

# FOREIGN EXCHANGE MARKETS

Module 3



## Definition

01

#### What is Forex?

The foreign exchange (forex or FX) mark et is a decentralized global financial mar ket where currencies are traded. It is the largest and most liquid financial market in the world, facilitating the exchange of currencies between participants for various purposes, including international trade, investment, speculation, and hedging a gainst currency risks.

02

#### Decentralized Structure:

The forex market operates globally without a centralized exchange. Instead, it consists of a network of financial institutions, including banks, brokers, and electronic trading platforms.

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#### 24-Hour Accessibility:

The forex market operates 24 hours a day, five days a week, spanning different time zones. This continuous trading allows participants to engage in currency trading at any time, reflecting the global nature of the market.

### Characteristics



Currencies are traded in pairs, where one currency is exchanged for anoth er. Each currency pair consists of a b ase currency and a quote currency. The exchange rate represents the relative value of the two currencies.



Participants in the forex market include central banks, commercial banks, hedge funds, multinational corpor ations, retail traders, and other financial institutions. Central banks play a significant role in influencing exchange rates through monetary policy.



Major currency pairs involve the mos t widely traded currencies, such as th e U.S. dollar (USD), Euro (EUR), Japan ese yen (JPY), and British pound (GB P). Minor pairs involve currencies oth er than the major ones, while exotic pairs include one major currency an d one from a smaller or emerging m

# Significance of Forex

01.

# Why Forex? (Significance)

01.

Spot and Forward Markets:

The spot market involves the immediate exchange of currencies at the current market rate. In contrast, the forward market allows participants to agree on a future exchange rate for a specified date.

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Leverage and Margin Trading:

Forex trading often involve s the use of leverage, allow ing traders to control large r positions with a smaller a mount of capital. However, this also increases the risk, and traders may need to u se margin accounts. 03.

High Liquidity:

The forex market is highly I iquid, meaning that large t rading volumes can be exe cuted with minimal impact on prices. This liquidity e nsures that participants can buy or sell currencies wit hout significant price fluct uations.

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Speculation and Hedging:

Traders participate in the f orex market for speculativ e purposes, aiming to profi t from price movements. A dditionally, businesses use the market to hedge again st currency risks, protectin g themselves from advers e exchange rate movemen ts.



The foreign exchange (forex) market is decentralized and involves:

**1.Interbank Market:** Major banks and financial institutions trade dir ectly.

**2.Participants:** Banks, financial institutions, retail forex brokers, and central banks.

**3.ECNs:** Electronic platforms for direct access to the interbank mar ket.

**4.Currency Pairs:** Traded in pairs, such as EUR/USD.

**5.OTC Market:** Transactions occur directly between participants.

**6.Spot and Forward Markets:** Immediate exchange or future agre ements.

**7.Clearing and Settlement:** Processes ensuring trade completion. This structure creates a dynamic and liquid environment for global currency trading.



# Mechanics of Currency Trading

**Currency Pairs**: Traded in pairs, indicating exchange rates.

**Bid and Ask Prices**: Bid (buyer's price) and ask (seller's price) determine the spread.

**Market Participants**: Banks, institutions, retail traders access via brokers.

**Retail Forex Brokers**: Intermediaries providing trading platforms for retail

traders.



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Placing a Trade: Decide to buy (go long) or sell (go short), specify size, and execute.

Leverage: Magnifies positions; manage carefully for risk.

Order Types: Market, limit, and stop orders used for trade execution.

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**Execution**: Broker processes and executes trades, matching buy and sell orders. **Profit and Loss**: Determined

by currency pair price

movement.

**Closing a Trade**: Close by executing an opposite transaction; profit or loss realized.

## Transactions in Forex

#### **Spot Transactions**

**Type:** Immediate exchange of currencies.

**Settlement Date:** Within two business days (T+2) from the transaction date.

**Description:** In a spot transaction, currencies are bought or sold for immediate delivery, with settl ement taking place two business days later.

#### **Forward Transactions**

**Type:** Agreement to buy or sell currencies at a future date.

**Settlement Date:** Agreed upon at the time of th e contract (beyond T+2).

**Description:** Forward contracts allow parties to I ock in an exchange rate for a future date. Settle ment occurs on the agreed-upon date, and the contract can cover various time frames.





