CLASS OF BUSINESS TRAINING

Class: Foreign Exchange Investments

Study Guide

2021

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Class of business training legislative requirement

The Financial Sector Conduct Authority (FSCA) **Board Notice 194 of 15 December 2017: Determination of Fit and Proper Requirements** stipulates that a Financial Service Provider (FSP) and a representative must complete the Class of Business (CoB) training relevant to those financial products for which they are authorised **prior to** render any financial service in respect of such products.

A key individual must, likewise, complete the CoB training in respect of the classes of business for which he/she is approved to act as a key individual **before** managing the rendering of any such financial services.

The Determination of Fit and Proper requirements define “Class of Business training” as training in respect of a specific class of business and which training is provided and assessed by an accredited provider or an educational institution.

The Class of Business training applies to the following:

- All FSPs, Key Individuals, and Representatives appointed after 1 April 2018.
- FSPs, Key Individuals, and Representatives who seek authorisation, approval or appointment for new financial product categories after 1 April 2018.
- Representatives working under supervision as at 1 April 2018, or appointed under supervision after 1 April 2018.
- Certain exemptions apply, depending on the type of business one does, and how it is conducted. Please contact your compliance officer if in doubt.

FSPs, KIs, and Reps authorised before 1 April 2018 are considered to have completed the CoB training given their experience and are therefore exempt from CoB training unless they add new products to their licence.

Glossary of terms

Term	Definition
CoB	Class of Business
FX	Foreign Exchange
SARB	South African Reserve Bank
Forex	Foreign Exchange
SARS	South Africa Revenue Services
PA	Prudential Authority
FSCA	Financial Sector Conduct Authority
OTC	Over The Counter
M & A	Mergers and acquisitions
SWIFT	Society for Worldwide Interbank Financial Telecommunications
ISO	International Standards Organization
ETF	Exchange-Traded Funds
ADLA	Authorised foreign exchange Dealers with Limited Authority

Chapter 1: Legislative Background

1.0 Introduction

The Financial Sector Regulation Act No. 9 of 2017 was published in Government Gazette No. 41060 on 22 August 2017. The Act introduces the Twin Peaks model of financial sector regulation in South Africa. Twin Peaks places equal focus on prudential and market conduct supervision. This is done by creating dedicated authorities responsible for each of these objectives.

The purpose of the Act is to achieve a stable financial system that works in the interests of financial customers and supports balanced and sustainable economic growth. It wants to achieve this by establishing, together with the specific financial sector laws, a regulatory and supervisory framework that promotes certain principles and objectives. Some of these are financial stability, the safety, and soundness of financial institutions and the fair treatment and protection of financial customers. A list of financial sector laws is set out in the Act and includes the Pension Funds Act, Banks Act and Financial Advisory and Intermediary Services Act.

In the Forex Market, this legislation ensures that proper trading conditions and the environment is maintained by the broker like leverage caps, direct market access, no malpractices by the broker, proper grievance redressing. South Africa has a local regulatory body FSCA, and it is recommended for South African traders to trade only with forex brokers regulated with FSCA as it ensures the safety of funds. Unregulated brokers have no oversight or obligation to maintain proper trading conditions for the clients resulting in some not providing withdrawals to their clients or they didn't send the client orders to the market.

The Financial Sector Regulation Act gave effect to three important changes to the regulation of the financial sector. First, it gave the SARB an explicit mandate to maintain and enhance financial stability. Second, it created a prudential regulator, the Prudential Authority (PA). The PA is responsible for regulating banks, insurers, cooperative financial institutions, financial conglomerates, and certain market infrastructures. Third, the Financial Sector Regulation Act established the Financial Sector Conduct Authority (FSCA), a market conduct regulator which is located outside of the SARB.

1.1 The Financial Sector Regulation Act aims:

- To establish a system of financial regulation by establishing the Prudential Authority and the Financial Sector Conduct Authority, and conferring powers on these entities;
- to preserve and enhance financial stability in the Republic by conferring powers on the Reserve Bank;
- to establish the Financial Stability Oversight Committee;
- to regulate and supervise financial product providers and financial services providers;
- to improve market conduct to protect financial customers;

- to provide for co-ordination, co-operation, collaboration and consultation among the Reserve Bank, the Prudential Authority, the Financial Sector Conduct Authority, the National Credit Regulator, the Financial Intelligence Centre and other organs of state concerning financial stability and the functions of these entities;
- to establish the Financial System Council of Regulators and the Financial Sector Inter-Ministerial Council;
- to provide for making regulatory instruments, including prudential standards, conduct standards, and joint standards;
- to make provision for the licensing of financial institutions; to make comprehensive provision for powers to gather information and to conduct supervisory on-site inspections and investigations;
- to make provision to significant owners of financial institutions and the supervision of financial conglomerates with eligible financial institutions that are part of financial conglomerates;
- to provide for powers to enforce financial sector laws, including by the imposition of administrative penalties;
- to provide for the protection and promotion of rights in the financial sector as set out in the Constitution;
- to establish the Ombud Council and confer powers on it concerning ombud schemes;
- to provide for coverage of financial product and financial service providers by appropriate ombud schemes;
- to establish the Financial Services Tribunal is an independent tribunal and to confer on its powers to reconsider decisions by financial sector regulators, the Ombud Council and certain market infrastructures;
- to establish the Financial Sector Information Register and make provision for its operation;
- to provide for information sharing arrangements; to create offenses; to provide for regulation-making powers of the Minister;
- to amend and repeal certain financial sector laws;
- to make transitional and savings provisions;
- And to provide for matters connected therewith.

1.2 The Twin Peaks

Under Twin Peaks, two regulators are established. One is charged with maintaining the stability of the financial system called prudential regulation; the other is responsible for market conduct and consumer protection.

The new approach is designed to address weaknesses in the other models commonly used to regulate banks and the financial services sector. Before adopting Twin Peaks South Africa used the sectorial model which regulated banks separately from other financial firms like insurers. That model has been replaced because it didn't address the fact that institutions from different sectors often merge. This is particularly true of banks and insurers (so-called bancassurance).

Twin Peaks ensures that all financial firms – irrespective of whether they are banks or insurers – are covered under the prudential peak, while the other peak monitors good conduct irrespective of the type of entity or the type of product or service offered.

The logic is that by creating two institutions that are independent of one another and that have clear and unambiguous remits and accountability, there's a much greater chance (but note, not guarantee) of avoiding a financial crisis. Consumers are protected fairly and efficiently.

There's an added twist to the model being adopted in South Africa: The South African Reserve Bank, which up until now has regulated the banking sector, will still have a role to play. And the existing National Credit Regulator will also be part of the suite of regulators looking after financial services. The roles are as follows:

1.2.1 The prudential peak

The prudential peak has been set up as a subsidiary of the Reserve Bank. Financial crises don't have consistent causes. This means that the Head of Prudential Authority agency will have to develop the ability to 'see around corners' in other words have sufficient intelligence to anticipate disasters before they happen. The role must perform an incredibly delicate balancing act; on the one hand, it will need, at times, to be able to stand its ground against the bank. For example, in a crisis, the Reserve Bank may want to raise interest rates to shore up the currency. The prudential regulator may oppose that because higher rates will lead to higher defaults, which will affect the solvency of the weakest banks. On the other hand, it will have to be flexible to make sure that consumer protection isn't constantly relegated in favour of making sure that financial institutions are sound. Put differently, the Twin Peaks architecture is most effective if the Reserve Bank doesn't dominate the prudential regulator, and the prudential regulator doesn't dominate the good conduct regulator.

1.2.2 Conduct peak and credit regulator

The new conduct peak is called the Financial Sector Conduct Authority which has absorbed the country's old Financial Services Board (FSB). The new body will have a much bigger set of responsibilities and a significant array of new tools. This will include the ability to seek damages and penalties far over what was available in the past.

The law that underpins the conducting authority adopts a very different regulatory philosophy because it is principles-based as opposed to rules-based. The principles-based philosophy requires businesses to shift away from just applying rules, to treating customers fairly. The regulator will no longer have to prove a rule was broken before it can intervene. It will only have to show that something has, or is likely to prejudice consumers before it takes action. This presents a much bigger target for the regulators and makes it much easier to intervene.

While the conducting authority will be responsible for protecting consumers, it won't when it comes to credit. That's because regulation of credit, and protecting customers against lending abuse, will stay with the country's 13-year old National Credit Regulator which is responsible for enforcing the National Credit Act.

1.3 Establishment of various regulatory bodies

1.3.1 Prudential Authority

The Prudential Authority (PA) is a regulatory body within the administration of the South African Reserve Bank (SARB). Some of the objectives of the PA include:

- promoting and enhancing the safety and soundness of financial institutions that provide financial products and securities services;
- protecting financial customers against the risk that they may fail to meet their obligations;
- Assisting in maintaining financial stability.

The Prudential Authority also co-operates with and assists other regulators such as the Council for Medical Schemes, Competition Commission, and the National Credit Regulator (NCR) on matters of mutual interest and as required in the Act.

1.3.2 Financial Sector Conduct Authority

The Financial Sector Conduct Authority (FSCA) replaces the Financial Services Board. It is a regulatory body within the administration of the Financial Intelligence Centre (FIC). The objectives of the FSCA include:

- promoting the fair treatment of financial customers by financial institutions;
- providing financial customers and potential financial customers with financial education programs; and
- Promoting financial literacy.

To achieve its outcomes, the FSCA regulates and supervises the conduct of financial institutions. It also co-operates with and assists other regulators such as the Council for Medical Schemes, Competition Commission, and the NCR on matters of mutual interest and as required in the Act.

1.3.3 Financial Services Tribunal

The Financial Services Tribunal is established to hear reviews of decisions made under financial sector laws, and for the imposing of administrative penalties and related orders.

1.3.4 Ombud Council

The Ombud Council assists in ensuring that financial customers have access to and can use affordable, effective, independent, and fair alternative dispute resolution processes. The dispute resolution processes are for complaints about financial institutions for financial products, financial services, and services provided by market infrastructures. Examples of market structures include a licensed exchange and a licensed trade depository. The Council achieves the above objectives by:

- promoting public awareness of the different ombuds and ombud schemes;
- promoting the services that they provide as well as the kinds of complaints that the different ombuds deal with;
- taking steps to facilitate the access by financial customers to the appropriate ombuds;
- monitoring the performance of the ombud schemes; and
- Resolving the overlap of the jurisdiction of the different ombud schemes.

1.4 Regulatory measures

1.4.1 Co-operation and collaboration between financial sector regulators

The Financial Sector Regulation Act requires financial sector regulators (such as the PA, FSCA, FIC, and NCR), together with SARB, to co-operate and collaborate when performing their functions in terms of financial sector laws, the National Credit Act and the Financial Intelligence Centre Act. The Act establishes the Financial System Council of Regulators (FSCR) which is a forum for the senior representatives of the financial sector regulators and other institutions represented on the FSCR (such as the Department of Trade and Industry). The FSCR has to co-operate and collaborate, and where appropriate decide on the consistency of action between the financial sector regulators.

1.4.2 Licenses

A person will only be able to provide, as a business or part of a business, a financial product, financial service, or market infrastructure if he is issued with a license under a specific financial sector law. If there is no specific financial sector law that provides for such a license, the license will be issued in terms of the Act. The Act sets out the licensing requirements for financial products, financial services, and holding companies of the financial group.

1.5 Enforcement measures

1.5.1 Guidance notices, interpretation rulings and directives

The Act provides for the issuing of guidance notices and interpretation rulings by the financial sector regulators. Financial sector regulators are also able to issue non-binding guidance notices on the application of the financial sector laws. The PA and the FSCA are empowered to issue binding interpretations on the application of specific provisions of financial sector laws. They are also empowered to issue directives on specific matters. The power to issue directives is in addition to the ones granted in other financial sector laws. Financial sector regulators are authorised to institute legal proceedings to enforce compliance with a financial sector law. They are also authorised to made orders debarring a person for not complying with financial sector laws including attempting, conspiring, aiding and abetting, inducing, inciting or procuring another person to contravene a financial sector law, or contravening a law of a foreign country that corresponds to a financial sector law.

1.5.2 Offences and penalties

The Act creates certain offences and penalties that may be imposed. Broadly speaking, the offences relate to the contravention of certain provisions in the Act. An example is conducting business without the required license. Depending on the nature of the offence, the penalties that may be imposed vary from periods of imprisonment of up to 10 years to fines of up to R15 000 000, or a combination of both.

The Act introduces administrative penalties that may be imposed by the financial sector regulator responsible for the relevant financial sector law. The Act makes provision for the penalty to be paid in installments and for interest to be levied on the penalty. A penalty cannot be imposed on a person where criminal proceedings against that person for the same set of facts have already started. A court will have to take into account any penalty that has been imposed for the same set of facts when determining a sentence to be imposed on a person convicted of an offence under a financial sector law.

1.6 Exchange Control Regulations

Exchange Controls are government-imposed limitations on the purchase and/or sale of currencies. These controls allow countries to better stabilize their economies by limiting in-flows and out-flows of currency, which can create exchange rate volatility. Not every nation may employ the measures, at least legitimately; the 14th article of the International Monetary Fund's Articles of Agreement allows only countries with so-called transitional economies to employ exchange controls.

