.2 Banks
 - 1.3 Other liabilities
 - 1.3.1 Monetary authorities
 - 1.3.2 General government
 - 1.3.3 Banks
 - 1.3.4 Other sectors
- 2. Exceptional financing transactions
 - 2.1 Transfers
 - 2.1.1 Debt forgiveness
 - 2.1.2 Other intergovernmental grants
 - 2.1.3 Grants received from Fund subsidy accounts
 - 2.2 Direct investment
 - 2.2.1 Investment associated with debt reduction
 - 2.2.2 Other

Selected Supplementary Information

- 2.3 Portfolio investment: borrowing by authorities or other sectors on authorities' behalf--liabilities ****
- 2.4 Other investment--liabilities****
 - 2.4.1 Drawings on new loans by authorities or other sectors on authorities' behalf
 - 2.4.2 Rescheduling of existing debt
 - 2.4.3 Accumulation of arrears
 - 2.4.3.1 Principal on short-term debt
 - 2.4.3.2 Principal on long-term debt
 - 2.4.3.3 Original interest
 - 2.4.3.4 Penalty interest
 - 2.4.4 Repayments of arrears
 - 2.4.4.1 Principal
 - 2.4.4.2 Interest
 - 2.4.5 Rescheduling of arrears
 - 2.4.5.1 Principal
 - 2.4.5.2 Interest
 - 2.4.6 Cancellation of arrears
 - 2.4.6.1 Principal
 - 2.4.6.2 Interest
- 3. Other transactions
 - 3.1 Portfolio investment income
 - 3.1.1 Monetary authorities
 - 3.1.2 General government
 - 3.1.3 Banks
 - 3.1.4 Other sectors
 - 3.2 Other (than direct investment) income
 - 3.2.1 Monetary authorities
 - 3.2.2 General government
 - 3.2.3 Banks
 - 3.2.4 Other sectors
 - 3.3 Other investment (liabilities)
 - 3.3.1 Drawings on long-term trade credits
 - 3.3.2 Repayments of long-term trade credits
 - 3.3.3 Drawings on long-term loans
 - 3.3.4 Repayments of long-term loans

**** Specify sector involved and standard component in which the item is included.

Selected Supplementary Information

- 4. Services sub-items
 - 4.1 Travel (personal)
 - 4.1.1 Health-related
 - 4.1.2 Education-related
 - 4.1.3 Other
 - 4.2 Miscellaneous business, professional, and technical services
 - 4.2.1 Legal, accounting, management consulting, and public relations
 - 4.2.2 Advertising, market research, and public opinion polling
 - 4.2.3 Research and development
 - 4.2.4 Architectural, engineering, and other technical services
 - 4.2.5 Agricultural, mining, and on-site processing
 - 4.2.6 Other

