



# Introduction to Financial Services: The International Foreign Exchange Market

## Overview

The international foreign exchange market is a vast, complex assortment of globally dispersed actors and transactions that comprise millions of transactions daily, valued at trillions of dollars. On a daily basis, the value of global foreign exchange transactions eclipses the total global value of economic output and the value of all traded stocks and bonds. These markets are highly liquid as a result of extensive global communications systems and electronic trading venues that operate on a 24-hour basis. Foreign exchange markets respond rapidly to political and economic events and instantaneously transmit market signals across national borders. Unexpected or abrupt disruptions in the foreign exchange market can roil financial markets and economies around the globe with broad implications for economic activity. For instance, in January 2015, Switzerland removed the cap it had placed on the foreign exchange value of its currency; in August 2015, China depreciated its currency; and in June 2016, British voters endorsed a referendum to pull the United Kingdom out of the European Union. In each case, global financial markets experienced large shifts in positions over a short period of time.

## Foreign Exchange Transactions

Foreign exchange (FX) markets facilitate international commerce by making it possible for firms to exchange currencies for exporting and importing goods and services. The markets also supply currencies for foreign investment, for purchases of financial instruments, and to currency traders attempting to gain profits from short-term fluctuations in exchange rates. Some governments also hold foreign currencies as reserves to protect against fluctuations in currency exchange rates.

Trading in the foreign exchange market occurs in both traditional markets with organized exchanges and standardized products and in the over-the-counter (OTC) market that is informal with uniquely crafted products. Traditional foreign exchange transactions consist of three kinds: spot transactions, forward transactions, swaps, and options. Spot and forward transactions are agreements that involve trading currencies immediately at the market exchange rate (spot transactions) or at some pre-arranged time in the future and at a pre-arranged rate of exchange (forward transactions). A swap is a contract to exchange currencies and to pay or receive interest payments over the duration of the contract. An option is a flexible forward transaction that allows the owner of the option to buy or sell a specific amount of foreign currency at a certain price before the pre-determined expiration date of the option contract. Over-the-counter foreign exchange derivative market transactions consist largely of interest rate contracts

(primarily interest rate swaps and forward rate agreements in a single currency that are designed to manage exposure to changes in interest rates over the duration of the swap).

## Foreign Exchange Market

**Market Activity.** According to a triennial survey of the world's leading 53 central banks and monetary authorities conducted by the Bank for International Settlements (BIS) in April 2016, spot transactions and foreign exchange swaps dominate the traditional foreign exchange markets, as indicated in **Table 1**. Daily turnover in these foreign exchange markets totaled more than \$5.1 trillion in the survey, while daily turnover in the OTC market totaled \$2.7 trillion, primarily in interest rate instruments (swaps). In total, daily foreign exchange turnover was \$7.8 trillion, more than three times the annual amount of U.S. exports of goods and services.

**Table 1. Foreign Exchange Market Turnover**

(daily averages in April of the year indicated, trillions of US dollars)

Year	2010	2013	2016
<b>Foreign Exchange Market Turnover</b>			
Spot transactions	1.5	2.0	1.7
Outright forwards	0.5	0.7	0.7
Foreign exchange swaps	1.8	2.2	2.4
Options	0.2	0.3	0.2
<b>Total "traditional"</b>	<b>4.0</b>	<b>5.4</b>	<b>5.1</b>
<b>Over-the-Counter Derivatives Market Turnover</b>			
Interest rate instruments	2.1	2.3	2.7
<b>Total Market Turnover</b>	<b>6.0</b>	<b>7.7</b>	<b>7.8</b>
<b>United States</b>			
Foreign exchange turnover	0.9	1.3	1.3
OTC derivatives	0.7	0.7	1.3
<b>Total U.S. turnover</b>	<b>1.6</b>	<b>2.0</b>	<b>2.6</b>