First introduced in South Africa in 1961 to ensure currency stability and manage the country's balance of payments, exchange controls are used to manage, measure, and report South Africa's total foreign exchange inflows and outflows. Consequently, all foreign exchange transactions must be reported by authorised dealers to SARB as the relevant regulatory authority by way of a Balance of Payments (BOP) form.

The Exchange Control Regulations and Rulings control the flow of money in and out of the country and apply to all transactions, no matter the amount. So the main purpose of exchange control is to restore the balance of payments equilibrium, by allowing the imports only when they are necessary for the interest of the country and thus limiting the demands for foreign exchange up to the available resources.

1.6.1 How Exchange Control Affects Investors / Traders

Many South Africans are actively looking to move funds offshore, for reasons that range from travel and investing to importing or exporting new products and launching new businesses. But without observing the correct exchange control procedures, you or your business could quickly land in hot water with the South African Reserve Bank.

1.6.1.1 Single Discretionary Allowances

Residents over 18 years old qualify for a Single Discretionary Allowance of up to R1 million per annum. Residents under the age of 18 qualify for an annual allowance of R200, 000

1.6.1.2 Investment Allowance

Residents over 18 years old also qualify for an Investment Allowance of R10 million per annum, subject to a valid SARS tax clearance certificate for investment purposes being issued by SARS, and a valid green barcoded identity document or Smart ID Card. Additionally, you need to be careful to ensure that your funds are utilised following the restrictions and limitations provided by SARB. Other details such as assigning your transactions the correct category codes, reporting accurate amounts, and supplying the necessary supporting documents are further key for compliance.

1.6.1.3 Companies

Any payment that needs to be made to a foreign party is covered by the regulations. Similar in effect to personal transfers abroad, companies are required to justify why they need to remit money to a foreign party and seek approval from the Reserve Bank or where empowered, the authorised dealer. Exchange control regulations cover all payments and investments abroad made by a company, and loans made by overseas investors to a South African resident.

There are also specific exchange control procedures that entities such as businesses and trusts must comply with, such as the requirement that entities convert foreign dividend receipts into ZAR within specific time frames according to SARB requirements. SARB has published separate

exchange control manuals for individuals, companies and authorised dealers, and updates these regularly to assist individuals and entities to ensure their continued compliance.

1.7 Key points of the South Africa Exchange Control Regulations

- It applies to all transactions no matter the size.
- No resident may effect a transfer without prior approval.
- No company or legal entity may effect a transfer without prior approval.
- Only authorised dealers are allowed to affect a currency transfer.
- Outward payments may only be made for permissible reasons and under conditions that are approved by the authorised dealers on behalf of the Reserve Bank.
- All payments made to foreign parties must be reported to the Reserve Bank.
- There are set amounts for personal transfers in the form of allowances that must be adhered to.

1.8 Tax Implications on Forex Investments

The South African Revenue Service's (SARS) treats profits from Forex trading as gross income and is therefore subject to income tax as per the Income Tax Act. All expenses incurred from trading must be deducted from the gross income to determine the taxable amount. The income tax table provides directives on how different individuals should be taxed. Every SA tax resident is required to pay tax on their worldwide income, and therefore forex traders must declare all their profits on their annual tax returns. The tax rate can range from 18% to 40% and it depends on the profits made. About online trading, it is important to know that they will need to declare the profits made from doing so. Also, a provisional tax must be paid in February and August of every year. It should be noted provisional tax is not an additional tax but just a method of paying the tax due to avoid paying large amounts on assessment. In regards to moving money offshore for investment purposes, traders can deposit up to R1 million annually without requiring approval from SARS or SARB. With a tax clearance from SARS, traders can move abroad up to R10 million annually.

1.9 Anti-Money Laundering

South Africa has a law that is designed to combat money laundering and combat the financing of terrorism, which is the abuse of financial systems to hide and/or disguise the proceeds of crime. This law is known as the Financial Intelligence Centre Act 28 of 2001, also referred to as FICA. The Act further imposes certain duties on financial institutions which might be used for money laundering purposes and terrorist and related activities. The duties include 'know your customer', record-keeping, and reporting obligations. In terms of the Act, dealers are required to obtain and verify, at a minimum, a prospective customer's identity, address, and source of funds. Financial Intelligence Centre (FIC) Act mandates the Reserve Bank to ensure that Authorised Dealers in

foreign exchange with Limited Authority (ADLAs) have adequate controls in place to combat acts of money laundering and the financing of terrorism. Flowing from these responsibilities, the Reserve Bank inspects ADLAs to assess whether they have appropriate measures in place as required by the FIC Act.

Chapter 2: Introduction to Forex

Learning outcomes

By the end of this chapter, you should be able to:

- Define Foreign Exchange and identifying different types of foreign exchange systems.
- Identify the determinants of different foreign exchange rate systems
- Distinguish different classes of traded currencies,
- Show familiarization with various forex terminology

The foreign exchange market has developed at such a blinding speed within the last two decades that it has garnered an unprecedented amount of interest from all over the globe. The swift rise of forex can be attributed to many advantages of trading currencies over other financial markets. More important than recognizing how forex trading can work to your benefit, however, is knowing exactly how to approach this fascinating market with the proper prudence, attitude, and methodology to achieve consistent profitability.

If you've ever traveled to another country, you usually had to find a currency exchange booth at the airport, and then exchange the money you have into the currency of the country you are visiting. You go up to the counter and notice a screen displaying different exchange rates for different currencies. You find "Japanese yen" and think to yourself, "WOW! My hundred rand is worth 700 yen?! And I have five hundred rands! I'm going to be rich!!!" (This excitement is quickly killed when you stop by a shop in the airport afterward to buy a can of soda and, all of a sudden, half your money is gone.) When you do this, you've essentially participated in the forex market! You've exchanged one currency for another. Or in forex trading terms, assuming you're South African visiting Japan, you've sold rand and bought yen.

Before you fly back home, you stop by the currency exchange booth to exchange the yen that you miraculously have leftover (Tokyo is expensive!) and notice the exchange rates have changed. It's these changes in the exchange rates that allow you to make or lose money in the foreign exchange market. The foreign exchange market, which is usually known as "forex" or "FX," is the largest financial market in the world.

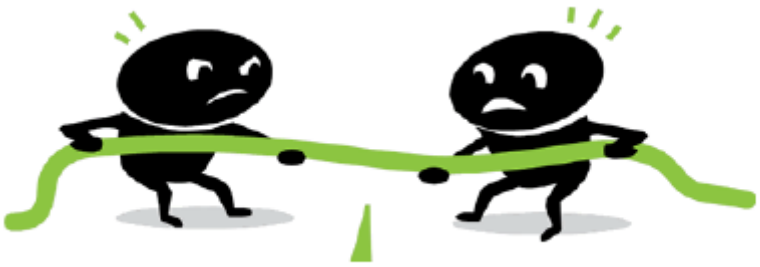
2.1 Definition of Forex

> Foreign exchange refers to money denominated in the currency of another nation or group of nations

What exactly is a foreign exchange and what is being bought and sold? When people discuss foreign exchange they invariably refer to the value of one currency in terms of another. A typical comment might relate to the strengthening of the rand: this will have little impact on the South Africans domestically, but it will allow them to buy foreign goods more cheaply. However, in the international market, it will make their exports more expensive and possibly uncompetitive.

Foreign exchange refers to money denominated in the currency of another nation or group of nations: any person who exchanges money denominated in his own nation's currency for money denominated in another nation's currency acquires foreign exchange. In essence, it is the value of the rand in the global marketplace, in terms of how much of another currency can be bought with one single rand, or how many rands will need to be given up in return for a specific amount of foreign currency. Individuals and companies do not normally buy and sell currencies for their own sake; rather, they do so to pay for something else, such as goods and services. In that sense, foreign exchange transactions are essentially a part of the payment mechanism, and it is to the commercial banks that individuals and companies have turned to convert foreign currency into domestic currency and vice versa. Incidentally, the market standard abbreviation for foreign exchange is FX or Forex.

Forex trading is the simultaneous buying of one currency and selling another. Currencies are traded through a broker or dealer such as a bank, bureau de change, etc., and are traded in pairs; for example, the euro and the U.S. dollar (EUR/USD) or the British pound and the Japanese yen (GBP/JPY). When you trade in the forex market, you buy or sell in currency pairs.



Imagine each pair constantly in a "tug of war" with each currency on its side of the rope. Exchange rates fluctuate based on which currency is stronger at the moment.

Because you're not buying anything physical, this kind of market can be confusing. Think of buying a currency as buying a share in a particular country, something like buying stocks of a company. The price of the currency is a direct reflection of what the market thinks about the current and future health of the South African economy. When you buy, say, the British Pound, you are buying a "share" in the British economy. You are betting that the British economy is doing well, and will even get better as time goes. Once you sell those "shares" back to the market, hopefully, you will end up with a profit.

2.2 Currency as an Asset Class

An asset class is a grouping of investments that exhibit similar characteristics and are subject to the same laws and regulations. Asset classes are made up of instruments which often behave similarly to one another in the marketplace. Historically, the three main asset classes have been equities (Shares in a listed company), fixed income (bonds), and cash equivalent or money market instruments. Currently, most investment professionals include real estate, commodities, futures, other financial derivatives, and even cryptocurrencies to the asset class mix. Investment assets include both tangible and intangible instruments that investors buy and sell to generate additional income on either a short- or long-term basis.

There are two distinct features to currencies as an asset class:

- One can earn the interest rate differential between two currencies: In general, an interest rate differential (IRD) weighs the contrast in interest rates between two similar interest-bearing assets. Traders in the foreign exchange market use IRDs when pricing forward exchange rates. Based on the interest rate parity, a trader can create an expectation of the future exchange rate between two currencies and set the premium, or discount, on the current market exchange rate futures contracts
- One can profit from changes in the exchange rate. An investor can profit from the gains obtained after buying and selling foreign currency at different exchange rates, thus the difference between the buying and selling rate.

2.3 Exchange Rate Policy Systems

A government should consider its economic standing, trade balance, and how it wants to use its policy tools when choosing an exchange rate regime. When any country decides on an exchange rate regime, it needs to take several important things into account. Unfortunately, no system that can achieve every possible beneficial outcome; there is a trade-off no matter what regime a nation pick. Below are a few considerations a country needs to make when choosing a regime.

2.3.1 Stage of Economic Development

A free-floating exchange rate increases foreign exchange volatility, which can be a significant issue for developing economies. Developing economies often have the majority of their liabilities denominated in other currencies instead of the local currency. Businesses and banks in these types of economies earn their revenue in the local currency but have to convert it to another currency to pay their debts. If there is an unexpected depreciation in the local currency's value, businesses and banks will find it much more difficult to settle their debts. This puts the entire economy's financial sector stability in danger.

2.3.2 Balance of Payments

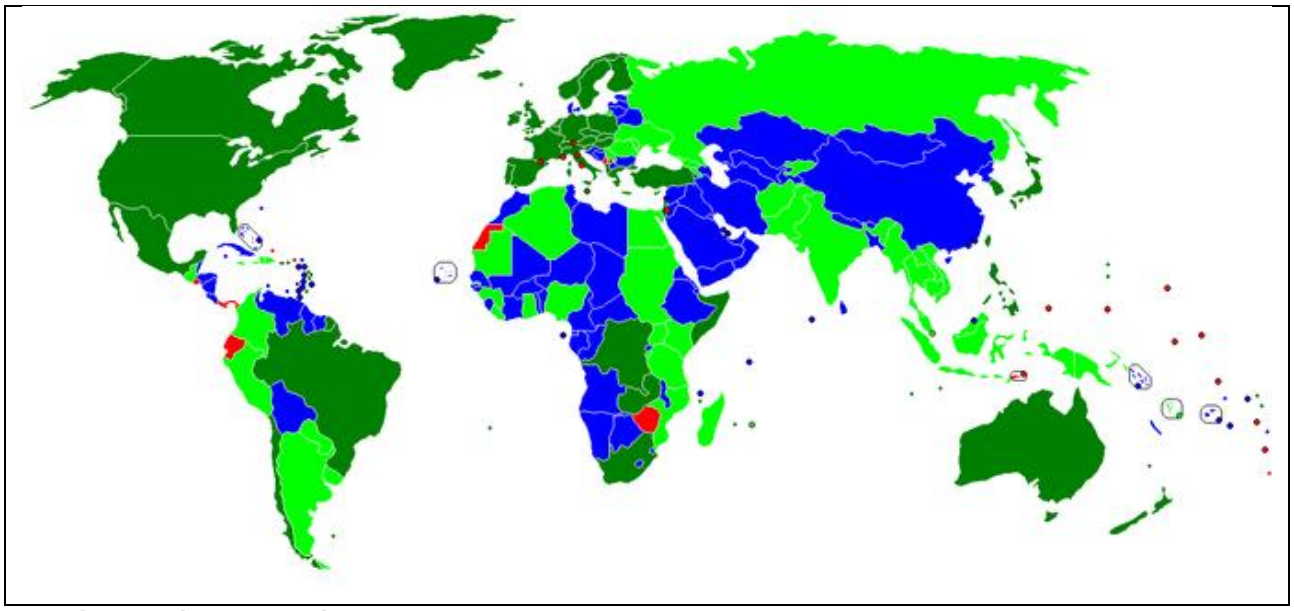
Flexible exchange rates serve to adjust the balance of trade. When a trade deficit occurs in an economy with a floating exchange rate, there will be increased demand for the foreign (rather than domestic) currency which will increase the price of the foreign currency in terms of the domestic currency. That in turn makes the price of foreign goods less attractive to the domestic market and decreases the trade deficit. Under fixed exchange rates, this automatic re-balancing does not occur.

