Wholesale Banking

Reference Handout

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Chapter Overview: General Banking Concepts

This chapter is designed to help the participants get a sound understanding of the business of banking in the context of the USA. We start with a brief introduction to the Banking, Financial Services & Insurance (BFSI) landscape in the USA and its importance to the U.S. economy. We then focus on the banking industry in particular and understand the role and importance of banks in an economy; the role of central banks and the Federal Reserve System in particular; the evolution of banking in USA and the current industry structure; the type of customers that a bank services and the typical products & services that it offers to such customers. We end the chapter with an overview of the different types of relationships that the bank can have with its customers based on the product or service offered.

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1. General Banking Concepts

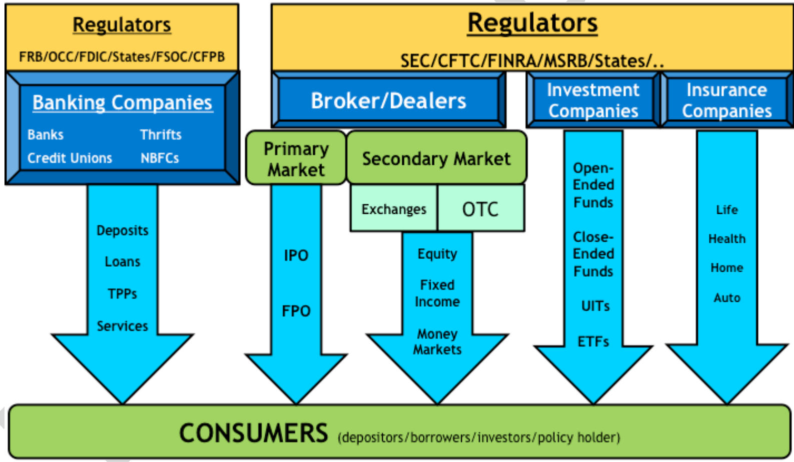
Banks bring together **'depositors'** and **'borrowers'** and play a critical role in channelizing monies from the surplus sector to the deficit sector. It has generally been observed that there exists a strong positive correlation between the economic performance of a country and the strength of its banking industry.

This section will provide a broad overview of the Banking, Financial Services & Insurance (**BFSI**) landscape in the USA with a special focus on the banking industry. The role of banks in an economy and their importance, the different types of banks that operate in the USA and the products & services that they offer to their customers will also be discussed here.

1.1 The BFSI Landscape

The **BFSI** sector comprises different types of **financial intermediaries** that bring together:

1. **Depositors & Borrowers** (Commercial Banks, Savings & Loans Associations, Credit Unions and Non-Banking Finance Companies (NBFCs)) etc.
2. **Investors & Issuers** (Investment Banks and Mutual Funds etc.)
3. **Buyers & Sellers** of financial securities like Equities & Bonds (Broker/Dealers, Exchanges etc.)
4. **Protection Seekers and Protection Providers** (Life, General, Health and other types of insurance companies)



In addition to the above, the BFSI sector also includes entities like

1. **Payment networks** like Visa and MasterCard etc. that provide the backbone for processing card-based transactions (credit cards, debit cards, pre-paid cards etc.)
2. **Payment gateways** that are so crucial for facilitating e-commerce as well as brick and mortar payment transactions
3. **Clearing & Settlement agencies** that help settle money & securities transactions
4. **Depositories** that hold securities in book-entry/electronic form on behalf of investors
5. **Depository Participants (DPs)** - interface between depositories and investors
6. **Credit Bureaus and Credit Rating Agencies** that help understand the credibility of borrowers and the issuers of different kinds of securities

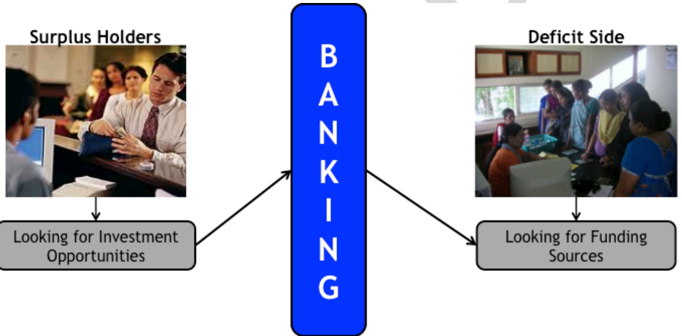
The **banking sector** is the largest segment of the BFSI domain and plays a critical role in the economic development of a nation. We will look at their role in the next section.

