

Foreign Exchange Market

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Introduction - Foreign Exchange Markets

The Foreign Exchange Market (also known as Forex Market or FX Market) is a financial institution that serves as international market for trading currencies all over the world. It determines the foreign exchange rate for every currency. It is an Over the Counter (OTC) or off-exchange market, where there is no necessity of middlemen (usually exchange institutions) and exchange happens directly between two entities or persons

It does not have a physical institution like in some other markets but is open 24 hours a day and five days a week and is closed on some important holidays. The trade starts from New Zealand and Australia, continues to Asia, Middle East, reaches London and then to North America. The most important aspect of Forex markets is that it trades in huge volumes and hence is highly liquid. It is highly unregulated and is traded in pairs (since one currency is traded against another). Forex is extremely dynamic in nature since the value of currencies change very frequently.

Forex Trading is highly unregulated. Though this is feature strictly restricts some countries like India, Bosnia, France, Korea, Malaysia, etc., to allow Forex Trading, it cannot be considered a faulty characteristic because this makes it very unique compared to other markets. Many governments believe that dealers or parties will move elsewhere if their markets are regulated. Though it might seem very risky, due to the volumes of money dealt during the active market hours, and due to high liquidity, manipulation by a single party is impracticable.

Foreign exchange is a very large global financial institution and performs some key functions:

1. Hedging function: Hedging function is something like an insurance in the field of forex in case of any fluctuation in the market like changes in exchange rates, etc. It guarantees that the trader is not at loss by giving you a forward contract. It is usually a three-month contract to buy or sell the foreign exchange for another currency at a fixed date in future on the price decided today.
2. Transfer function: Transfer function is self-explanatory. It is like transferring or converting your funds from one currency to another.
3. Credit function: Credit function is especially useful for businessmen who do business in different countries. It is nothing but a type of short-term loan that is given in required currency to these persons who are in need so that they can continue their business

History of forex markets

The reason behind the emergence of forex markets is one of the most valuable metals on earth i.e., gold. In the 17th century, most of the trade between countries and people occurred through gold. The gold became the global currency and as the trade expanded, paper receipts for gold came into existence and they were the closest thing to the paper currency we have today. However, as the need for printing more money grew, countries started to turn to different monetary systems to finance their huge military expenses.

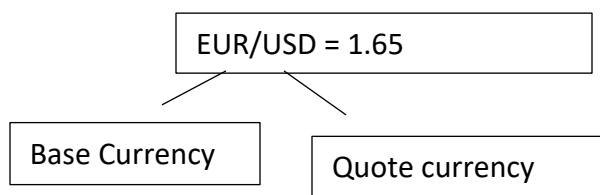
In July 1944, the Bretton Wood system was introduced. With the introduction of this system, the role of the U.S. Dollar became one of the most important roles in the history of foreign exchange markets as it became the world's reserve currency. All foreign currencies were still indirectly linked to gold through the U.S. Dollar as it itself was directly influenced by the price of gold.

Of course, this system was not sustainable as the American gold reserves became too low for the U.S. government to provide convertibility for all the U.S. Dollar reserves around the world. Through the '80s and the '90s a lot of treaties and accords came into effect, but none were effective in ironing out the issues that plagued the development of poorer countries that relied on the efficiency of foreign exchange assets. Finally, in 1992, the Maastricht Treaty led to the establishment of the Euro currency which reduced the reliance on the U.S. Dollar for the European countries.

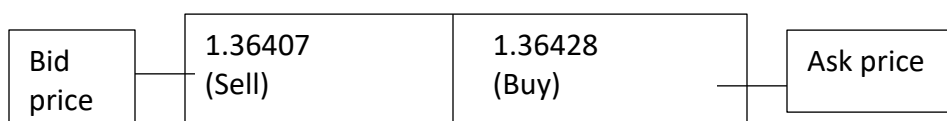
On the other hand, as the fixed-rate systems were getting abandoned, most western governments started adopting floating rates system where the central banks used the interest rate to influence the trading power of forex traders, thus indirectly influencing the exchange rates rather than managing it directly. In parallel as the internet grew, access to these markets became easier and thus trading became easier. Online networks came up in huge abundance which allowed traders to produce quotes and trade in real-time. This huge growth has continued through the 21st century where daily trade volume has crossed 5 Trillion Dollars in valuation across the whole world. With the introduction of digital currencies, a new chapter in the history of foreign exchange markets has been introduced.