2.3.3 Monetary and Fiscal Policy

A big drawback of adopting a fixed-rate regime is that the country cannot use its monetary or fiscal policies with a free hand. In general, fixed-rates are not established by law but are instead maintained through government intervention in the market. The government does this through the buying and selling of its reserves, adjusting its interest rates, and altering its fiscal policies. Because the government must commit its monetary and fiscal tools to maintain the fixed rate of exchange, it cannot use these tools to address other macroeconomics conditions such as price level, employment, and recessions resulting from the business cycle.

2.4 Exchange Rate Systems

One of the key economic decisions a nation must make is how it will value its currency in comparison to other currencies. An exchange rate regime is how a nation manages its currency in the foreign exchange market. An exchange rate regime is closely related to that country's monetary policy. There are three basic types of exchange regimes: floating exchange, fixed exchange, and pegged float exchange.



Foreign Exchange Regimes: ***The above map shows which countries have adopted which exchange rate regime. Dark green is for free float, neon green is for managed float, blue is for currency peg, and red is for countries that use another country's currency.***

2.4.1 The Floating Exchange Rate

A floating exchange rate, or fluctuating exchange rate, is a type of exchange rate regime wherein a currency's value is allowed to fluctuate according to the foreign exchange market. A currency that uses a floating exchange rate is known as a floating currency. The dollar is an example of a floating currency. Many economists believe floating exchange rates are the best possible exchange rate regime because these regimes automatically adjust to economic circumstances. These regimes enable a country to dampen the impact of shocks and foreign business cycles and to preempt the possibility of having a balance of payments crisis. However, they also engender unpredictability as a result of their dynamism.

2.4.2 The Fixed Exchange Rate

A fixed exchange rate system, or pegged exchange rate system, is a currency system in which governments try to maintain a currency value that is constant against a specific currency or good. In a fixed-exchange-rate system, a country's government decides the worth of its currency in terms of either a fixed weight of an asset, another currency, or a basket of other currencies. The central bank of a country remains committed at all times to buy and sell its currency at a fixed price. To ensure that a currency will maintain its "pegged" value, the country's central bank maintains reserves of foreign currencies and gold. They can sell these reserves to intervene in the foreign exchange market to make up excess demand or take up the excess supply of the country's currency. The most famous fixed rate system is the gold standard, where a unit of currency is pegged to a specific measure of gold. Regimes also peg to other currencies. These countries can

either choose a single currency to peg to, or a “basket” consisting of the currencies of the country’s major trading partners.

2.4.3 The Pegged Float Exchange Rate

Pegged floating currencies are pegged to some band or value, which is either fixed or periodically adjusted. These are a hybrid of fixed and floating regimes. There are three types of pegged float regimes:

- *Crawling bands*: The market value of a national currency is permitted to fluctuate within a range specified by a band of fluctuation. This band is determined by international agreements or by unilateral decisions by a central bank. The bands are adjusted periodically by the country’s central bank. Generally, the bands are adjusted in response to economic circumstances and indicators.
- *Crawling Pegs*: A crawling peg is an exchange rate regime, usually seen as a part of fixed exchange rate regimes that allow gradual depreciation or appreciation in an exchange rate. The system is a method to fully utilize the peg under the fixed exchange regimes, as well as the flexibility under the floating exchange rate regime. The system is designed to peg at a certain value but, at the same time, to “glide” in response to external market uncertainties. In dealing with external pressure to appreciate or depreciate the exchange rate (such as interest rate differentials or changes in foreign exchange reserves), the system can meet frequent but moderate exchange rate changes to ensure that the economic dislocation is minimized.
- *Pegged with horizontal bands*: This system is similar to crawling bands, but the currency is allowed to fluctuate within a larger band of greater than one percent of the currency’s value.

2.5 Forex terminology you should be familiar with

As in any new skill that you learn, you need to learn the terminology especially if you wish to win your investment activities. You must know certain terms like the back of your hand before making your first trade.

2.5.1 Major and Minor Currencies

The eight most frequently traded currencies (USD, EUR, JPY, GBP, CHF, CAD, NZD, and AUD) are called the major currencies or the "majors" and they are the most liquid. All other currencies are referred to as minor currencies.

2.5.2 Base Currency

The base currency is the first currency in any currency pair. The currency quote shows how much the base currency is worth as measured against the second currency. For example,

*USD/ZAR rate equals **14.7328** then one USD is worth **ZAR 14.7328.***

In the forex market, the U.S. dollar is normally considered the "base" currency for quotes, meaning that quotes are expressed as a unit of 1 USD per the other currency quoted in the pair. The primary exceptions to this rule are the British pound, the euro, and the Australian and New Zealand dollar.

2.5.3 Quote Currency

The quote currency is the second currency in any currency pair. This is frequently called the pip currency and any unrealized profit or loss is expressed in this currency.

2.5.4 Pip

A pip is the smallest unit of price for any currency. Nearly all currency pairs consist of five significant digits and most pairs have the decimal point immediately after the first digit, that is, EUR/USD equals 1.2538. In this instance, a single pip equals the smallest change in the fourth decimal place - that is, 0.0001. Therefore, if the quote currency in any pair is USD, then one pip always equals 1/100 of a cent. Notable exceptions are pairs that include the Japanese yen where a pip equals 0.01.

2.5.5 Pipette

One-tenth of a pip. Some brokers quote fractional pips, or pipettes, for added precision in quoting rates. For example, if EUR/USD moved from 1.3215**6** to 1.3215**8**, it moved 2 pipettes.

2.5.6 Bid Price

The bid is the price at which the market is prepared to buy a specific currency pair in the forex market. At this price, the trader can sell the base currency. It is shown on the left side of the quotation.

For example, *in the quote USD/ZAR 14.7328/95, the bid price is 14.7328. This means you sell one US Dollar for 14.7328 ZAR.*

2.5.7 Ask/Offer Price

The ask/offer is the price at which the market is prepared to sell a specific currency pair in the forex market. At this price, you can buy the base currency. It is shown on the right side of the quotation.

For example, *in the quote USD/ZAR 14.7328/95, the selling price is 14.7395 this means you can Sell USD 1.00 for 14.7395 ZAR. The asking price is also called the offer price.*

2.5.8 Bid/Ask Spread

The spread is the difference between the bid and the asking price. The "big figure quote" is the dealer expression referring to the first few digits of an exchange rate. These digits are often omitted in dealer quotes. For example, the USD/ZAR rate might be 14.7328/14.7395, but would be quoted verbally without the first four digits as "27/95." In this example, USD/ZAR has a 67-pip spread.

2.5.9 Quote Convention

Exchange rates in the forex market are expressed using the following format Base currency / Quote currency = Bid / Ask

2.5.10 Transaction Cost

The critical characteristic of the bid/ask spread is that it is also the transaction cost for a round-turn trade. Round-turn means a buy (or sell) trade and an offsetting sell (or buy) trade of the same size in the same currency pair. For example, in the case of the USD/ZAR rate of 14.7328/14.7395, the transaction cost is sixty-seven pips. The formula for calculating the transaction cost is:

*Transaction cost (**spread**) = Ask Price - Bid Price*

2.5.11 Cross Currency

A cross-currency is any pair in which neither currency is the U.S. dollar. These pairs exhibit erratic price behaviour since the trader has, in effect, initiated two USD trades. For example, initiating a long (buy) EUR/GBP is equivalent to buying a EUR/USD currency pair and selling GBP/USD. Cross-currency pairs frequently carry a higher transaction cost.

2.5.12 Margin

When you open a new margin account with a forex broker, you must deposit a minimum amount with that broker. This minimum varies from broker to broker and can be as low as USD 100 to as high as USD 100,000. Each time you execute a new trade, a certain percentage of the account balance in the margin account will be set aside as the initial margin requirement for the new trade based upon the underlying currency pair, its current price, and the number of units (or lots) traded. The lot size always refers to the base currency.

2.5.13 Leverage

This is the ratio of the amount of capital used in a transaction to the required security deposit (margin). It is the ability to control large dollar amounts of a security with a relatively small exchange rates amount of capital. Leveraging varies dramatically with different brokers, ranging from 2:1 to 500:1.

2.6 Basic Principles in Forex Trading

2.6.1 Quantify Your Risk Capital

Calculate the risk involved in the trading process. If the chances of profit are lower in comparison to the profit to gain, stop trading. You may want to use a trading calculator to measure the risks more effectively. Many of the important aspects of money management proceed from this key value.

2.6.2 Avoid Trading Too Aggressively

Trading too aggressively is perhaps the biggest mistake new traders make. If a small sequence of losses would be enough to eradicate most of your risk capital, it suggests that each trade has too much risk.

2.6.3 Be Realistic

One of the reasons that new traders are overly aggressive is because their expectations are not realistic. They may think that aggressive trading will help them make a return on their investment more quickly. However, the best traders make steady returns.

2.6.4 Admit When You Are Wrong

The golden rule of trading is to run your profits and cut your losses. It's essential to exit quickly when there's clear evidence that you have made a bad trade. It's a natural human tendency to try and turn a bad situation into a good situation, but it's a mistake in FX trading. Here's why – one cannot control the market.

2.6.5 **Prepare for the Worst** (Past Performance is Not Indicative of Future Results)

We cannot know the future of a market, but we have plenty of evidence from the past. What has happened before may not be repeated, but it does show what is possible. Therefore, it's important to look at the history of the currency pair you are trading. Think about what action you would need to take to protect yourself if a bad scenario were to happen again. Do not underestimate the chances of price shocks occurring – you should have a plan for such a scenario.

2.6.6 Envisage Exit Points Before Entering a Position

Think about what levels you are aiming for on the upside, and what level of loss is sensible to withstand on the downside. Doing so will help you to maintain your discipline in the heat of the trade. It will also encourage you to think in terms of risk versus reward.

2.6.7 Use Stop-losses

Using stop-losses for every trade position you initiate is a good money management tip. Stop-loss orders shield your investment from unexpected shifts in the market. Since there is always the possibility of a loss, set your stop-loss order not to exceed more than 2% of your trading balance for any given trade.

2.6.8 Don't Trade on Tilt

At some point, you may suffer a bad loss or a burn through a substantial portion of your risk capital. There is a temptation after a big loss to try and get your investment back with the next trade. But here's a problem. Increasing your risk when your risk capital has been stressed, is the worst time to do it. Instead, consider reducing your trading size in a losing streak, or taking a break until you can identify a high-probability trade. Always stay on an even keel, both emotionally and in terms of your position sizes.

2.6.9 Respect and Understand Leverage

Leverage offers the opportunity to magnify profits made from the risk capital you have available, but it also increases the potential for risk. It's a useful tool, but it is very important to understand the size of your overall exposure.

2.7 A typical Exchange Rate Board in a Bank

Chapter 3: The Foreign Exchange Market

Learning outcomes

By the end of this chapter, you should be able to:

- Define foreign exchange markets.
- Identify the functions of the foreign exchange market and its characteristics.
- Outline the forex market players/participants.
- Understand the derived from forex trading.
- Differentiate between different currency quoting pairs.
- Identify a bid price, offer/ask price, and calculate the spread thereon.
- Identify the different forex trading orders.
- Clearly illustrate the various types of transactions in the forex market.
- Outline the eleven determinates of the foreign exchange rate.
- Define Interest Rate Parity and be able to calculate Forward Rates.
- Familiarise with trading strategy and the common trading time frames.
- Highlight the major risks inherent in the forex market, and the strategies to manage them.

The foreign exchange market refers to the international network of major foreign exchange dealers engaged in high-volume trading around the world. The market for the sale and purchase of currencies is an over the- counter market: there is no organized exchange on which currencies are

traded. The largest players in the market are commercial banks. These banks typically provide two-way quotes for several currencies. They will quote a bid rate for buying a particular currency as well as an asking rate for selling the currency.

Unlike other financial markets like the Johannesburg Stock Exchange, the forex spot market has neither a physical location nor a central exchange. The forex market is considered an Over-the-Counter (OTC), or "Interbank", market since the entire market is run electronically, within a network of banks, continuously over 24-hours. This means that the spot forex market is spread all over the globe with no central location. They can take place anywhere, even at the top of Mt. Fuji! The forex OTC market is by far the biggest and most popular financial market in the world, traded globally by a large number of individuals and organizations. In the OTC market, participants determine whom they want to trade with depending on trading conditions, the attractiveness of prices, and the reputation of the trading counterpart.

3.1 Functions of Foreign Exchange Market

3.1.1 Transfer of Purchasing Power

The primary function of a foreign exchange market is the transfer of purchasing power from one country to another and from one currency to another. The international clearing function performed by foreign exchange markets plays a very important role in facilitating international trade and capital movement.

3.1.2 Provision of credit

The credit function performed by foreign exchange markets also plays a very important role in the growth of foreign trade, for international trade depends to a great extent on credit facilities. Exporters may get pre-shipment and post-shipment credit. Credit facilities are available also for importers. The Eurodollar market has emerged as a major international credit market.

3.1.3 Provision of Hedging Facilities

The other importance of the foreign exchange market is to provide hedging facilities. Hedging refers to covering of the foreign trade risks, and it provides a mechanism to exporters and importers to guard themselves against losses arising from fluctuations in exchange rates.