1.2 Role of Banks in an Economy

A Bank is an institution, which deals in money and its substitutes. **It is an institution, which accepts deposits, lends money and makes investments**. To ensure public faith in the deposits made with a bank, banks are **licensed by regulators** (FRB/OCC/FDIC/State Government etc.) to provide banking services. Banks also deal in cheques, cards etc. Payments through these mechanisms are substitutes for making payment in cash. **Collecting and clearing such payments is also a primary function of a bank.** In fact, a financial institution, which does not perform the task of collecting and clearing customer's cheques, would not qualify to be called a bank. Just as a river through its banks regulates and directs the flow of water, banks regulate and direct the flow of money in the economy.

1.2.1 Intermediary Role

Banks are financial intermediaries that bring together **depositors** (entities, individuals or businesses or institutions, that have short-term or long-term surpluses and are looking for secure investment opportunities) **and borrowers** (entities that have need for money – money that will be used for consumption or investments and who will repay the monies over a period of time). Left to themselves the depositors and the borrowers will not be able to come together and transact because of the asymmetry of information; the lack of trust and the inability of the depositors to determine the credibility of the borrowers. Banks help break the impasse between depositors and borrowers by providing the necessary comfort to both the parties involved.



1.2.2 Transformational Role

The second important activity of banks is to offer liquidity to their customers. Depositors, borrowers and lenders have different liquidity preferences. Customers expect to be able to withdraw deposits from current accounts at any time. Typically, firms in the business sector want to borrow funds and repay them in line with the expected returns of an investment project, which may not be realised for several years after the investment. By lending funds, savers are actually agreeing to forgo present consumption in favour of consumption at some date in the future.

Perhaps more important, the liquidity preferences may change over time because of unexpected events. If customers make term deposits with a fixed term of maturity (e.g., 3 or 6 months), they expect to be able to withdraw them on demand, in exchange for paying an interest penalty. Likewise, borrowers anticipate being allowed to repay a loan early, or subject to a satisfactory credit screen, rolling over a loan. If banks are able to pool a large number of borrowers and savers, the liquidity demands of both parties will be met. Liquidity is therefore an important service that a bank offers its customers. Again, it differentiates banks from other financial firms offering near-bank and non-bank financial products.

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By pooling assets and liabilities, banks are said to be engaging in *asset transformation,* i.e., transforming the value of the assets and liabilities

1.2.3 Payment Processor

Banks differ from other financial firms because they act as intermediaries and provide liquidity. Banks require a system for processing the debits and credits arising from these banking transactions. The payment system is a by-product of intermediation, and facilitates the transfer of ownership claims in the financial sector - credits and debits are transferred between the relevant parties.

In common parlance, this is known as the **Collection and Clearing** service provided by banks.

1.2.4 Other Roles

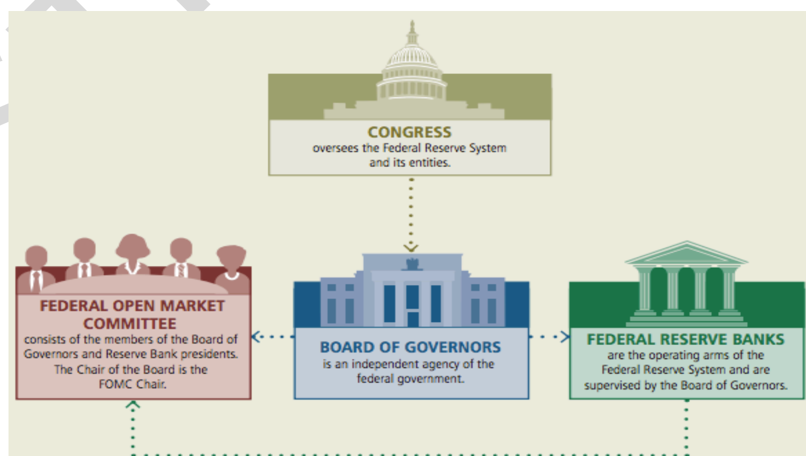
In addition to the intermediary, asset transformation and payment processor roles, banks also perform various other functions that help

