

Transactions in Financial Derivatives

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Coverage and definitions

This account measures transactions arising from financial derivatives contracts between U.S. and foreign residents.

Transactions arising from financial derivatives contracts consist of U.S. cash receipts and payments arising from the sale, purchase, periodic settlement, or final settlement of derivatives contracts. Transactions are measured on a net settlements basis; that is, the value of U.S. cash receipts less U.S. cash payments on contracts with positive fair values and negative fair values is reported as a single amount. All types of financial derivatives contracts are covered.

Financial derivatives contracts derive their value from underlying variables, such as interest rates, exchange rates, stock prices, commodity prices, credit quality, other financial derivatives, and many other variables. Changes in the value of financial derivatives contracts are determined by changes in the value of their underlying variables.

Estimation methods overview

Comprehensive data on financial derivatives are collected on Treasury International Capital (TIC) Form D, "Report of Holdings of, and Transactions in, Finan-

cial Derivatives Contracts." Data are collected from U.S. banks, bank holding companies, financial holding companies, securities dealers, and all other firms with worldwide holdings of financial derivatives, for their own and their customers' accounts combined, in excess of \$400 billion in notional value, which is the face value of underlying assets used to calculate a contract's cash flows. Trading in financial derivatives is highly concentrated among a small number of large firms. About 50 firms provide data each quarter to the Federal Reserve Bank of New York, which conducts the mandatory survey for the U.S. Treasury Department.

1 Financial Derivatives, Net (line 70)

1.1 Transactions in financial derivatives contracts between U.S. and foreign residents, as measured by net cash settlements, are entered in financial derivatives, net (line 70) (see [table 31](#)).

Table 31. Transactions in Financial Derivatives, 2009 (Line 70)
[Millions of dollars]

Financial derivatives, net	50,804
By type of contract:	
Over-the-counter contracts	41,265
Single currency interest rate contracts	26,349
Foreign exchange contracts.....	-313
Other contracts (equity, credit derivative, and commodity contracts).....	15,229
Exchange-traded contracts.....	9,539
U.S. residents' contracts on foreign exchanges.....	12,963
Own contracts	-287
Customers' contracts	13,250
Foreign residents' contracts on U.S. exchanges.....	-3,424

1.2 Net settlements are reported on TIC Form D as follows. Receipts of cash by U.S. residents from foreigners are treated as positive amounts (+), and payments of cash by U.S. residents to foreigners are treated as negative amounts (–). The receipts and payments for all contracts are summed for each reporting category. A net settlement cash receipt or payment occurs only when cash is received or paid for the purchase or sale of a derivative, or a settlement payment (such as the periodic settlement under a swap agreement or the daily settlement of an exchange-traded contract) is received or paid.

1.3 Net settlements are reported for three risk categories of over-the-counter contracts, classified by the type of underlying variable in the contract: single-currency interest rate contracts, foreign exchange contracts, and other risk categories, which include equity contracts, credit contracts, and commodity contracts. These risk categories can include forward, swap, or option contracts with these underlying variables. Net settlements are also reported for exchange-traded contracts, categorized by the location of the exchange and the parties to the contract. Three categories are reported: the reporters' own contracts on foreign exchanges, the reporters' customers' contracts on foreign exchanges, and all contracts with foreign counterparties on U.S. exchanges. Total net settlements is the sum of net settlements for the three categories of over-the-counter contracts and the three categories of exchange traded contracts.

1.4 Contracts with standardized features, such as futures and standardized options, are usually traded in public exchange markets, with the exchange clearing house included as a counterparty to all transactions. Contracts with customized features, such as forwards, swaps, and customized options, are usually traded in over-the-counter (OTC) markets, and are arranged and generally settled directly between financial market participants without the involvement of a clearing house.

1.5 For forward-type contracts (forwards, futures, and swaps), cash receipts and payments usually do not occur at contract initiation because the initial value of contracts is usually zero. Cash receipts and payments may occur to settle the value of forward

contracts at maturity, to settle daily changes in the value of futures contracts, or to settle the value of swap contracts at specific points in time, including maturity or termination. For option-type contracts (such as options on equities), cash receipts and payments occur when premiums are received or paid at initiation, or when in-the-money options are sold before expiration or settled at expiration in cash.¹

1.6 The following paragraphs, taken from a Federal Reserve Board publication, summarize unique conceptual and economic accounting issues related to presentation of derivatives in the accounts:

“Derivatives do not fit neatly into the international transactions accounts for two reasons. The first is that, unlike financial instruments such as bonds and stocks, some derivatives contracts cannot be categorized solely as claims or liabilities. Clearly an option written by a U.S. resident and purchased by a foreign resident is a U.S. liability to foreigners, but the distinction is less clear for products such as swaps, forwards, and futures. Over the lives of these products, the fair market value may be positive at times and negative at times, and it may switch signs several times within a quarter. So these instruments are neither strictly claims, with consistently positive fair values and payments to the U.S. resident counterparty to the contract, nor strictly liabilities, with consistently negative fair values and payments from the U.S. resident counterparty.”

“The second reason that derivatives are not easily incorporated into the international transactions accounts is the ambiguous status of the associated payments. The periodic payments on derivatives can be considered returns on invested capital, which are recorded in the current account; alternatively, they can be considered realized gains from changes in the contractual value, which are recorded in the financial accounts. Because the return from derivatives for many end users comes in the form of trading gains and losses, the International Monetary Fund has recommended that period payments on derivatives

1. Initial cash margin and collateral deposits on derivatives contracts are classified as banking transactions, specifically increases or decreases in brokerage balances, not as derivatives transactions.

be recorded as a financial account transaction.”²

1.7 Because of the difficulty in characterizing finan-

2. See Stephanie E. Curcuru, “U.S. Cross-Border Derivatives Data: A User’s Guide, *Federal Reserve Bulletin* (May 2007; reprinted by permission: A10); Robert M. Heath, “The Statistical Measurement of Financial Derivatives” (IMF working paper 98/24, Washington, DC: International Monetary Fund, March 1998); *Financial Derivatives: A Supplement to the Balance of Payments Manual* (Washington, DC: International Monetary Fund, 2000).

cial derivatives as either claims or liabilities and because cash settlements are reported to BEA as a single amount with no separation between contracts with gross positive fair values and contracts with gross negative fair values, BEA presents cash settlements as a net amount on a single line, line 70, in the financial account, separate from lines for transactions for U.S.-owned assets abroad and foreign-owned assets in the United States.

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