3.2 Characteristics of the Foreign Currency Exchange Market

3.2.1 Lower trading cost

In the forex market, the lower trading cost has made it possible for even small, individual investors to make decent profits from trading. With lower costs, the possible losses are much lower. You will discover that forex trading has no commission fees unlike in other

investments. The forex trading cost is limited to the spread or the difference between the buying and selling prices for a particular currency pair.

3.2.2 24-hour trading opportunity 5 days a week

You have plenty of opportunities to execute trades and sufficient time to make adjustments whenever and where ever such opportunities present themselves. Trading the foreign currency exchange market opening on Monday, 8 am Australian time (which is 5 pm Sunday New York time). It continues nonstop until Friday, 4 pm New York time.

3.2.3 Highly leveraged market

You are allowed to trade on margins or technically on borrowed money with forex. You get more value for your money as the returns can be magnified a hundredfold. However, always remember that there always two sides of the coin when it comes to leverage meaning it can also increase your losses.

3.2.4 Excellent transparency

Forex trading is a transparent process because the forex trader has full access to market data and information that are necessary to achieve successful transactions. The excellent transparency that traders have more control over investments and decide what to do based on the available information.

3.2.5 Access advantage in forex

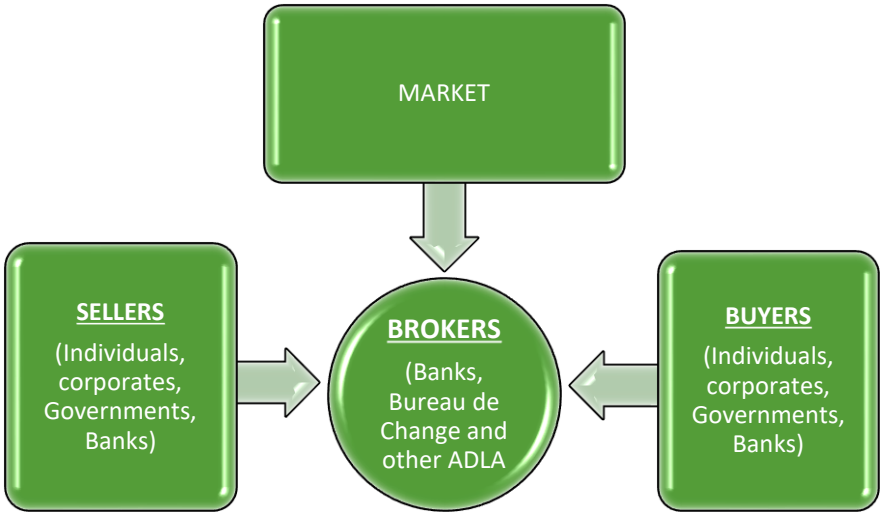
You can access the foreign currency exchange market and your trading account from anywhere using an internet connection without difficulty and trade from anywhere you may happen to be. With other financial markets, you need to be physically present to execute a trade.

3.2.6 Superior liquidity

In a forex market, traders are free to buy and sell currencies of their choosing. The superior liquidity of the forex market allows traders to easily exchange currencies without affecting the prices of currencies being traded.

3.3 Market Players / Participants

Now that you know the overall structure of the forex market, let's delve in a little deeper to find out who exactly these people in the ladder are. It is essential for you that you understand the nature of the spot forex market and who are the main players. Until the late 1990s, only the "big guys" could play this game. The initial requirement was that you could trade only if you had about ten to fifty million bucks to start with! Forex was originally intended to be used by bankers and large institutions, and not by us "little guys." However, because of the rise of the internet, online forex trading firms are now able to offer trading accounts to "retail" traders like us.



Forex brokers allow buyers and sellers access to the foreign exchange market for currencies. Most brokers service retail clients, though larger banking firms service institutional clients as well. Forex brokers allow clients to trade with very substantial leverage. Forex brokers make money primarily on the bid-ask spread but may have other ways to do so as well.

3.3.1 Banks

Banks are the major players in the market. They buy and sell currencies for their clients. They may also operate on their own. Since the forex spot market is decentralized, it is the largest bank in the world that determine the exchange rates. Based on the supply and demand for currencies, they are generally the ones that make the bid/ask spread that we all love (or hate, for that matter). These large banks, collectively known as the interbank market, take on a significant amount of forex transactions each day for both their customers and themselves. For smaller transactions, the intermediation of foreign exchange brokers may be sought. A couple of these super banks include UBS, Barclays Capital, Deutsche Bank, and Citigroup. You could say that the interbank market is THE foreign exchange market.

3.3.2 Corporates

Companies take part in the foreign exchange market to do business. For instance, BMW must first exchange its ZAR for the German Deutsch Marks when purchasing automotive components from Germany for their vehicle plants. Since the volume, the trade is much smaller than those in the interbank market, this type of market player typically deals with commercial banks for their transactions. They may also buy or sell currencies to speculate or trade-in currencies to the extent permitted by the exchange control regulations. They operate by placing orders with the commercial banks. Mergers and acquisitions (M&A) between large companies can also create currency exchange rate fluctuations. In international cross-border M&As, a lot of currency conversations happens that could move prices around.

3.3.3 Governments and Central Banks

Governments and central banks, such as the South African Reserve Bank, and the Federal Reserve, are regularly involved in the forex market too. Just like companies, national governments participate in the forex market for their operations, international trade payments, and handling their foreign exchange reserves. Meanwhile, central banks affect the forex market when they adjust interest rates to control inflation. By doing this, they can affect currency valuation. There are also instances when central banks intervene, either directly or verbally, in the forex market when they want to realign exchange rates. Sometimes, central banks think that their currency is priced too high or too low, so they start massive sell/buy operations to alter exchange rates.

3.3.4 The Retail Forex Market

Retail foreign exchange trading is a small segment of the larger foreign exchange market where individuals speculate on the exchange rate between different currencies. This segment has developed with the advent of dedicated electronic trading platforms and the internet, which allows individuals to access the global currency markets. The retail forex market is primarily made up of individual speculators that trade on margin deposited in a trading account with an online forex broker using an electronic trading platform like MetaTrader, for example. These traders tend to be speculators that bank on short-term movements in currency pairs to make a profit. The number of speculators typically increases as market volatility increases.

In the retail currency exchange market, different buying and selling rates will be quoted by money dealers. Most trades are to, or from the local currency. The buying rate is the rate at which money dealers will buy foreign currency, and the selling rate is the rate at which they will sell that currency. Direct Market Access displays the best bid and offers the price available for a particular market, plus further prices on either side of the order book. Individuals then place an order, and brokers instantaneously conduct a margin check to ensure one has sufficient funds to cover the margin on their proposed trade. If the margin check is satisfied the broker places an order in the market and, at the same time, creates a parallel CFD between the individuals and the broker.

In addition to individual traders, retail market participants also include tourists, travelers, and students that travel or study outside of the country of origin. The great majority of retail forex participants typically trade currencies online through one of many online forex brokers and Introducing brokers. These retail forex market participants typically trade in small amounts that can range from micro to standard lot sizes, with the standard lot size usually consisting of 100,000 units of the base currency in a currency pair.

3.4 Foreign Currency Trading Platform

A currency trading platform is a software interface provided by currency brokers to their customers for executing buy and sell orders in the Forex markets. This may be an online, web-based portal, mobile app, a standalone downloadable program, or any combination of the three. MetaTrader 4 (MT4) is nearly a defacto standard among forex trading platforms. This platform is widely used

among retail traders, so much so that many brokers that offer their platforms also offer MT4 integration so that those retail traders familiar with the platform will have the ability to migrate their tools to the new brokerage with ease.

3.5 Advantages of Forex Trading

If you are an insider who has great knowledge of this industry, then you can play well and make a huge profit. But if you lack knowledge or expertise, then the chances of failures are higher in this industry. There are many benefits of trading forex that you can get from trading**:**

3.5.1. High liquidity

Forex is a huge market because of which it is exceptionally liquid. It is the most sought-after ability that can convert an asset into cash speedily. Through the forex trading, you can move a large amount of money in less available time at minimum cost into and out of foreign currency. You can take benefit of it with a single click through which you can trade the currency. The best thing is you never feel like stuck while trading. You can even set up a trading platform online through which it can be managed automatically whether you are building a profit or want to stop when you are losing.

3.5.2 Leverage

Leverage is the most important feature of forex trading. That means you have to raise only a minimum amount as an opening deposit to make an entry in the trading world. It gives you the ability to make a profit and as well as keep risk at a minimum capital level. You can also increase your potential to making a profit if the market favours you and control if it goes against you through the margined trading. Keep in mind that increased leverage boost profits as well as losses too. Also, market change can go against you, and your losses can surpass the opening amount because of quick movement in the prices.

3.5.3 Forex market opens for 24 hours

Forex market never sleeps, so it is so amazing for those traders who like to trade casually while having their job. You can choose the most convenient time according to your need. Some traders like to trade in the morning, at noon, and at night. Enjoy 24-hour duration at any time anywhere in the world.

3.5.4. Less-to-no barriers to make an entry

If you are thinking that you require a million or two for making an entry as a currency trader, and then correct it yourself as this is not true. Remember that online brokers offer micro and mini trading accounts, with a minimal cost of opening like R250. Try to keep an initial amount with the lowest because it is beneficial for those people who do not have lots of trading capital at the start. They can enjoy and get the outcome of forex trading.

3.5.5 Profit potential from increasing and decreasing prices

The forex market has no limitations to steer trading. It means that if you know currency is going to increase in its value, you can buy it quickly. Likewise, if the currency rate is going to be decreased in its value, you can sell it immediately.

3.5.6 No one can control the forex market

The best thing about forex trading and its industry is that nobody can control it for quite long. It is a huge market and has many members, so controlling or influencing the market price by a single entity is difficult.

3.5.7. No middlemen

Currency exchange allows you to trade directly with the market that is liable for setting prices of your chosen currency pair. You do not have to worry about with the middleman in this industry.

3.6 Disadvantages of Forex Trading

The biggest disadvantages of the forex market are that it is fast and volatile which means that you can make money fast; the downside is that you can lose money just as fast as well. Currency values can change without warning which is making it very difficult to accurately predict the forex market movements and where to invest your money**:**

3.6.1 Low Transparency

This is one of the biggest disadvantages of the foreign exchange market. Due to the decentralized and de-regularized nature of the foreign exchange market, it is dominated by brokers. And you have to trade against professionals. A trader might not have any control over how his trade-order gets fulfilled, but you may not get the best price or may get limited views on trading quotes as furnished by your selected broker.

3.6.2 Price Determination Process

The process of price determination of foreign currency is often believed to be complex because of the composite price determination process. The fluctuations in exchange rates are influenced by multiple reasons and factors. The international politics and economy influence the rate of the currency the most, which creates uncertainty of the price.

3.6.3 No Centralized Exchange

Unlike stocks or futures, the spot Forex market does not have any centralized exchange or clearinghouse. Alternatively, each broker acts as its exchange and the broker effectively becomes the market maker. This provides an opportunity to abuse on the part of the broker or worse. Because of the absence of a centralized exchange, we also see price variations from broker to broker.

3.6.4 Self-Directed Learning Curve

While there is an advantage of getting tons of learning tools and materials available at no cost, it also implies a risk. In the stock market, a trader may get professional assistance from portfolio managers, trade advisors, and relationship managers. Contrary to that, Forex traders have to trade on their own with little or no assistance.

3.7 Settlement of Foreign Exchange Transactions

Foreign exchange markets make extensive use of the latest developments in telecommunications for transmitting as well as settling foreign exchange transaction, Banks use the exclusive network SWIFT to communicate messages and settle the transactions. SWIFT is an acronym for Society for Worldwide Interbank Financial Telecommunications. It is a communications network for international financial market transactions linking effectively more than 25,000 financial institutions throughout the world who have been allotted bank identified codes. The messages are transmitted from country to country via central interconnected operating centres. The member countries are connected to the centre through regional processors in each country. The local banks in each country reach the regional processors through the national networks.

The SWIFT System enables the member banks to transact among themselves quickly;

(i) International payments
(ii) Statements
(iii) Other messages connected with international banking.

Transmission of messages takes place within seconds, and therefore this method is economical as well as time-saving.

3.8 Foreign Currency Codes

Every currency has a three-character code that has been assigned by the International Standards Organization (ISO). The codes for some of the globally important currencies are given in the table below:

Symbols for Major Currencies

Country	Currency	Symbol
Australia	Dollar	AUD
Brazil	Real	BRL
Canada	Dollar	CAD
China	Renminbi Yuan	CNY
Czech Republic	Koruna	CAK
European Monetary Union	Euro	EUR
Hong Kong	Dollar	HKD

Hungary	Forint	HUF
India	Rupee	INR
Israel	Shekel	ILS
Japan	Yen	JPY
Malaysia	Ringgit	MYR
Mexico	Peso	MXN
New Zealand	Dollar	NZD
Norway	Krone	NOK
Poland	Zloty	PLN
Russia	Rouble	RUB
Singapore	Dollar	SGD
South Africa	Rand	ZAR
Sweden	Krona	KRW
Switzerland	Franc	SEK
Thailand	Baht	CHF
UK	Pound Sterling	GBP
USA	Dollar	USD

So currency symbols always have three letters, where the first two letters identify the name of the country and the third letter identifies the name of that country's currency. Take NZD for instance. NZ stands for New Zealand, while D stands for dollar.