Important Terminologies

1. Exchange rate: The value of currency of one country in terms of another. For example, if the exchange rate between a dollar and a euro is 1.33, this means that it will take 1.33 dollar to buy one euro.
2. Currency pair: It is the value of one currency quoted against another. The first listed currency is called the base currency and the second is called quote currency. For example,



3. Cross Rate: Cross rate refers to the exchange rate between two currencies expressed in a third currency. For example, expressing the exchange rate between Euro and Yen in USD. These should not contain USD as a base or quote currency.
4. Pips: Pip is 'percentage in point' or 'price interest point'. It is used to measure the movement of exchange rates. Pip is the smallest price movement that a currency pair can make. It is equivalent to one-hundredth of a percent (four decimal places, 0.0001). This measure serves useful when two parties trade between currencies.
5. Leverage: It is used to increase one's trading position beyond their total account margin. It involves borrowing money from required to invest in something. It is usually borrowed from a broker.
6. Margin: Margin is the minimum amount of money a party needs to put in order to open a position. There are two types of margins: 'free' and 'used'. Free margins are used to open new positions while used margins are used to maintain a currently open position. If a party fails to maintain the minimum amount, he/she will receive a 'margin call' alerting them to either add money or close their open position. Most brokers usually close the open positions in the case of a margin call.
7. Bid Price: It is the price at which you are willing to sell your currency pair (or the price at which the market will buy the currency pair from you)
8. Ask Price: It is the price at which you are buying a currency pair (or the price at which the market will sell the currency pair to you)
9. Spread: Spread is the difference between the ask price and bid price.



$$1.36428 - 1.36507 = 0.00021$$

Spread = 2.1 pips

10. Going long: This means that the party is buying the currency and expecting the price of the currency to rise. For example, in case of AUD/USD, a trader would buy Australian dollar against USD with a hope that AUD would increase.
11. Going short: This means that a trader is selling the currency expecting the price of the sold currency to decrease further.

Types of Foreign Exchange markets

Below are the major types of forex markets:

1. Spot markets: Spot market trades in commodities, currencies and securities which are traded for immediate delivery. These markets are also referred to as 'physical markets' because trades happen for exchange of commodities effective right after the trade occurs. Both the parties agree upon the price now and deliver the products and transfer the funds at some time after the agreement happens. An example can be purchasing furniture from one country to another.
2. Forward markets: It is a financial market where the two involved participants agree to trade on a future date and future delivery. These are usually used by banks for bank to bank or bank to customer transactions and can be used for hedging. They set the price at a spot rate and agree to deliver (or mature) at a future time period.

The major participants in the Forex market are commercial banks, central banks, dealers, brokers and speculators. Commercial banks trade on behalf of their customers and offer this as a financial service. A major part of the trade comes in as the difference between bid and ask prices. If the transaction is too large, banks use inter-banking system to exchange.

Central banks also play an important role in forex trading. The central banks of every country to enter the market when they anticipate currency fluctuations. For example, a country might sell some foreign currency to make sure that their country's currency is not depreciating.

Dealers or brokers usually buy when the value of a currency is low and sell when the value increases. These dealers and brokers are usually seen during inter-bank transactions. They charge low and make the trade easier.

Differences between Forex and other markets

Forex markets are open 24 hours a day and five days a week, unlike other markets which operate during fixed hours. This means that there could be severe changes in the market, while the trader doesn't monitor the market. But the 24-hour open period also allows parties to react within minutes to any recent news. It is considered the best time to trade when active trading periods of two zones overlap.

Forex market has high liquidity. It has a large volume of traders and huge volumes of money flowing into the market from all around the world. This makes it very easy to find a buyer or seller at any time during the trading hours. The other markets comparatively witness lesser number of trades per day, and due to the restrictions of open trading hours, the trades are further low in number compared to Forex.

Forex markets are also highly volatile. Due to the high volume of trades happening during the trading hours, the currency values keep fluctuating very frequently. Other markets, such as stocks usually observe stable prices of stocks.

Leverage trading is more commonly seen in Forex markets than in any other markets. Only by depositing a small sum of money, parties can make profits or losses, i.e., trade on margin. Other markets usually require traders to deposit much larger sums of money compared to Forex to trade on margin.