#### **Futures Contracts**

**Type:** Similar to forward contracts but s tandardized and traded on exchanges. **Settlement Date:** Specified by the exchange (e.g., monthly or quarterly).

**Description:** Futures contracts involve the obligation to buy or sell currencies at a predetermined price on a specified future date. They are traded on organiz ed exchanges, providing liquidity and s tandardized terms.



#### **Swap Transactions**

**Type:** Simultaneous spot and forward tr ansactions.

**Settlement Date:** Spot settlement (T+2) and a future date for the forward leg.

**Description:** In a currency swap, two parties exchange currencies for a specific period, then reverse the transaction at a later date. This is often used for hedging or managing cash—flow needs.



#### **Option Contracts**

**Type:** Right but not the obligation to b uy or sell currencies at a predetermine d price.

**Settlement Date:** Varies depending on the terms of the option contract.

**Description:** Options provide the holde r with the right (but not the obligation) to buy (call option) or sell (put option) c urrencies at a predetermined price bef ore or at expiration. The settlement dat

a depends on whether the option is ever

# **Exchange Rate Quotations**

**Direct and Indirect Quotatio** ns

**Bid and Ask Prices** 

**Spread** 

**Direct:** Shows the domestic currency's value in terms of a fore ign currency (e.g., USD/EUR). **Indirect:** Shows the foreign currency's value in terms of the domestic currency (e.g., EUR/USD).

**Bid (Buy):** The price at which t he market (or a dealer) will buy a specific currency pair.

**Ask (Sell):** The price at which t he market (or a dealer) will sell a specific currency pair.

The difference between the bid and ask prices. A narrower spread is favorable for traders.

# **Abritrage**

Arbitrage is the simultaneous buying and selling of an asset (or currency) in different markets to profit f rom price differences.

**Risk Arbitrage:** Taking advantage of price discrepancies in the foreign exchange market due to information asymmetry or mispricing.

Arbitrage opportunities are short-lived in efficient markets as prices adjust quickly to eliminate discrepancies.

#### **Triangular Arbitrage**

Involves three currencies and three currency exchange r ates. Traders exploit inconsistencies in the cross rates t o make a risk- free profit.

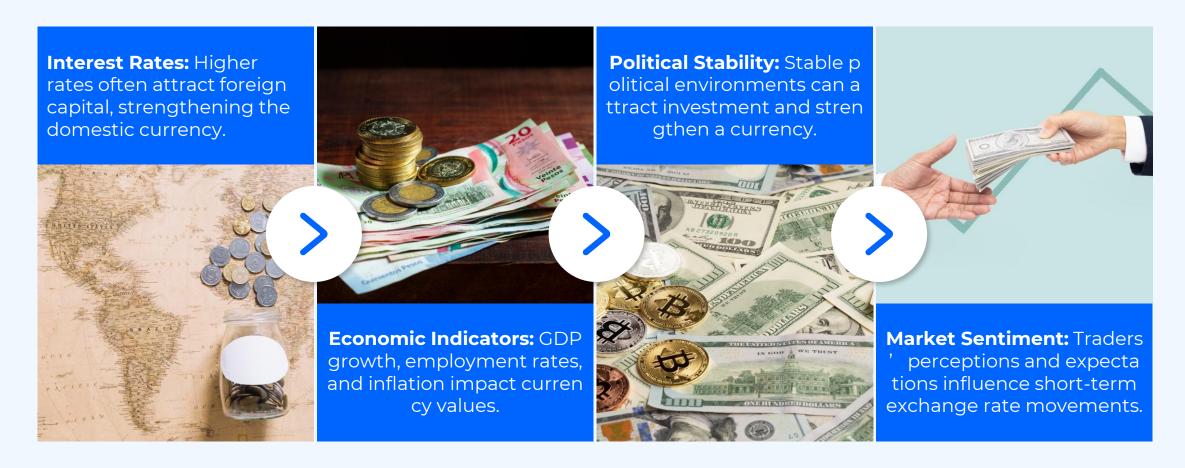
#### **Interest Rate Arbitrage**

Capitalizing on differences in interest rates between two currencies. Investors borrow in a low-interest-rate currency, convert to a higher-interest-rate currency, and invest for a positive carry.

#### **Covered Interest Arbitrage**

Taking advantage of the interest rate differential between two currencies while hedging against exchange rate risk using forward contracts.