3.8.1 Major Currency Pairs

The currencies included in the chart below are called the "majors" because they are the most widely traded ones. These pairs all contain the U.S. dollar (USD) on one side and are the most frequently traded. The majors are thus the most liquid and widely traded currency pairs in the world.

Pair	Countries
EUR/USD	Euro Zone / United States
USD/JPY	The United States / Japan
GBP/USD	United Kingdom / United States
USD/CHF	The United States / Switzerland
USD/CAD	The United States / Canada
AUD/USD	Australia / United States
NZD/USD	New Zealand / United States

3.8.2 Major Cross-Currency Pairs or Minor Currency Pairs

Currency pairs that don't contain the U.S. dollar (USD) are known as cross-currency pairs or simply as the "crosses." Major crosses are also known as "minors." The most actively traded crosses are derived from the three major non-USD currencies: EUR, JPY, and GBP.

Euro Crosses

Pair	Countries
EUR/CHF	Euro Zone / Switzerland
EUR/GBP	Euro Zone / United Kingdom
EUR/CAD	Euro Zone / Canada
EUR/AUD	Euro Zone / Australia
EUR/NZD	Euro Zone / New Zealand

Pound Crosses

Pair	Countries
GBP/CHF	The United Kingdom / Switzerland
GBP/AUD	The United Kingdom / Australia
GBP/CAD	The United Kingdom / Canada
GBP/NZD	The United Kingdom / New Zealand

Other Crosses

Pair	Countries
AUD/CHF	Australia / Switzerland
AUD/CAD	Australia / Canada
AUD/NZD	Australia / New Zealand
CAD/CHF	Canada / Switzerland
NZD/CHF	New Zealand /Switzerland
NZD/CAD	New Zealand / Canada

Exotic pairs are made up of one major currency paired with the currency of an emerging economy, such as Brazil, Mexico, or Hungary. The chart below contains a few examples of exotic currency pairs. Do you want to take a shot at guessing what those other currency symbols stand for?

Exotic Pairs

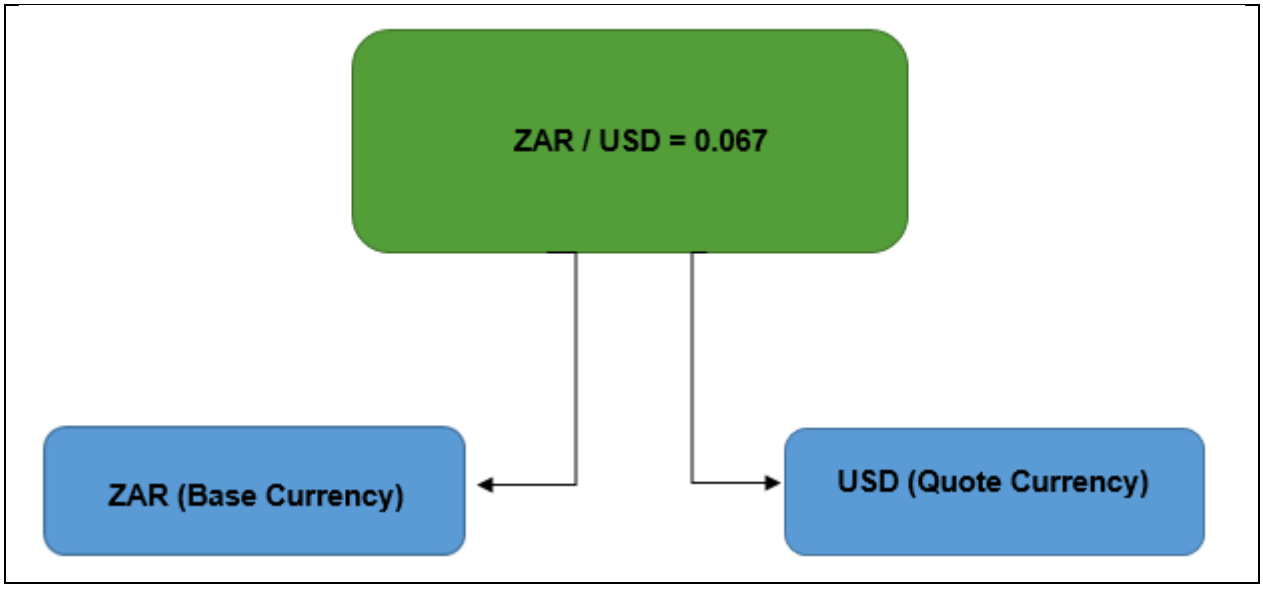
Pair	Countries

USD/HKD	United States / Hong Kong
USD/SGD	The United States / Singapore
USD/ZAR	The United States / South Africa
USD/THB	The United States / Thailand
USD/MXN	The United States / Mexico
USD/DKK	The United States / Denmark
USD/SEK	The United States / Sweden

Depending on your forex broker, you may see the above exotic pairs so it's good to know what they are. Keep in mind that these pairs aren't as heavily traded as the "majors" or "crosses," so the transaction costs associated with trading these pairs are usually bigger. It isn't unusual to see spreads that are two or three times bigger than that of EUR/USD or USD/JPY. So if you want to trade exotics pairs, remember to factor this in your decision.

3.9 Foreign Exchange Quoting

Currencies are always quoted in pairs, such as ZAR/USD or USD/GBP. The reason they are quoted in pairs is that in every foreign exchange transaction, you are simultaneously buying one currency and selling another. Here is an example of a foreign exchange rate for the South African rand versus the U.S. dollar:



The first listed currency to the left of the slash (“/”) is known as the **base** currency, in this example, the South African Rand, while the second one on the right is called the **counter** or **quote** currency our example, the U.S. dollar.

3.9.1 Long/Short

First, one should determine whether they want to buy or sell. If one wants to buy (which means buy the base currency and sell the quote currency), you want the base currency to rise in value and then you would sell it back at a higher price. In the trader's talk, this is called "going long" or taking a "long position." Just remember: **long = buy.**

If you want to sell (which means sell the base currency and buy the quote currency), you want the base currency to fall in value and then you would buy it back at a lower price. This is called "going short" or taking a "short position". Just remember: **short = sell.**

All forex quotes are quoted with two prices: the bid and ask. For the most part, the **bid** is lower than the **asking** price. The **bid** is the price at which your broker is willing to buy the base currency in exchange for the quote currency. This means the bid is the best available price at which you (the trader) will sell to the market. The **ask** is the price at which your broker will sell the base currency in exchange for the quote currency. This means the asking price is the best available price at which you will buy from the market. Another word for **ask** is the **offer price.**

The difference between the bid and the asking price is popularly known as the **spread.**

3.9.2 Two Way Quotations

Typically, the quotation in the interbank market is a two-way quotation. It means the rate quoted by the market maker will indicate two prices. One at which it is willing to buy the foreign currency, and the other at which it is willing to sell the foreign currency. For example, a South African bank may quote its rate for USD as under:

USD 1 = ZAR 14.83/15.20

More often, the rate would be quoted as 14.83/15.20

3.9.3 Direct Quotation.

It will be obvious that the quoting bank will be willing to buy dollars at R14.83 and sell dollars at R15.20. If one dollar bought and sold, the bank makes a gross profit of R0.37. In a foreign exchange quotation, the foreign currency is the commodity that is being bought and sold. The exchange quotation which gives the price for the foreign currency in terms of the domestic currency is known as a direct quotation. In a direct quotation, the quoting bank will apply the rule: Buy low; Sell high.

3.9.4 Indirect quotation

There is another way of quoting in the foreign exchange market. The South African bank quotes the rate for a dollar as*R 100 = USD 6.74*

This type of quotation which gives the quantity of foreign currency per unit of domestic currency is known as an indirect quotation. In this case, the quoting bank will receive USD 6.74 per R 100 while buying dollars and give away USD 6.57 per R 100 while selling dollars. In another world, he will apply the rule: Buy high - Sell low.

3.10 Explicit and Implicit Forex Transaction Costs

There are three commission structures used by Forex brokers: a fixed spread, a variable spread, and/or a commission charge based on a percentage of the spread. There is a difference between explicit and implicit trading costs. To the first group belong spreads, commissions, and roll-overs which are dependent on volume traded and equity, and usually relatively easy to calculate. To the group of implicit costs belong things like slippages, delays, requotes, and even missed trading opportunities.

Some Forex brokers don't charge a commission, so the spread is how they make money. The lower the number of pips required per trade by the broker is, the greater the hypothetical profit that the trader makes is. Comparing pip spreads of half a dozen brokers will reveal different transaction costs. In the case of a broker who offers a variable spread, you can expect a spread that will, at times, be as low as 1 pip or as high as 7 pips on the most major pairs, depending on the level of market volatility. While market makers provide two-way pricing to customers throughout the day, these prices can be quoted on a fixed basis, meaning that they do not move throughout the day. But they can also use a dynamic spread system, which means the prices change as the liquidity in certain pairs change.

A lack of liquidity in the markets or very volatile market conditions can force the broker to apply a slippage on the pricing. Slippage, also called "requote", occurs when your trade is executed away from the price you were offered when you end up paying more pips than the average spread. This is perhaps a cost that one doesn't want to bear if they are trading very short term or if they trade based on economic data releases (news-trading). Other brokers, may also charge a small commission, usually in the order of two-tenths of one pip. Whether you should pay a small commission depends on what else the broker is offering. For example, the broker may pass your orders on to a large market maker conglomerate. You might choose a broker with such an arrangement, if you look for very tight spreads only larger investors can otherwise get.

An important and not very discussed aspect when considering trading costs is the rollover charges. These are determined by the difference between the interest rate of the country of the base currency and the interest rate of the other country. The greater the interest rate differential between the two currencies, the greater the rollover charge. However, before one jumps in and choose a broker based on the type of commission structure, consider the total broker's package, otherwise one may be sacrificing other benefits. For example, some brokers may offer excellent

spreads but their platforms may not have that personal preference feature one needs for trading to work.

3.11 Margin Trading

When you go to the grocery store and want to buy an egg, in some stores you can't just buy a single egg; they come in dozens or "lots" of 12. In forex, it would be just as foolish to buy or sell 1 euro, so they usually come in "lots" of 1,000 units of currency (Micro), 10,000 units (Mini), or 100,000 units (Standard) depending on the broker and the type of account you have.

Margin trading is simply the term used for trading with borrowed capital. This is made possible by opening US$1,250 or US$50,000 positions with as little as US$25 or US$1,000. You can conduct relatively large transactions, very quickly and cheaply, with a small amount of initial capital. This is explained as follows;

- You believe that signals in the market are indicating that the British pound will go up against the U.S. dollar.
- You open one standard lot (100,000 units GBP/USD), buying with the British pound at a 2% margin and wait for the exchange rate to climb. When you buy one lot (100,000 units) of GBP/USD at 1.50000, you are buying 100,000 pounds, which is worth US$150,000 (100,000 units of GBP * 1.50000).

  If the margin requirement was 2%, then US$3,000 would be set aside in your account to open up the trade (US$150,000 * 2%). You now control 100,000 pounds with just US$3,000.

- Your predictions come true and you decide to sell. You close the position at 1.50500. You earn about $500.

Your Actions	**GBP**	**USD**
You buy 100,000 pounds at the exchange rate of **1.5000**	+100,000	-150,000
You blink for two seconds and the GBP/USD exchange rates rise to **1.5050** and you sell.	-100,000	+150,500
You have earned a **profit of $500**.	0	+500

When you decide to close a position, the deposit that you originally made is returned to you and a calculation of your profits or losses is done. This profit or loss is then credited to your account.

3.12 Types of Forex Trading Orders

An order is an instruction to deal if the market reaches a certain level. different types of orders can be placed in the foreign exchange market. When trading, one needs to be sure that they know which type of orders their broker accepts. Different brokers accept different types of orders. There are some basic order types that all brokers provide and some others that may sound weird.

3.12.1 Market order

A market order is an order to buy or sell at the best available price. For example, the bid price for USD/ZAR is currently at 14.7326 and the asking price is at 14.7411 If you wanted to buy USD/ZAR at the market, then it would be sold to you at the asking price of 14.7411. You would click buy and your trading platform would instantly execute a buy order at that exact price.

3.12.2 Limit Entry Order

A limit entry is an order placed to buy below the market or sell above the market at a certain price. For example, USD/ZAR is currently trading at 14.7368. You want to go short if the price reaches 14.7523. You can either sit in front of your monitor and wait for it to hit 14.7523 (at which point you would click a sell market order), or you can set a sell limit order at 14.7523 (then you could walk away from your computer to attend your ballroom dancing class). If the price goes up to 14.7523, your trading platform will automatically execute a sell order at the best available price. You use this type of entry order when you believe the price will reverse upon hitting the price you specified!

3.12.3 Stop-Entry Order

A stop-entry order is an order placed to buy above the market or sell below the market at a certain price. For example, USD/ZAR is currently trading at 14.7368 and is heading upward. You believe the price will continue with its direction if it hit 14.7405. You can do either one of these things: sit in front of your computer and buy at market when it hits 1.5060 OR set a stop-entry order at 14.7505. You use stop-entry orders when you feel that the price will move in one direction!