Almost all forex brokers charge no commission on Forex trading. They usually earn from the spread received during the currency exchange. Other markets especially stocks, collect their commission in order to trade stocks.

There are some major currencies that deal with a major part of the forex trading. These are called Major currency pairs, which are: Euro/USD, USD/Japanese Yen, British Pound/USD, Swiss Franc/USD, Australian Dollar/USD, Canadian Dollar/USD. All of these have USD in common. Since major trading happens between these few currencies, it is easier to focus on these trends. But in case of stocks, there are thousands of stocks to look at and analyze.

The most important difference between Forex and other markets, which makes Forex different and unique is that it is an Over-the-Counter market and has very few restrictions compared to any other market. There is no physical institution and no involvement of middlemen between parties to trade. Though unregulated, it has very less chances of manipulation by a small group of parties.

Advantages of Forex markets:

1. **High volume and liquidity:** Forex market is the largest financial market in the world and hence is very easy to find a buyer or seller in the market at any given point of time and any amount of trade. This makes it highly liquid due to the high volumes of trade transactions.
2. **Leverage and access to everyone:** Forex can work on margin trading with high leverage factors. This means that anyone can trade in Forex market even with small initial investment. This makes the market open to everyone, and not only the ones who can afford to spend huge sums on these kinds of investments. Though this comes with its own risks, it at least allows the entry of large participants.
3. **No manipulation by single trader:** Considering the volume of traders and their trade in the market, it is almost impossible for one single trader to manipulate the market prices, no matter how big the trader is or how big their transactions are. Being an Over-the-Counter market, one party trades directly with another and a forex broker would only facilitate in this connection and nothing more, eliminating insider trading.
4. **Minimal transaction costs:** As discussed in one of the earlier sections, there are no commissions charged on these trades. Financial brokers in this field get their profits by the difference in the two currencies being dealt with (the spread). This makes it an economical option for many traders who do not wish to take up the extra burden of commission unlike in other markets.
5. **Flexibility:** The Forex market is open 24 hours a day and five days a week. This makes it very flexible for traders to trade at any time they want to and any volume of exchange amount since there is no minimum or maximum limit for these trades.
6. **Hedging risk safety:** Hedging function, as discussed in one of the previous sections is an important element of Forex market. It safeguards the participants from the risk of loss due to currency fluctuations while carrying out a trade.

Risks of trading in Forex markets

1. Over-leveraging: Forex markets allow leverage up to about 20 times the margin the participants deposit. This may not always serve as an advantage as there are risks of losing high amounts of money depending on the leveraged amount.
2. Buyer/Seller risks: Forex markets are highly unregulated and there exists no single institution to safeguard participants against any wrongdoing by any seller or buyer.
3. 24/5 Trading hours: Though the amount of time for trading gives the participants a lot of flexibility, monitoring the changes in the market for the whole of 24 hours in a day by humans can be very burdensome. Hence many large companies make use of technology and algorithms to monitor their investments in their absence. While this innovation could be very useful, a minor mistake by computers can cost huge sums of money to these companies even before the mistake is identified.
4. Self-directed learning: In the case of stock markets, various portfolio managers are available to assist participants to buy and sell stocks, but in case of Forex markets, due to the absence of middlemen, participants have to educate themselves about currency trading all on their own.
5. Complexity in price determination: The values of currencies of countries around the world depend on various factors and situations happening all around the world. Hence it is difficult to analyze and make reliable conclusions to make better decisions in selling and buying.
6. High volatility: the values of currencies change very frequently. Due to this, it might be very hard for traders to judge the market and make good investment decisions.
7. Social Trading: Due to the absence of middlemen and the aspect of self-driven learning, people might be victims of those who websites or information provided by inexperienced traders. This might result in huge losses for those who blindly follow their instructions.