# **Exchange Rate Determination and Forecasting**



**Trade Balances:** Surpluses strengthen a currency, while deficits may weaken it.

# Determinants of Exchange Rate







# Purchasing Power Parity (PPP):

Suggests that in the long r un, exchange rates should move toward the rate th at equalizes the prices of a n identical basket of goods in different countries.

# Interest Rate Parity (IRP):

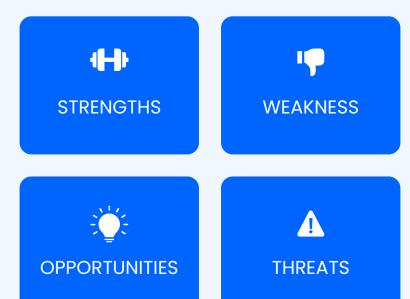
States that the difference in interest rates between two currencies should be equal to the expected ch ange in exchange rates.

#### **Balance of Payments:**

The overall economic transactions between a country and the rest of the world impact its currency's value.

# **Exchange Rate Forecasting**

- Technical Analysis:
  Examining historical price charts, trends, and patterns to predict future price movements.
- Fundamental Analysis:
   Evaluating economic, political, and market indicators to forecast exchange rate movements



- Econometrics Model:
   Using statistical models
   to analyze historical
   data and identify
   relationships that can
   inform future exchange
   rate predictions.
- Sentiment Analysis:

   Analyzing market
   sentiment through
   news, social media, or
   surveys to gauge
   potential market
   movements.

## **Currency Options**

Currency options are financial derivatives that provide the holder with the right but not the obligation to buy (cal I option) or sell (put option) a specific amount of a currency at a predetermined exchange rate (strike price) before or at the option's expiration date.

#### **Call Options:**

Buyer's Perspective: Grants the right to buy a specific currency at the agreed-upon strike price.

Seller's Perspective: Obliged to sell the currency if the buyer chooses to exercise the option.

#### **Put Options:**

Buyer's Perspective: Grants the right to sell a specific currency at the agreed-upon strike price.

Seller's Perspective: Obliged to buy the currency if the buyer chooses to exercise the option.

**Expiration Date:** The date at which the option contract expires. The holder must exercise the option before or on this date.

**Strike Price:** The pre-determined exchange rate at which the currency will be bought or sold if the option is exercised.

**Premium:** The price paid by the option buyer to the option seller for the right to buy or sell the currency. It represents the cost of the option.

**Risk Reversals and Collars:** Strategies involving combinations of call and put options to create customized risk profiles.

#### Forwards

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#### Definition

A forward contract
is a customized
agreement between
two parties to buy or
sell an asset
(including currencies)
at a specified future
date for a price
agreed upon today.

02

#### Key Components

Contract Expiry: The date when the contract will be settled.

Forward Rate: The

agreed-upon exchange rate for the future transaction.

**Notional Amount**: The quantity of the underlying asset

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#### Purpose

Forwards are often used for hedging against future exchange rate fluctuations or for speculation.

04

#### Over-the-Counter (OTC):

Forwards are traded directly between the parties involved, providing privacy and flexibility in contract terms.

#### Definition

A swap is a financial agreement between two parties to exchange cash flows or other financial instruments over a specified period.

## **Currency Swap**

A common type of swap involving the exchange of cash flows in different currencies.

## Interest Rate Swaps

Involves the exchange of fixed-rate and floating-rate interest payments.

#### **Key Components:**

**Notional Amount:** The principal amount on which the cash flows are calculated.

**Swap Rate:** The agreed-upon rate used to calculate the cash flows exchanged.

#### **Variety of Structures:**

Plain vanilla swaps involve a straightforward exchan ge of cash flows, while more complex structures incl ude options and combinations of different types of s waps.

#### **OTC Market:**

Like forwards, swaps are often traded over-the-coun ter, allowing for customization and flexibility.

#### **Purpose:**

Swaps are used for managing interest rate risk, curren cy risk, and achieving specific cash flow structures.

#### **Maturity**

Swaps can have short or long maturities, depending on the needs of the parties involved.

#### **Cash Settlement:**

While some swaps involve the physical exchange of as sets, many are settled through cash payments based on the agreed-upon terms.

Parties in a swap are exposed to counterparty risk, the risk that one party may default on its obligations.

# Thanks!