3.12.4 Stop-Loss Order

A stop-loss order is a type of order linked to trade to prevent additional losses if the price goes against you. REMEMBER THIS TYPE OF ORDER. A stop-loss order remains in effect until the position is liquidated or you cancel the stop-loss order. For example, you went long (buy) USD/ZAR at 14.6250. To limit your maximum loss, you set a stop-loss order at 14.6130. This means if you were dead wrong and USD/ZAR drops to 14.6100 instead of moving up, your trading platform would automatically execute a sell order at 14.6100 the best available price and close out your position for a 30-pip loss. Stop-losses are extremely useful if you don't want to sit in front of your monitor all day worried that you will lose all your money. You can simply set a stop-loss order on any open positions so you won't miss your basket weaving class or elephant polo game.

3.12.5 Trailing Stop

A trailing stop is a type of stop-loss order attached to a trade that moves as the price fluctuates. Let's say that you've decided to short USD/JPY at 90.80, with a trailing stop of 20 pips. This means that originally, your stop loss is at 91.00. If the price goes down and hits 90.50, your trailing stop would move down to 90.70. Just remember though, that your stop will STAY at this price. It will not widen if the price goes against you. Going back to the example, with a trailing stop of 20

pips, if USD/JPY hits 90.50, then your stop would move to 90.70. However, if the price were to suddenly move up to 90.60, your stop would remain at 90.70. Your trade will remain open as long as the price does not move against you by 20 pips. Once price hits your trailing stop, a stop-loss order will be triggered and your position will be closed.

3.13 Transactions in the Foreign Exchange Market

Currencies are exchanged through a wide variety of different instruments, and each one is governed by different rules and different strategies. Among these, the most popular ones are forex spot, futures, options, forwards and swaps.

3.13.1 Spot Market

The term spot exchange refers to the class of foreign exchange transactions which requires the immediate delivery or exchange of currencies on the spot. What's awesome about this market is its simplicity, liquidity, tight spreads, and round-the-clock operations. In practice, the settlement takes place within two days in most markets. The rate of exchange effective for the spot transaction is known as the spot rate and the market for such transactions is known as the spot market.

3.13.2 Forward Market

Forward transactions refer to an agreement between two parties, requiring the delivery at some specified future date of a specified amount of foreign currency by one of the parties, against payment in domestic currency to the other party, at the price agreed upon in the contract. The rate of exchange applicable to the forward contract is called the forward exchange rate and the market for forward transactions is known as the forward market. The foreign exchange regulations of various countries generally regulate the forward exchange transactions intending to curb speculation in the foreign exchange market. In some countries, commercial banks are permitted to offer forward cover only concerning genuine export and import transactions.

Forward exchange facilities are of immense help to exporters and importers as they can cover the risks arising out of exchange rate fluctuations by entering into an appropriate forward exchange contract. Regarding its relationship with spot rate, the forward rate may be at *par, discount, or premium.* If the forward exchange rate quoted is the exact equivalent to the spot rate at the time of making the contract the forward exchange rate is said to be *at par***.**

The forward rate for a currency, say the rand, is said to be *a premium* to the spot rate when one rand buys more units of another currency, say pula, in the forward than in the spot rate on a per annum basis. The forward rate for a currency, say the rand, is said to be *a discount* to the spot rate when one rand buys less pula in the forward than in the spot market. The discount is also usually expressed as a percentage deviation from the spot rate on a per annum basis.

3.13.3 Futures

Futures are contracts to buy or sell a certain asset at a specified price on a future date hence the name futures. While a futures contract is similar to a forward contract, there are several differences between them. While a forward contract is tailor-made for the client by his international bank, a futures contract has standardized features, the contract size and maturity dates are standardized. Futures can be traded only on an organized exchange and they are traded competitively. Margins are not required in respect of a forward contract but margins are required of all participants in the futures market and an initial margin must be deposited into a collateral account to establish a futures position.

3.13.4 Options

An option is a contract or financial instrument that gives the holder the right, but not the obligation, to sell or buy a given quantity of an asset as a specified price at a specified future date. A trader pays a premium to a Forex dealer for an option to buy or sell a currency at a specific strike price. If the exchange rate moves in the trader's favour before the option expires, she can exercise the option for a profit. If the exchange rate doesn't move the right way enough to cover the premium paid, the option will expire and the trader loses her money. Unlike stock options, the buyer of a Forex option contract may choose the strike price and expiration date.

3.13.5 Exchange-Traded Funds

An ETF could contain a set of stocks combined with some currencies, allowing the trader to diversify with different assets. These are created by financial institutions and can be traded like stocks through an exchange. Like forex options, the limitation in trading ETFs is that the market isn't open 24 hours. Also, since ETFs contain stocks, these are subject to trading commissions and other transaction costs.

3.14 Forex Option and Currency Trading Options

Forex options (also known as currency trading options) are securities that allow currency traders to realize gains without having to place an actual trade-in with the underlying currency pair. Forex options allow traders to pay a premium in exchange for the ability to profit from the moves of a currency block without holding or being held liable for that block. In this way, they can further leverage their currency trade and have the opportunity to magnify returns while limiting downside risk to the amount of premium paid.

3.14.1 Understanding Forex Option and Currency Trading Options

Because forex option and currency trading options contracts implement leverage, traders can profit from much smaller moves when using options contracts than a traditional retail forex trade would allow. When combining traditional positions with a forex option, hedging strategies such as

straddles strangles, and spreads can be used to minimize the risk of loss in a currency trade. While this sounds good, an important caveat is that option pricing is mostly fairly priced, meaning there is a slight bias in pricing towards the seller. This bias makes it unlikely that options will pay out more than they cost or lose over time. There are two types of options available to retail forex traders for currency option trading: standard (vanilla) put and call options and exotic options.

3.14.1.1 Vanilla Options

The call option gives the buyer the right to purchase a currency pair at a given exchange rate in the future. The put option gives the buyer the right to sell a currency pair at a given exchange rate in the future. Both the put and call options are a right to buy or sell, and not an obligation. If the current exchange rate puts the options out of the money, then the options will expire worthlessly.

3.14.1.2 Exotic Options

Exotic derivatives can also include single payment options trading (SPOT). SPOT options have a higher premium cost compared to traditional options, but they are easier to set and execute. A currency trader buys a SPOT option by inputting the desired scenario (e.g. "I think EUR/USD will have an exchange rate above 1.5205 15 days from now") and is quoted a premium. If the buyer purchases this option, the SPOT will automatically payout if the scenario occurs. Essentially, the option is automatically converted to cash.

Key Takeaways:

- Forex options allow traders to leverage currency moves, limit risk, and create higher potential gains.
- Option pricing favors the seller so purchase options rarely payout more than they cost over time.
- Two types of options are offered known as Vanilla and Exotic Options.

3.15 Forex Market Analysis

Forex analysis examines the changes in currency pair prices and attempts to isolate which direction prices are going and where they may go in the future. In the forex market, traders buy and sell currencies intending to make a profit. Banks, commercial companies, investment management firms, hedge funds, and traders use forex analysis to determine the best trade for a currency pair at any given time. Some forex analysis is manual; some is performed by computers with software that analyses historical data. Some traders use a combination of manual analysis and computer-driven analysis. There are three basic types of market analysis;

3.15.1 Technical Analysis

It relies on past price movement data to predict a currency pair's future value. Traders focus on charts of price movement and various analytical tools to evaluate a currency pair's strength or

weakness. In technical analysis, a trader examines the prices of specified currencies over time. In most cases, they will recognize repeated patterns, which they then use to predict the movement of the market. It rides on the adage, "History tends to repeat itself". That's basically what technical analysis is all about! If a price level held as key support or resistance in the past, investors will keep an eye out for it and base their trades around that historical price level. Technical analysts look for similar patterns that have formed in the past and will form trade ideas believing that price will act the same way that it did before. With automated technical analysis, computer software analyses the history of the currencies' price movement.

3.15.2 Fundamental Analysis

It relies on quantifying current factors or predicting future factors, that are affecting a country's economy. In fundamental analysis, investors examine factors such as a country's inflation rate, interest rates, Gross Domestic Product, and other economic indicators. Traders consider interest rates particularly important when making decisions. A higher interest rate will attract more investors, which, over time, will increase the value of that country's currency. Yet if interest rates are too high, that means inflation may be a problem. Inflation will erode a currency's value.

The idea behind this type of analysis is that if a country's current or future economic outlook is good, its currency should strengthen. The better shape a country's economy is, the more foreign businesses and investors will invest in that country. This results in the need to purchase that country's currency to obtain those assets.

3.15.3 Sentiment Analysis

It is based on how many people are buying or selling a particular currency, or their thoughts about which direction a currency will go. It is the feeling or tone of a market, also referred to as crowd psychology. When a trader uses sentiment to analyse the forex market they look for a particularly large amount of investment in a particular currency in one direction. With a large number of investors purchasing a given currency, the number of future sellers of that currency expands and the number of available buyers shrinks. This creates the potential for a price reversal, as eventually, all those buyers will need to sell.

3.16 Factors Determining Foreign Exchange Rates

3.16.1 Balance of Payments

Balance of Payments represents the demand for and supply of foreign exchange which ultimately determines the value of the currency. Exports, both visible and invisible, represent the supply side for foreign exchange. Imports, visible and invisible, create demand for foreign exchange. Put differently, export from the country creates demand for the currency of the country in the foreign exchange market. The exporters would offer to the market the foreign currencies they have

acquired and demand in exchange for the local currency. Conversely, imports into the country will increase the supply of the currency of the country in the foreign exchange market.

When the balance of payments of a country is continuously at a deficit, it implies that the demand for the currency of the country is lesser than its supply. Therefore, its value in the market declines. If the balance of payments is surplus continuously it shows that the demand for the currency in the exchange market is higher than its supply therefore the currency gains in value.

3.16.2 Inflation

Inflation in the country would increase the domestic prices of the commodities. With an increase in prices, exports may dwindle because the price may not be competitive. With the decrease in exports the demand for the currency would also decline; this in turn would result in the decline of the external value of the currency. It may be noted that the unit is the relative rate of inflation in the two countries that cause changes in exchange rates. If, for instance, both South Africa and Britain experience 10% inflation, the exchange rate between rand and pound will remain the same. If inflation in South Africa is 15% and in Britain, it is 10%, the increase in prices would be higher in South Africa than it is in Britain. Therefore, the rand will depreciate relative to the pound.

Empirical studies have shown that inflation has a definite influence on the exchange rates in the long run. The trend of exchange rates between two currencies has tended to hover around the basic rate discounted for the inflation factor. The actual rates have varied from the trend only by a small margin which is acceptable.

However, this is true only where there is no drastic change in the economy of the country. New resources found may upset the trend. Also, in the short run, the rates fluctuate widely from the trend set by the inflation rate. These fluctuations are accounted for by causes other than inflation.

3.16.3 Interest rates

The interest rate factor is a Monetary Policy measure with great influence on the short-term movement of capital. When the interest rate in a country rises, it attracts short term funds from other countries. This would increase the demand for the currency of the country and hence its value. Rising of interest rate may be adopted by a country due to tight money conditions or as a deliberate attempt to attract foreign investment. Whatever the intention, the effect of an increase in interest rate is to strengthen the currency of the country through a larger inflow of investment and reduction in the outflow of investments by the residents of the country.

3.16.4 Money Supply

Money Supply is also a Monetary Policy measure. An increase in the money supply in the country will affect the exchange rate by causing inflation in the country. It can also affect the exchange rate directly. An increase in money supply in the country relative to its demand will lead to large scale

spending on foreign goods and the purchase of foreign investments. Thus the supply of the currency in the foreign exchange markets is increased and its value declines. The downward pressure on the external value of the currency then increases the cost of imports and so adds to inflation. The effect of money supply on the exchange rate directly is more immediate than its effect through inflation. While in the long-run inflation seems to correlate exchange rate variations in a better way, in the short run exchange rates move more in sympathy with changes in the money supply. One explanation of how changes in money supply vary the exchange rate is this; the total money supply in the country represents the value of total commodities and services in the country. Based on this the outside world determines the external value of the currency. If the money supply is doubled, the currency will be valued at half the previous value to keep the external value of the total money stock of the country constant.

3.16.5 National Income

National income is a general Fiscal Policy measure that affects foreign exchange rates. An increase in national income reflects an increase in the income of the residents of the country. This increase in income increases the demand for goods in the country. If there is underutilized production capacity in the country, this will lead to an increase in production. There is a chance for growth in exports too. But more often it takes time for the production to adjust to the increased income. Where the production does not increase in sympathy with income rise, it leads to increased imports and increased supply of the currency of the country in the foreign exchange market. The result is similar to that of inflation a decline in the value of the currency. Thus, an increase in national income will lead to an increase in investment or consumption, and accordingly, its effect on the exchange rate will change. Here again, it is the relative increase in national incomes of the countries concerned that is to be considered and not the absolute increase.

3.16.6 Resource Discoveries

When the country can discover key resources, its currency gains in value. A good example can be the influence of oil on exchange rates. When the supply of oil from major suppliers, such as the Middle East, become insecure, the demand for the currencies of other countries that are self-sufficient in oil rises. The discovery of North Sea oil by Britain helped pound sterling to rise to over USD 2.40 from USD 1.60 in a couple of years.