5. Financial Derivatives:

5.1. Forwards

5.1.1 Assets

5.1.1.1 Monetary Authorities

5.1.1.2 General government

5.1.1.3 Banks

5.1.1.4 Other sectors

5.1.2 Liabilities

5.1.2.1 Monetary Authorities

5.1.2.2 General government

5.1.2.3 Banks

5.1.2.4 Other sectors

5.2. Options

5.2.1:Assets

5.2.1.1 Monetary Authorities

5.2.1.2 General government

5.2.1.3 Banks

5.2.1.4 Other sectors

5.2.2. Liabilities

5.2.2.1 Monetary Authorities

5.2.2.2 General government

5.2.2.3 Banks

5.2.2.4 Other sectors

5.3 By market risk category:

5.3.1. Foreign Exchange

5.3.1.1Assets

5.3.1.1.1 Monetary authorities

5.3.1.1.2 General government

Selected Supplementary Information

- 5.3.1.1.3 Banks
- 5.3.1.1.4 Other sectors
- 5.3.1.2 *Liabilities*
 - 5.3.1.2.1 Monetary authorities
 - 5.3.1.2.2 General government
 - 5.3.1.2.3 Banks
 - 5.3.1.2.4 Other sectors
- 5.4 *Single Currency Interest Rate*
- 5.4.1 *Assets*
 - 5.4.1.1 Monetary authorities
 - 5.4.1.2 General government
 - 5.4.1.3 Banks
 - 5.4.1.4 Other sectors
- 5.4.2 *Liabilities*
 - 5.4.2.1 Monetary authorities
 - 5.4.2.2 General government
 - 5.4.2.3 Banks
 - 5.4.2.4 Other sectors
- 5.5 *Equities*
- 5.5.1 *Assets*
 - 5.5.1.1 Monetary authorities
 - 5.5.1.2 General government
 - 5.5.1.3 Banks
 - 5.5.1.4 Other sectors
- 5.5.2 *Liabilities*
 - 5.5.2.1 Monetary authorities
 - 5.5.2.2 General government
 - 5.5.2.3 Banks
 - 5.5.2.4 Other sectors
- 5.6 *Commodities*
- 5.6.1 *Assets*
 - 5.6.1.1 Monetary authorities
 - 5.6.1.2 General government
 - 5.6.1.3 Banks
 - 5.6.1.4 Other sectors
- 5.6.2 *Liabilities*
 - 5.6.2.1 Monetary authorities
 - 5.6.2.2 General government
 - 5.6.2.3 Banks
 - 5.6.2.4 Other sectors

Selected Supplementary Information

5.7 Other contracts

5.7.1 Assets

5.7.1.1 Monetary authorities

5.7.1.2 General government

5.7.1.3 Banks

5.7.1.4 Other sectors

5.7.2 Liabilities

5.7.2.1 Monetary authorities

5.7.2.2 General government

5.7.2.3 Banks

5.7.2.4 Other sectors

International Investment Position: Standard Components

	Changes in Position Reflecting:					
	Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year
A. Assets						
1. Direct investment abroad ⁴						
1.1 Equity capital and reinvested earnings						
1.1.1 Claims on affiliated enterprises						
1.1.2 Liabilities to affiliated enterprises						
1.2 Other capital						
1.2.1 Claims on affiliated enterprises						
1.2.2 Liabilities to affiliated enterprises						
1.3 Financial Derivatives						
1.3.1 Claims on affiliated enterprises						
1.3.2 Liabilities to affiliated enterprises						
2. Portfolio investment						
2.1 Equity securities						
2.1.1 Monetary authorities						
2.1.2 General government						
2.1.3 Banks						
2.1.4 Other sectors						
2.2 Debt securities						
2.2.1 Bonds and notes						
2.2.1.1 Monetary authorities						
2.2.1.2 General government						
2.2.1.3 Banks						
2.2.1.4 Other sectors						
2.2.2 Money market instruments						
2.2.2.1 Monetary authorities						
2.2.2.2 General government						
2.2.2.3 Banks						
2.2.2.4 Other sectors						
2.2.3 Financial derivatives						
2.2.3.1 Monetary authorities						
2.2.3.2 General government						
2.2.3.3 Banks						
2.2.3.4 Other sectors						

⁴ Because direct investment is classified primarily on a directional basis -- abroad under the heading **Assets** and in the reporting economy under the heading **Liabilities** -- claim/liability breakdowns are shown for the components of each, although these sub-items do not strictly conform to the overall headings of **Assets** and **Liabilities**

International Investment Position: Standard Components

	Changes in Position Reflecting:					
	Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year
3. Other investment						
3.1 Trade credits						
3.1.1 General government						
3.1.1.1 Long-term						
3.1.1.2 Short-term						
3.1.2 Other sectors						
3.1.2.1 Long-term						
3.1.2.2 Short-term						
3.2 Loans						
3.2.1 Monetary authorities						
3.2.1.1 Long-term						
3.2.1.2 Short-term						
3.2.2 General government						
3.2.2.1 Long-term						
3.2.2.2 Short-term						
3.2.3 Banks						
3.2.3.1 Long-term						
3.2.3.2 Short-term						
3.2.4 Other sectors						
3.2.4.1 Long-term						
3.2.4.2 Short-term						
3.3 Currency and deposits						
3.3.1 Monetary authorities						
3.3.2 General government						
3.3.3 Banks						
3.3.4 Other sectors						
3.4 Other assets						
3.4.1 Monetary authorities						
3.4.1.1 Long-term						
3.4.1.2 Short-term						
3.4.2 General government						
3.4.2.1 Long-term						
3.4.2.2 Short-term						
3.4.3 Banks						
3.4.3.1 Long-term						
3.4.3.2 Short-term						
3.4.4 Other sectors						
3.4.4.1 Long-term						
3.4.4.2 Short-term						