Factors affecting forex market:

1. Inflation rate: Inflation rate refers to decrease in the value of purchasing power. A country with low inflation rates will see the value of their currency rise up, while countries with high inflation rates aren't of great interest in the market.
2. Interest rates: higher interest rates result in higher rates to lenders, which in turn will attract more foreign capital. This will cause a rise in exchange rates. Cutting the interest rates will depreciate the currency value.
3. Balance of payments: This refers to the country's current account. It includes information and numerical figures about exports, imports, debts and other transactional information. A positive balance of payments will cause currency appreciation and hence will attract traders to consider the currency worth spending. In case it is negative, traders would not be as interested to invest.
4. Government debt: It is the debt incurred by the government of a country. If a country already has huge amounts of debt, then the possibility of capital flowing in is very less. And therefore, it might result in inflation. Traders are very likely less interested in investing in a country with high inflation rates.
5. Political stability: A country with less chances of political instability will attract more foreign traders. The security of assets in a politically instable country is not highly guaranteed and hence investors cannot trust their investments in these countries. A politically peaceful country will see more capital flowing in and hence currency appreciation.
6. Recession: recession is the time frame in which trade and industrial activity temporarily runs low. During a recession, interest rates fall, causing more inflation to occur, and hence the currency values drop.
7. Future market speculations: If there is an opinion in the market that the currency value of a particular country will rise, the demand for that currency will rise and hence the exchange rate will also increase.
8. Imports and exports: If the prices of exports of a country are listed higher than those of imports in the balance of payments, demand is created for their exports and hence the currency value will see a rise. Conversely, if the rate of exports is lesser than the rate of imports, then the value of currency will decrease.

Why does US Dollar dominate Foreign Exchange Market?

The dominance of USD in today's present exists due to many situations that have arisen during World War 2. Before the United States entered into the war, it supplied weapons and other war supplies to its allies in the war in exchange of gold. By the end of the world war, the US reserves were filled with huge amounts of gold collected from various countries for warfare.

After the world war, about 44 allied countries came together to decide upon a fair arrangement for Foreign Exchange which would help all countries. This agreement came to be known as Bretton Woods agreement, which made USD the official reserve currency and had the world's largest gold reserve. The agreement decided that since the currencies cannot be linked to gold, they could be linked to USD which was in turn linked to gold. Now after the agreement, instead of accumulating gold reserves, governments of other countries started accumulating USD. Then the countries needed a safe place to store their huge reserves of USD, and hence felt that buying US treasury securities was the safest way to store their dollar reserves.

Concerned with the stability of the dollar, countries started converting the USD reserves back to gold reserves. Due to the high demand for gold, the US government decided to delink gold from dollar which led to the exchange rates present today.

Although there have been periods of slow economic growth in the history of USA's economic growth, with trillions of dollars of debt even today, USD continues to dominate the forex market as US Treasury securities continue to be the safest vault for money.

Role of Technology in the Forex Market

Technology has played an immense role in the evolution of forex trading. It has made trading much easier for participants and is predicted to improve these facilities too for the efficient use of resources for trading.

Forex market is open 24 hours a day and 5 days a week, which makes it very difficult for humans to monitor every single movement and fluctuations in the market. Huge volumes of currencies are traded and fluctuations in the currency values are very frequent that they could be very hard to monitor. Moreover, these differences depend on many factors discussed in one of the previous sections. The problem of accessing was eliminated first with the invent of wireless technologies. With the wide spread of mobile services and access to forex related information through internet, traders could now access Forex rates and trading processes from everywhere and anywhere in the world. This eased the burden of traders monitoring the fluctuations every moment.

Analysis of the ocean of information has been made much easier with technology. With the use of useful algorithms and artificial intelligence, huge companies, MNCs and individual traders have tried to save their time and devote it to more useful tasks. As these algorithms and machines are capable of providing much informative analyses of markets, traders can now spend their time to formulate wise trading strategies and trade judiciously, instead of trying to find pattern and calculating numerical figures.

Forex markets do not have many managers like the portfolio managers in stock markets. Most of the traders have to educate themselves about the terms and processes in Forex market. The internet with its rapidly growing improvements in its speed and efficiency have enabled beginners to gain a deep understanding about the market and its working. People have access to various trading platforms and aren't even required to have a vast experience in the subject. There is a lot of online mentoring available and even technologies which help beginners prepare to enter the actual market by first playing around with a fictitious market and then entering the actual market with some preliminary experience.

In conclusion, technology has made forex trading much easier compared to earlier, considering its size and volatility. Traders with these technologies will definitely have an advantage over the others as these provide efficiency and save time.