3.16.7 Capital Movements

Many factors influence the movement of capital from one country to another. Short term movement of capital may be influenced by the offer of higher interest in a country. If the interest rate in a country rises due to an increase in bank rate or otherwise, there will be a flow of short-term funds into the country and the exchange rate of the currency will rise. The reverse will happen in case of a fall in interest rates. Bright investment climate and political stability may encourage portfolio investments in the country. This leads to a higher demand for currency and an upward trend in its

rate. Poor economic outlook may mean repatriation of the investments leading to decreased demand and lower exchange value for the currency of the country. The movement of capital is also caused by external borrowing and assistance. Large scale external borrowing will increase the supply of foreign exchange in the market. This will have a favorable effect on the exchange rate of the currency of the country. When repatriation of principal and interest starts the rate may be adversely affected.

3.16.8 Political Factors

Political stability induces confidence in the investors and encourages capital inflow into the country. This has the effect of strengthening the currency of the country. On the other hand, where the political situation in the country is unstable, it makes the investors withdraw their investments. The outflow of capital from the country would weaken the currency. Any news about a change in the government or political leadership or about the policies of the government would also have the effect of temporarily throwing out of gear the smooth functioning of the exchange rate mechanism.

3.16.9 Government Debt

Government debt is public debt or national debt owed by the central government. A country with huge government debt is less likely to acquire foreign capital, leading to inflation. Foreign investors will sell their bonds in the open market if the market predicts high government debt within a certain country. As a result, a decrease in the value of its exchange rate will follow.

3.16.10 Recession

When a country experiences a recession, its interest rates are likely to fall, decreasing its chances to acquire foreign capital. As a result, its currency weakens in comparison to that of other countries, therefore lowering the exchange rate.

3.16.11 Speculation

If a country's currency value is expected to rise, investors will demand more of that currency to make a profit shortly. As a result, the value of the currency will rise due to the increase in demand. With this increase in currency value, comes a rise in the exchange rate as well.

3.17 Interest Rate Parity and Forex

Interest rate parity (IRP) is the fundamental equation that governs the relationship between interest rates and currency exchange rates. The basic premise of interest rate parity is that hedged returns from investing in different currencies should be the same, regardless of the level of their interest rates.

There are two versions *of interest rate parity:*

1. Covered Interest Rate Parity - With covered interest rate parity, forward exchange rates should incorporate the difference in interest rates between two countries; otherwise, an

arbitrage opportunity would exist. In other words, there is no interest rate advantage if an investor borrows in a low-interest rate currency to invest in a currency offering a higher interest rate.

2. Uncovered Interest Rate Parity - Uncovered interest rate parity (UIP) states that the difference in interest rates between two countries equals the expected change in exchange rates between those two countries. Theoretically, if the interest rate differential between the two countries is 3%, then the currency of the nation with the higher interest rate would be expected to depreciate 3% against the other currency.

3.17.1 Calculating Forward Rates

Forward exchange rates for currencies are exchanged that anticipates the rate at a future point in time, as opposed to spot current exchange rates. An understanding of forwarding rates is fundamental to interest rate parity, especially as it pertains to arbitrage (the simultaneous purchase and sale of an asset to profit from a difference in the price).

The basic equation for calculating forward rates with the U.S. dollar as the base currency is:

$$\text{Forward Rate} = \text{Spot Rate} \times \frac{1 + \text{IRO}}{1 + \text{IRD}}$$

Where: IRO = Interest rate of an overseas country
IRD = Interest rate of the domestic country

Forward rates are available from banks and currency dealers for periods ranging from less than a week to as far out as five years and beyond. As with spot currency quotations, forwards are quoted with a bid-ask spread.

A currency with lower interest rates will trade at a forward premium concerning a currency with a higher interest rate. In the example shown above, the U.S. dollar trades at a forward premium against the Canadian dollar; conversely, the Canadian dollar trades at a forward discount versus the U.S. dollar

Example

Consider U.S. and Canadian rates as an illustration. Suppose that the spot rate for the Canadian dollar is presently 1 USD = 1.0650 CAD (ignoring bid-ask spreads for the moment). Using the above formula, the one-year forward rate is computed as follows:

$$1\ \text{USD} = 1.0650 \times \frac{1 + 3.64\%}{1 + 3.15\%} = 1.0700\ \text{CAD}$$

The difference between the forward rate and spot rate is known as swap points. In the above example, the swap points amount to 50. If this difference (forward rate minus spot rate) is positive, it is known as a *forward premium;* a negative difference is termed a *forward discount.*

Key Takeaways:

- Interest rate parity is the fundamental equation that governs the relationship between interest rates and currency exchange rates.
- The basic premise of interest rate parity is that hedged returns from investing in different currencies should be the same, regardless of the level of their interest rates.
- Parity is used by forex traders to find arbitrage or other trading opportunities.

3.18 Forex Trading Strategy

A forex trading strategy is a technique used by a forex trader or investor to determine whether to buy or sell a currency pair at any given time.

3.18.1 Basics of a Forex Trading Strategy

Forex trading strategies can be either manual or automated methods for generating trading signals. Manual systems involve a trader sitting in front of a computer screen, looking for trading signals and interpreting whether to buy or sell. Automated systems involve a trader developing an algorithm that finds trading signals and executes trades on its own. The latter systems take human emotion out of the equation and may improve performance.

Traders should exercise caution when purchasing off-the-shelf forex trading strategies since it is difficult to verify their track record and many successful trading systems are kept secret. A trading strategy includes a well-considered investing and trading plan that specifies investing objectives, risk tolerance, time horizon, and tax implications. Ideas and best practices need to be researched and adopted then adhered to. Planning for trading includes developing methods that include buying or selling stocks, bonds, ETFs, or other investments and may extend to more complex trades such as options or futures. Placing trades means working with a broker or broker-dealer and identifying and managing trading costs including spreads, commissions, and fees. Ideally, a trading strategy can be likened to a trading plan that takes into account various factors and exigencies for an investor. It consists of three stages: planning, placing trades, and executing trades. At each stage of the process, metrics relating to the strategy are measured and changed based on the change in markets.

3.18.2 Creating a Forex Trading Strategy

Many forex traders start with a simple trading strategy. For example, they may notice that a specific currency pair tends to rebound from a particular support or resistance level. They may then decide to add other elements that improve the accuracy of these trading signals over time.

For instance, they may require that the price rebound from a specific support level by a certain percentage or number of pips.

There are several different components to an effective forex trading strategy:

1. Selecting the Market: Traders must determine what currency pairs they trade and become experts at reading those currency pairs.
2. Position Sizing: Traders must determine how large each position is to control for the amount of risk taken in each trade.
3. Entry Points: Traders must develop rules governing when to enter a long or short position in a given currency pair.
4. Exit Points: Traders must develop rules telling them when to exit a long or short position, as well as when to get out of a losing position.
5. Trading Tactics: Traders should have set rules for how to buy and sell currency pairs, including selecting the right execution technologies.

Traders should consider developing trading systems that make it easy to automate rule-following. Also, these applications let trader's back-test trading strategies to see how they would have performed in the past.

3.18.3 Trading Time Frames

Before you enter into a position, you need to know – beforehand – when you are going to exit the market. A trader is not going to hold onto a position indefinitely, that's for sure. There are mainly four different types of trading time frames:

3.18.3.1 Scalping

This is the shortest time frame in trading; it exploits small changes in currency prices. It describes the ultra-rapid action of opening and closing of a position within a few seconds or minutes, to steal a few pips from each trade. The profit of the winning trade is small, while the number of such winning trades should be big enough so that these small profits can add up to a decent amount. Scalpers usually need to have access to the tightest spreads and fastest connection speeds possible, to carry out this bullet-speed trading with the tiny profits. They tend to do this many times a day to accumulate the little profits that are harvested. Losses must be limited such that one large loss does not wipe out the profits gained from many winning trades. Many forex market makers discourage this type of trading as they find it difficult to cover the opposite side of the transactions, given the fast speed and numerous orders entered into their systems.

3.18.3.2 Day trading

Day trading is one of the more popular types of trading, whereby traders open and close positions within a day. They also do not hold their positions overnight because of the added risk of not knowing if prices would change dramatically while they sleep. The holding period of their trades may range from minutes to hours. Day trading relies heavily on intraday momentum to bring the current price to the desired price level in one direction.

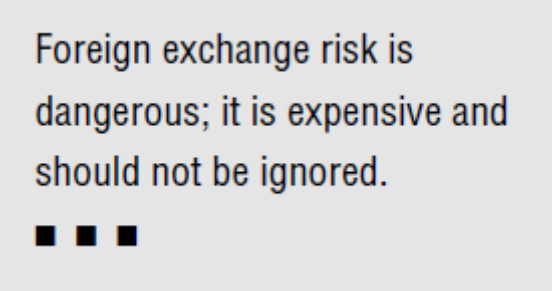
3.18.3.3 Swing trading

Swing traders hold their positions for a few days, but seldom more than a week. Identifying and riding on trends early is the central objective of this trading style, and the profit objective tends to be set higher than that of day trading since the swing trader is expecting that by holding out for a few days, there is a better chance of capturing a larger price move. Unlike the day trader, the swing trader has to endure overnight risk.

3.18.3.4 Position trading

Position trading spans the longest period and refers to traders holding their position for weeks or even months. Position traders seek to identify and trade currency pairs that signal that a medium to long term trend is playing out – but will take more than a few days to play out. Their positions are usually closed before the trend runs out of power. This trading time frame is the least time-consuming one among all the different ones, as there is not much need for intensive monitoring.

3.19 Foreign Exchange Risk Management



Forex risk management is one of the most debated topics in trading. On one hand, traders want to reduce the size of a potential loss, but on the other hand, such traders also want to benefit by getting the most out of a single trade.

3.19.1 Types of Forex Risks

Risks in currency transactions are inevitable and are subject to unexpected rate changes, volatile markets, and political events. They can be enumerated as below:

3.19.2 Exchange Rate Risk

This refers to the fluctuations in currency prices over a trading period. Prices can fall rapidly resulting in substantial losses unless stop-loss orders are used when trading forex. Stop-loss orders specify that the open position should be closed if currency prices pass a predetermined level. There are three categories of exchange rate risk, being:

3.19.2.1 Transaction Risk

This occurs when a company buys products or services in a different currency or has receivables in a different currency than their operating currency. This can cause a gain or loss for the company depending on the direction of the movement of exchange rates and thus poses risk to the company.

3.19.2.2 Translation Risk

This occurs when a company's financial statement reporting is affected by the exchange rate volatility. A multinational company generally reports its consolidated financials and this involves translating foreign currencies of different subsidiaries to the domestic currency. This can have a huge impact on the company's balance sheet and income statement and can ultimately affect the stock price of the company.

3.19.2.3 Economic Risk

A company faces economic risk when the volatility in the exchange rate market can cause changes in the market value of the company. It represents the effects of exchange rates movement on revenues and expenses of a company which ultimately affects the future operating cash flows of the company and its present value.

3.19.3 Margin Risk

This is the risk that emanates from buying currencies on margin or credit. Many brokers offer margin account giving you a margin of 100:1, meaning one can buy R100 worth of foreign currency with just R1 in his account. This means that both profits and losses can be magnified by 100 times. Thus, you can both make and lose a lot of money very quickly.

3.19.4 Interest Rate Risk

This can result from discrepancies between the interest rates in the two countries represented by the currency pair in a forex quote. This discrepancy can result in variations from the expected profit or loss of a particular forex transaction.

3.19.5 Credit Risk

It is the possibility that one party in a forex transaction may not honour their debt when the deal is closed. This may happen when a bank or financial institution declares insolvency.

3.19.6 Country Risk

Is associated with governments that may become involved in foreign exchange markets by limiting the flow of currency. There is more country risk associated with 'exotic' currencies than with major currencies that allow the free trading of their currency.

3.20 Forex Risk Management Strategies

Foreign exchange risk management strategy or FX hedging strategy are terms used to define all the measures devised by businesses or investors to protect the value of their cash flows, assets, or liabilities from adverse fluctuations of the exchange rate. The value of a currency changes frequently due to various factors in the market such as inflation, interest rates, current account deficits, trade terms, political and economic performance, etc.

3.20.1 Limit Orders

A limit order can be used to set the ideal exchange rate at which to buy a particular currency. This is a favoured strategy when current market rates are less favourable for currency buyers. They are highly favoured by businesses who need to make payments but who are not confined to deadlines. For example, if the current rate of exchange is 1 USD = ZAR 14.2, an investor may not want to send USD100,000 to South Africa until he can get a better rate. He then makes a limit order targeting a rate of 1 USD = 14.5 ZAR. When this rate is reached 4 months later, the transfer is triggered and funds are sent to South Africa. This is particularly useful when payment deadlines do not have to be fulfilled. Once the rate is achieved, investors can be assured that the payment is made just at the right moment.

3.20.2 Stop Loss Orders

Stop-loss orders are used by investors to lock in a deal so that it never trades below what it deems to be an acceptable exchange rate. This effectively guarantees a minimum rate at which the currency is exchanged. It is an instruction to buy or sell currency at a predetermined ‘worst case’ exchange rate. Stop-loss orders are often used when there is a negative sentiment about currency movements and the risk to exposure of such movements can then be reduced. It should be noted also when locking in an exchange rate that a company could miss out if currency movements go in its favour. However, normal trading businesses should avoid taking a speculative position because this can be very costly.

3.20.3 Risk Sharing

The seller and buyer agree to share the currency risk to keep the long-term relationship based on the product quality and supplier reliability.