**Source:** Bank for International Settlements, and Federal Reserve Bank of New York.

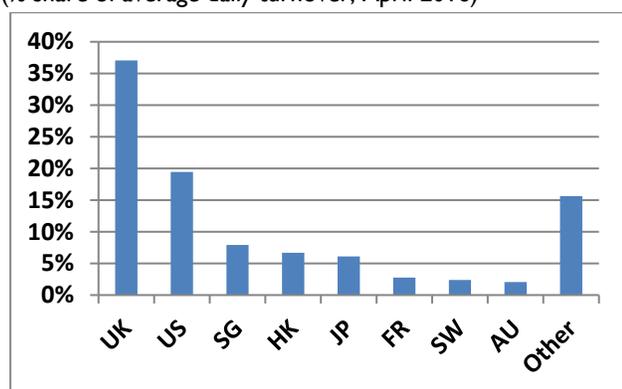
In Mid-2015, the outstanding notional amount of foreign exchange OTC derivative contracts totaled \$70 trillion, while the comparable interest rate contracts totaled \$384 trillion. Daily foreign exchange market activity in the United States in the April 2016 survey amounted to \$2.6 trillion, about one-third of the total global foreign exchange market activity in April 2016. Two-thirds of the daily U.S.

foreign exchange market turnover was in traditional foreign exchange transactions, with one-third in foreign exchange derivatives.

**Markets by Geographic Region.** Foreign exchange trading activity is dominated by a few geographic locations, as indicated in **Figure 1**. London is the largest trading center, accounting for 37% of global volume. The United States (New York) accounts for about half the U.K. share, or 19% of global trading. The next six countries—Singapore (8.0%), Hong Kong (7.0%), Japan (6.0%), France (3.0%), Switzerland (2.4%), and Australia (2.0%)—combined with the U.K. and U.S. shares—account for about 85% of all foreign exchange transactions.

**Figure 1. Geographical Distribution of Global Foreign Exchange Market Turnover**

(% share of average daily turnover, April 2016)



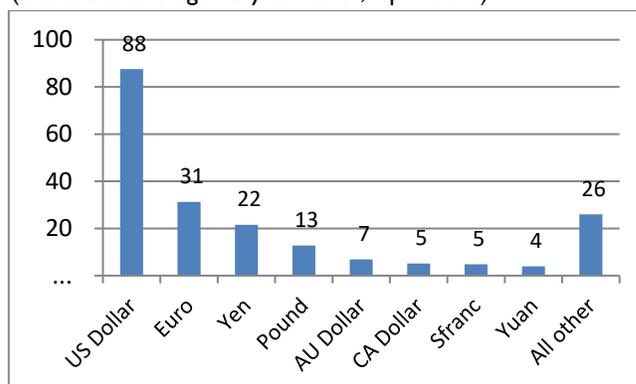
Source: Bank for International Settlements, September 2016.

**The Role of the Dollar.** The U.S. dollar is the most heavily traded currency in FX markets, as indicated in **Figure 2**. It accounts for 88% of daily foreign exchange transactions and reflects the role of the dollar as the international reserve currency. (Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%.) In comparison, the euro accounts for 31% of trades, the Japanese yen accounts for 22%, and the British pound accounts for 13%. Other currencies account for smaller shares: Australian dollar (7.0%), Swiss franc (5.0%), Canadian dollar (5.0%), and Chinese renminbi (4.0%). The dollar is used to fund commercial activities and by governments and central banks to intervene at times in foreign exchange markets or as reserves to protect their currencies from the spillover effects of global crises. Governments also have increased their holdings of dollars and dollar-denominated assets as safe assets as a result of increased financial openness and exposure to capital flow volatility. In addition, regulatory reforms that require financial institutions to hold safe and

liquid assets as a buffer against adverse financial shocks have added to this global demand for dollars.

**Figure 2. Currency Distribution of Global Foreign Exchange Market Turnover**

(% share of average daily turnover, April 2016)



Source: Bank for International Settlements, September 2016.

## Issues for Congress

Through the Dodd-Frank Wall Street Reform and Consumer Protection Act (P.L. 111-203), Congress moved to regulate parts of the foreign exchange derivatives (swap) markets by: 1) registering and regulating swap dealers and major swap participants; 2) implementing clearing and trade execution requirements for certain foreign exchange swaps; and 3) establishing record keeping and reporting requirements. In November 2014, however, U.S., U.K., and Swiss regulators fined five international banks, including Citigroup and JP Morgan Chase, \$4.3 billion for manipulating the foreign exchange market. Congress may choose to use its oversight role to ensure that the new requirements promote transparency and greater stability in the foreign exchange derivatives market and to determine if new laws or regulations are necessary. Congress may also choose to evaluate the effectiveness of recent exchange market reforms in light of recent settlements with major banks over manipulation of the foreign exchange market. The increased role in international markets of such emerging economies as China may also pose challenges for the dollar over the long run as the global economy's reserve currency. Congress may choose to assess and evaluate the continuing role of the dollar as the most important reserve currency and possible implications for U.S. economic and financial policies.

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