Effects of pandemic on forex markets

The Covid-19 pandemic's effect on forex markets was always going to be complex as it went on to affect international trades, supply chain, incomes, jobs, and other economic activities. As the menace of the pandemic grew, many central banks rushed to adjust their monetary policies to cushion the impact from financial setbacks. The OECD had estimated that the global stock markets had declined by 11th March 2020, around the same time as lockdowns were being enforced in various parts of the world. In its

On the other side of forex markets were the investors and forex traders who experienced huge losses due to loss in valuation of portfolios and the heightened volatility that was generated during the pandemic. However, the surprising element was that despite the economies being on the brink of collapse, the forex industry started to thrive. Various reasons could have been attributed to this as the markets cheaper and people found themselves having more time to actively trade in the markets.

The forex trading was already growing before the pandemic as it grew about 25 percent from \$1.935 quadrillion dollars in 2016 to \$2.409 quadrillion dollars in 2019. The forex was starting to be seen as an attractive opportunity to make huge profits from home as it is not very difficult to use digital resources to enter an easily accessible market, even with low funds. However, the volatility in markets would not subside until the pandemic completely ends or stops affecting economic trades across the world to a certain extent.

As we evaluate the impact of COVID on Forex markets, it is imperative to consider its impact on one of the most important currencies in the world, the U.S. Dollar. The U.S. Dollar index which measures the strength of USD against a host of other currencies, lost a lot of valuations as the Fed cut rates while the government provided an unbelievable amount of stimulus to its citizens. The USD also acted as a safe haven for investors as its valuation has been on an upward trend since the market crisis of 2007-08 and this caused the demand for the USD to soar. The other factor which caused upheaval for the forex markets was the U.S. unemployment rates. The job losses have been making Covid potentially worse than the 2008 financial crisis. In more than five weeks, more than 25 million Americans applied for unemployment benefits which shows the worse side of the pandemic.

Case study: Argentina Economic crisis

Brazil's end of its own peg to the US dollar had a huge impact on the good running economy of Argentina since Brazil was one of the main trading partners. Which resulted in reducing Argentina competitiveness in the global market like decline in prices of products manufactured in Argentina due to which their accounts went into deficits and which led to the crisis in 1998. Even Though Argentina was trying to increase the value of their currency to stay in the race since it was unable to apply monetary or exchange rate due to which it was unable to gain its value to counter the growing economic problems in Argentina. When comparing the Peso with the Dollar (which had seen its peak in 15 years.) it was like tying its own arms to exit from the race. Digging deeper into facts on the reasons of crisis the peg was not even supported by nominal price and wage flexibility which worsened Argentina's ideas to cope up with their currency overvaluation and which in return decreased the credibility of the fixed exchange rate regime.

In July 2001, the country lost its grip on international financial markets since foreign investors had backed out from their investments in Argentina's economy which led to increase in borrowing cost. In simple words the country was running on debts. One of the main reasons for the cause of this crisis was Argentina's fiscal policies. If you want to survive in these economic conditions with a fixed exchange rate regime you need to follow certain counter-cyclical fiscal policies unlike pro-cyclical policy which was Argentina's fiscal policy. The central government's failure to tackle corruption and the expenditure of local government resulted in fears of devaluation.

In the end I would like to conclude that Argentina's economic crisis was caused due to various economic events like issues with currency peg, overvaluation of currency, using different methods of fiscal policy, backing out of foreign investors, and debts. The political reforms and social unrest made this crisis an even more severe economic crisis in the 20th century. However, Argentina pounced back in the early 2000s from the crisis and was able to correct its mistakes and become a stable economy.

Conclusion

Foreign exchange market is very unique in many aspects. Though its advantages and disadvantages all run around the characteristics of foreign exchange markets, it is important for us to understand when the characteristics will act as pros and when they will act as cons. For example, Forex being unregulated may serve as an advantage for some countries while some countries discourage such free market environment.

Technology, though seems very natural and a part of the system now, has and does play a very important role in trading with currencies around the world very easy. Traders and other participants in the field too are very optimistic about it playing a significant role in the way forex trades would be handled in the future. Many are anticipating the intervention of artificial intelligence and cloud computing into forex trading technologies.

Though it is believed that the market runs ethically, and cannot be manipulated by one single person, the case of LIBOR manipulation (which hasn't been mentioned in this paper) was very interesting and also worrisome because incidents like these disturb the faith of other participants in the trade that Forex is free of manipulation and corruption. LIBOR was a case of scandal where major financial institutions colluded with each other to manipulate the London Inter-Bank Offered Rate. Though scandals like these could continue to happen, it is a good practice to make sure participants from lower level are at least aware of the market they are entering into.

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