3.20.4 Diversification

It can be done by investors by using funds in more than one capital market and more than one currency. It involves investing in securities denominated in different currencies. Diversification reduces the risk even if currencies are non-correlated. It will give the company global exposure, minimize foreign exchange exposure, and capitalize on exchange rate disparities.

3.20.5 Matching

This refers to the process in which a company matches its currency inflows with its currency outflows concerning amount and timing. When a company has receipts and payments in the same foreign currency due at the same time, it can simply match them against each other. Hedging is required for an unmatched portion of foreign currency cash flows. This kind of operation is referred to as natural matching. Parallel matching is another possibility. When gains in one foreign currency are expected to be offset by losses in another, if the movements in two currencies are parallel is called parallel matching.

3.20.6 Payments Netting

Netting implies offsetting exposures in one currency with exposure in the same or another currency, where exchange rates are expected to move high in such a way that losses or gains on the first exposed position should be offset by gains or losses on the second currency exposure. It is of two types of bilateral netting & multilateral netting. In bilateral netting, each pair of subsidiaries nets out their positions with each other. Flows are reduced by the lower of each company's purchases from or sales to its netting partner.

3.20.7 Leading and Lagging

This method works by adjusting the payments required reflecting future currency movements. It is a zero-sum game because if there is a receivable blocked in their respective currency it will allow them to use it against payable in the same currency. These involve adjusting the timing of the payment of receivables. Leading is accelerating payment of strengthening currencies and speeding up the receipt of weakening currencies. Lagging is delaying payment of weakening currencies and postponing receipt of strengthening currencies. In these, the payable or receivable of the foreign currency is postponed to benefit from the movements in exchange rates.

3.20.8 Cross Hedging

If a conversion consists of more than one currency then cross hedging is used for example if an importer receiving payment in Chinese Yuan, it cannot be directly converted into ZAR so it is first converted into USD and then ZAR so in these type of transaction Cross Hedging is used. It essentially means taking an opposing position in two positively correlated currencies. It can be used when hedging of a particular foreign currency is not possible. Even though hedging is done in

a different currency, the effects would remain the same, and hence cross hedging is an important technique that can be used by investors or companies.

3.20.9 Overseas Loans/ Foreign currency Denominated debt:

Foreign debts are an effective way to hedge foreign exchange exposure. This is supported by the International Fischer Effect relationship. For example, a company is expected to receive a fixed amount of Euros at a future date. There is a possibility that the company can experience a loss if the domestic currency appreciates against the Euros. To hedge this, the company can take a loan in Euros for the same period and convert the foreign currency into domestic currency at the spot exchange rate. And when the company receives Euros, it can pay off its loan in Euros. Hence the company can eliminate its foreign exchange exposure.

3.20.10 Money market Hedge

It is a costly and unused strategy. Companies borrow in foreign currency and lend in the same currency which will lead to losing on their spread. Instead of this strategy, there can use forward hedging.

3.20.11 Borrowing Policy

Every company needs to have a strong borrowing policy. It needs to know whether to go for long-term loans or working capital loans.

3.20.12 Derivatives

Products whose values are derived from the underlying assets. The four different products are:

a) Forward Contract

It is a derivative product where the contract holder enters into a forward contract made today for delivery of an asset at a predefined time in the future at a price agreed upon today. The contract eliminates the risk of exchange rate fluctuation by allowing the user to hedge expected foreign currency transactions by locking in a price today for a transaction that will take place in the future. For example, assume a U.S. investor has a euro-denominated bond maturing in a year and is concerned about the risk of the euro declining against the U.S. dollar in that time frame. The investor can enter into a forward contract to sell euros (in an amount equal to the maturity value of the bond) and buy U.S. dollars at the one-year forward rate.

b) Futures

These contracts work the same as forwards but these contracts are traded through an exchange and they have fixed quantity and period. Currency futures contract involves a standardized contract between two parties to buy/sell an amount of currency at a fixed

price on a specified date in the future and is traded on organized exchanges Futures contracts are more liquid than forwarding contracts as they are traded in an organized exchange.

c) Options

Currency options are contracts that provide the holder the right to buy or sell a specified amount of currency for a specified price over a given period. Currency options give the owner of the agreement the right to buy or sell but not an obligation. The owner of the agreement has a choice of whether to use or not to use the option based on the exchange rates. He/she can choose to sell or buy the currency or let the option lapse. They are considered as an appropriate hedging instrument because of its flexibility in the conditions and avoid losses.

d) Currency Swaps

A currency swap involves an agreement between two parties to exchange a series of cash flows in one currency for a series of cash flows in another currency, at agreed intervals over an agreed period. The equivalent principal amounts of the two parties are exchanged at the spot rate.

3.21 Impact of Economic and Environmental Factors on the Forex Market

This section covers the major fundamental factors that affect currencies. These are interest rates, monetary policies, and market-moving economic reports.

3.21.1 Interest Rates

Simply put, interest rates make the forex world go 'round! In other words, the forex market is ruled by interest rates. A currency's interest rate is probably the biggest factor in determining the perceived value of a currency. So knowing how a country's central bank sets its monetary policy, such as interest rate decisions, is a crucial thing to wrap your head around. One of the biggest influences on a central bank's interest rate decision is price stability, or "inflation". It's generally accepted that moderate inflation comes with economic growth. However, too much inflation can harm an economy and that's why central banks are always keeping a watchful eye on inflation-related economic indicators, such as the CPI and PCE.

3.21.1.1 Interest rate expectations

Markets are ever-changing with the anticipation of different events and situations. Interest rates do the same thing - they change - but they don't change as often. Most investors do not spend their time focused on current interest rates because the market has already "priced" them into the currency price. What is more important is where interest rates are *expected* to go. It's also important to know that interest rates tend to shift in line with monetary policy, or more specifically, with the end of monetary cycles. If rates have been going lower and lower over a period a time, it's

almost inevitable that the opposite will happen. Rates will have to increase at some point. And you can count on the speculators to try to figure out when that will happen and by how much. The market will tell them; it's the nature of the beast. A shift in expectations is a signal that a shift in speculation will start, gaining more momentum as the interest rate change nears. While interest rates change with the gradual shift of monetary policy, market sentiment can also change rather suddenly from just a single report. This causes interest rates to change more drastically or even in the opposite direction as originally anticipated.

3.21.1.2 Rate Differentials

Pick a pair, any pair. Many forex traders use a technique of comparing one currency's interest rate to another currency's interest rate as the starting point for deciding whether a currency may weaken or strengthen. The difference between the two interest rates, known as the "interest rate differential," is the key value to keep an eye on. This spread can help you identify shifts in currencies that might not be obvious. An interest rate differential that increases helps to reinforce the higher-yielding currency, while a narrowing differential is positive for the lower-yielding currency. Instances where the interest rates of the two countries move in opposite directions often produce some of the market's largest swing. An interest rate increase in one currency combined with the interest rate decrease of the other currency is a perfect equation for sharp swings!

3.21.1.3 Nominal vs. Real

When people talk about interest rates, they are either referring to the nominal interest rate or the real interest rate.

What's the difference?

The nominal interest rate doesn't always tell the entire story. The nominal interest rate is the rate of interest before adjustments for inflation.

Real Interest Rate = nominal interest rate - expected inflation

The nominal rate is usually the stated or base rate that you see (e.g., the yield on a bond). Markets, on the other hand, don't focus on this rate, but rather on the real interest rate. If you had a bond that carried a nominal yield of 6%, but inflation was at an annual rate of 5%, the bond's real yield would be 1%. This is a huge difference so always remember to distinguish between the two.

3.21.2 Country Central Bank

To keep inflation at a comfortable level, central banks will most likely increase interest rates, resulting in lower overall growth and slower inflation. This occurs because setting high-interest rates normally force consumers and businesses to borrow less and save more, putting a damper on economic activity. Loans just become more expensive while sitting on cash becomes more attractive. On the other hand, when interest rates are decreasing, consumers and businesses are

more inclined to borrow (because banks ease lending requirements), boosting retail and capital spending, thus helping the economy to grow.

Currencies rely on interest rates because these dictate the flow of global capital into and out of a country. They're what investors use to determine if they'll invest in a country or go elsewhere. For instance, if you had your choice between a savings account offering 1% interest and another offering 0.25%, which would you choose? Neither, you say? Yea, we're inclined to go the same route - keep the money under the mattress, you know what we mean? - but that's not an option. You would pick the 1%, right? We hope so... because 1 is bigger than 0.25. Currencies work the same way! The higher a country's interest rate, the more likely its currency will strengthen. Currencies surrounded by lower interest rates are more likely to weaken over the longer term. The main point to be learned here is that domestic interest rates directly affect how global market players feel about a currency's value relative to another.

3.21.3 Monetary Policy

National governments and their corresponding central banking authorities formulate monetary policy to achieve certain economic mandates or goals. Central banks and monetary policy go hand-in-hand, so you can't talk about one without talking about the other. Central banks have their own unique set of goals brought on by their distinctive economies. Ultimately, monetary policy boils down to promoting and maintaining price stability and economic growth.

To achieve their goals, central banks use monetary policy mainly to control the following:

- The interest rates tied to the cost of money,
- The rise in inflation,
- The money supply,
- Reserve requirements over banks,
- Discount window lending to commercial banks

3.21.3.1 Types of Monetary Policy

Monetary policy can be referred to in a couple of different ways. *Contractionary* or R*estrictive Monetary Policy* takes place if it reduces the size of the money supply. It can also occur with the raising of interest rates. The idea here is to slow economic growth with high-interest rates. Borrowing money becomes harder and more expensive, which reduces spending and investment by both consumers and businesses. *Expansionary Monetary Policy*, on the other hand, expands or increases the money supply, or decreases the interest rate. The cost of borrowing money goes down in hopes that spending and investment will go up. Accommodative monetary policy aims to create economic growth by lowering the interest rate, whereas tight monetary policy is set to reduce inflation or restrain economic growth by raising interest rates Finally, the *neutral monetary policy* intends to neither create growth nor fight inflation.

The important thing to remember about inflation is that central banks usually have an inflation target in mind, say 2%. They might not come out and say it specifically, but their monetary policies all operate and focus on reaching this comfort zone. They know that some inflation is a good thing, but out-of-control inflation can remove the confidence people have in their economy, their job, and ultimately, their money. By having target inflation levels, central banks help market participants better understand how they (the central bankers) will deal with the current economic landscape.

3.21.4 Economic Growth and Outlook

We start easy with the economy and outlook held by consumers, businesses, and governments. It's easy to understand that when consumers perceive a strong economy, they feel happy and safe, and they spend money. Companies with money spend money. And all this creates some healthy tax revenue for the government. They jump on board and also start spending money. Now everybody is spending, and this tends to have a positive effect on the economy. Weak economies, on the other hand, are usually accompanied by consumers who aren't spending, businesses who aren't making any money and aren't spending, so the government is the only one still spending. But you get the idea. Both positive and negative economic outlooks can have a direct effect on the currency markets.

3.21.5 Capital Flows

Capital flows measure the amount of money flowing into and out of a country or economy because of capital investment purchasing and selling. The important thing you want to keep track of is capital flow balance, which can be positive or negative. When a country has a positive capital flow balance, foreign investments coming into the country are greater than investments heading out of the country. A negative capital flow balance is the direct opposite. Investments leaving the country for some foreign destinations are greater than investments coming in. With more investment coming into a country, demand increases for that country's currency as foreign investors have to sell their currency to buy the local currency. This demand causes the currency to increase in value. Simple supply and demand. And you guessed it, if supply is high for a currency (or demand is weak), the currency tends to lose value. When foreign investments make an about-face, and domestic investors also want to switch teams and leave, and then you have an abundance of the local currency as everybody is selling and buying the currency of whatever foreign country or economy, they're investing in.

3.21.6 Trade Flows & Trade Balance

We're living in a global marketplace. Countries sell their goods to countries that want them (exporting), while at the same time buying goods they want from other countries (importing). Have a look around your house. Most of the stuff (electronics, clothing, doggie toys) lying around is probably made outside of the country you live in. Every time you buy something, you have to give up some of your hard-earned cash. Whomever you buy your widget from has to do the same thing.

U.S. importers exchange money with Chinese exporters when they buy goods. And Chinese imports exchange money with European exporters when they buy goods. All this buying and selling is accompanied by the exchange of money, which in turn changes the flow of currency into and out of a country. Trade balance (or balance of trade or net exports) measures the ratio of exports to imports for a given economy. It demonstrates the demand for that country's goods and services, and ultimately, it's currency as well. If exports are higher than imports, a trade surplus exists and the trade balance is positive. If imports are higher than exports, a trade deficit exists, and the trade balance is negative. So:

Exports > Imports = Trade Surplus = Positive **(+)** Trade Balance

Imports > Exports = Trade Deficit = Negative **(-)** Trade Balance

Trade deficits have the prospect of pushing a currency price down compared to other currencies. Net importers first have to sell their currency to buy the currency of the foreign merchant who's selling the goods they want. When there's a trade deficit, the local currency is being sold to buy foreign goods. Because of that, the currency of a country with a trade deficit is less in demand compared to the currency of a country with a trade surplus. Net exporters, countries that export more than they import, see their currency being bought more by countries interested in buying the exported goods. It is in more demand, helping their currency to gain value. It's all due to the demand for the currency. Currencies in higher demand tend to be valued higher than those in less demand.

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