International Investment Position: Standard Components

Changes in Position Reflecting:					
Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year
4. Financial Derivatives					
4.1 Monetary authorities					
4.2 General government					
4.3 Banks					
4.4 Other sectors					
<i>4.5 Reserve assets</i>					
4.5.1 Monetary gold					
4.5.2 Special drawing rights					
4.5.3 Reserve position in the Fund					
4.5.4 Foreign exchange					
4.5.4.1 Currency and deposits					
4.5.4.1.1 With monetary authorities					
4.5.4.1.2 With banks					
4.5.4.2 Securities					
4.5.4.2.1 Equities					
4.5.4.2.2 Bonds and notes					
4.5.4.2.3 Money market instruments and financial derivatives					
4.5.4.3 Financial derivatives					
4.5.5 Other claims					

International Investment Position: Standard Components

	Changes in Position Reflecting:					
	Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year
<i>B. Liabilities</i>						
<i>1. Direct investment in reporting economy⁵</i>						
1.1 Equity capital and reinvested earnings						
1.1.1 Claims on direct investors						
1.1.2 Liabilities to direct investors						
1.2 Other capital						
1.2.1 Claims on direct investors						
1.2.2 Liabilities to direct investors						
1.3 Financial Derivatives						
1.3.1 Claims on direct investors						
1.3.2 Liabilities to direct investors						
<i>2. Portfolio investment</i>						
2.1 Equity securities						
2.1.1 Banks						
2.1.1 Other sectors						
2.2 Debt securities						
2.2.1 Bonds and notes						
2.2.1.1 Monetary authorities						
2.2.1.2 General government						
2.2.1.3 Banks						
2.2.1.4 Other sectors						
2.2.2 Money market instruments						
2.2.2.1 Monetary authorities						
2.2.2.2 General government						
2.2.2.3 Banks						
2.2.2.4 Other sectors						
2.2.3 Financial derivatives						
2.2.3.1 Monetary authorities						
2.2.3.2 General government						
2.2.3.3 Banks						
2.2.3.4 Other sectors						
<i>3. Other investment</i>						
3.1 Trade credits						

⁵ Because direct investment is classified primarily on a directional basis -- abroad under the heading **Assets** and in the reporting economy under the heading **Liabilities** -- claim/liability breakdowns are shown for the components of each, although these sub-items do not strictly conform to the overall headings of **Assets** and **Liabilities**

International Investment Position: Standard Components

	Changes in Position Reflecting:					
	Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year
3.1.1 General government						
3.1.1.1 Long-term						
3.1.1.2 Short-term						
3.1.2 Other sectors						
3.1.2.1 Long-term						
3.1.2.2 Short-term						
3.2 Loans						
3.2.1 Monetary authorities						
3.2.1.1 Use of Fund credit and loans from the Fund						
3.2.1.2 Other long-term						
3.2.1.3 Short-term						
3.2.2 General government						
3.2.2.1 Long-term						
3.2.2.2 Short-term						
3.2.3 Banks						
3.2.3.1 Long-term						
3.2.3.2 Short -term						
3.2.4 Other sectors						
3.2.4.1 Long-term						
3.2.4.2 Short-term						
3.3 Currency and deposits						
3.3.1 Monetary authorities						
3.3.2 Banks						
3.4 Other liabilities						
3.4.1 Monetary authorities						
3.4.1.1 Long-term						
3.4.1.2 Short-term						
3.4.2 General government						
3.4.2.1 Long-term						
3.4.2.2 Short-term						
3.4.3 Banks						
3.4.3.1 Long-term						
3.4.3.2 Short-term						
3.4.4 Other sectors						
3.4.4.1 Long-term						
3.4.4.2 Short-term						

International Investment Position: Standard Components

Changes in Position Reflecting:					
Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year
4. Financial Derivatives					
4.1 Monetary authorities					
4.2 General government					
4.3 Banks					
4.4 Other sectors					

Selected Supplementary Information

Changes in Position Reflecting:						
Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	at End of Year	Position
				*a	*b	

A. Financial Derivatives: Assets:

4.1 Forwards

4.1.1 Monetary Authorities

4.1.2 General government

4.1.3 Banks

4.2. Options

4.2.1 Monetary Authorities

4.2.2 General government

4.2.3 Banks

4.2.4 Other sectors

4.3 By market risk category:

4.3.1. Foreign Exchange

4.3.1.1 Monetary authorities

4.3.1.2 General government

4.3.1.3 Banks

4.3.1.4 Other sectors

4.4 Single Currency Interest Rate

4.4.1 Monetary authorities

4.4.2 General government

4.4.3 Banks

4.4.4 Other sectors

4.5 Equities

4.5.1 Monetary authorities

4.5.2 General government

4.5.3 Banks

4.5.4 Other sectors

* Details necessary for reconciliation with classifications used in SNA Rest of the World Account: a = neutral holding gains/losses; b = real holding gains/losses

Selected Supplementary Information

Changes in Position Reflecting:						
Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year	
			*a	*b		
<i>4.6 Commodities</i>						
4.6.1 Monetary authorities						
4.6.2 General government						
4.6.3 Banks						
4.6.4 Other sectors						
<i>4.7 Other contracts</i>						
4.7.1 Monetary authorities						
4.7.2 General government						
4.7.3 Banks						
4.7.4 Other sectors						
<i>4.5 Reserve assets</i>						
4.5.1 Monetary gold						
4.5.2 Special drawing rights						
4.5.3 Reserve position in the Fund						
4.5.4 Foreign exchange						
4.5.4.1 Currency and deposits						
4.5.4.1.1 With monetary authorities						
4.5.4.1.2 With banks						
4.5.4.2 Securities						
4.5.4.2.1 Equities						
4.5.4.2.2 Bonds and notes						
4.5.4.2.3 Money market instruments and financial derivatives						
4.5.4.3 Financial derivatives						
4.5.5 Other claims						

B. Financial Derivatives: Liabilities:

<i>4.1. Forwards</i>
4.1.1. Monetary Authorities
4.1.2 General government
4.1.3 Banks
4.1.4 Other sectors
<i>4.2. Options</i>
4.2.1 Monetary Authorities
4.2.2 General government
4.2.3 Banks

Selected Supplementary Information

Changes in Position Reflecting:						
Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	Position at End of Year	
				*a *b		

4.2.4 Other sectors

4.3 By market risk category:

4.3.1. Foreign Exchange

4.3.1.1 Monetary authorities

4.3.1.2 General government

4.3.1.3 Banks

4.3.1.4 Other sectors

4.4 Single Currency Interest Rate

4.4.1 Monetary authorities

4.4.2 General government

4.4.3 Banks

4.4.4 Other sectors

* Details necessary for reconciliation with classifications used in SNA Rest of the World Account: a = neutral holding gains/losses; b = real holding gains/losses

Selected Supplementary Information

Changes in Position Reflecting:						
Position at Beginning Of Year	Trans- actions	Price Changes	Exchange Rate Changes	Other Adjust- ments	at End of Year	Position
				*a	*b	

5.5 Equities

5.5.1 Monetary authorities

5.5.2 General government

5.5.3 Banks

5.5.4 Other sectors

5.6 Commodities

5.6.1 Monetary authorities

5.6.2 General government

5.6.3 Banks

5.6.4 Other sectors

5.7 Other contracts

5.7.1 Monetary authorities

5.7.2 General government

5.7.3 Banks

5.7.4 Other sectors

* Details necessary for reconciliation with classifications used in SNA Rest of the World Account: a = neutral holding gains/losses; b = real holding gains/losses