1. **International trade** – facilitate cross-border and domestic trade by handling trade documents and movement of money.
2. **Custodial services** – safekeeping of securities/other assets of customers.
3. **Foreign exchange** services – Help individuals and businesses remit and receive funds in different currencies and hedge risks arising out of such transactions.

1.3 The Role of Central Banks - Federal Reserve System

A central bank, reserve bank, or monetary authority is an institution that manages a state's currency, money supply, and interest rates. Central banks also usually oversee the commercial banking system of their respective countries. In contrast to a commercial bank, a central bank possesses a monopoly on increasing the monetary base in the state, and usually also prints the national currency, which usually serves as the state's legal tender.

The **Federal Reserve System** (also known as the Federal Reserve, and informally as the Fed) is the central banking system of the United States. It was created on December 23, 1913, with the enactment of the Federal Reserve Act, largely in response to a series of financial panics, particularly a severe panic in 1907.

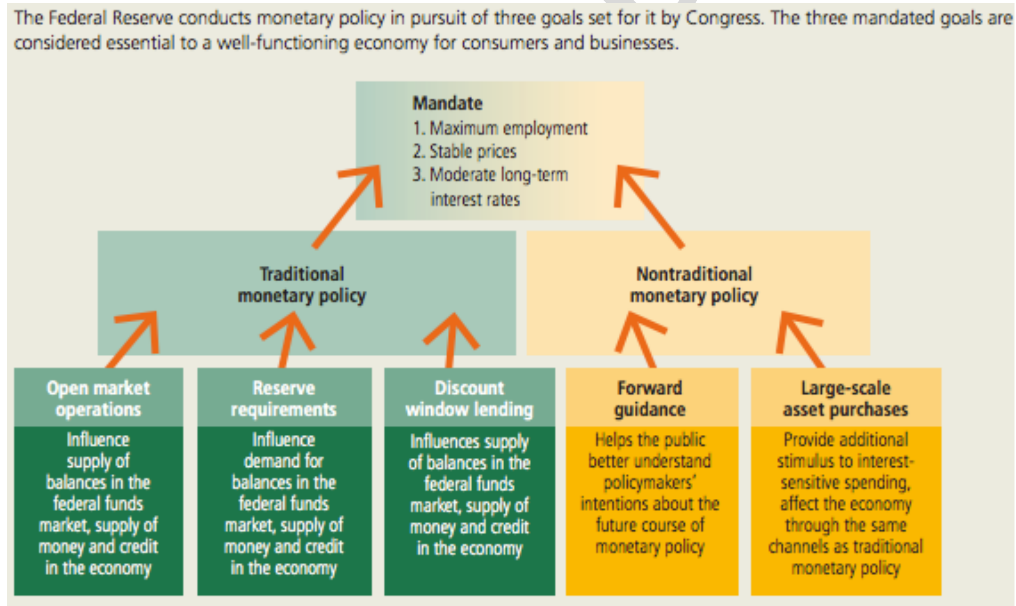


The Federal Reserve

- Conducts the nation's **monetary policy** to promote maximum employment, stable prices, and moderate long-term interest rates in the U.S. economy;
- Promotes the **stability of the financial system** and seeks to minimize and contain systemic risks through active monitoring and engagement in the U.S. and abroad;
- Promotes the **safety and soundness of individual financial institutions** and monitors their impact on the financial system as a whole;
- Fosters **payment and settlement system safety and efficiency** through services to the banking industry and the U.S. government that facilitate U.S.-dollar transactions and payments; and
- Promotes **consumer protection and community development** through consumer-focused supervision and examination, research and analysis of emerging consumer issues and trends, community economic development activities, and the administration of consumer laws and regulations.

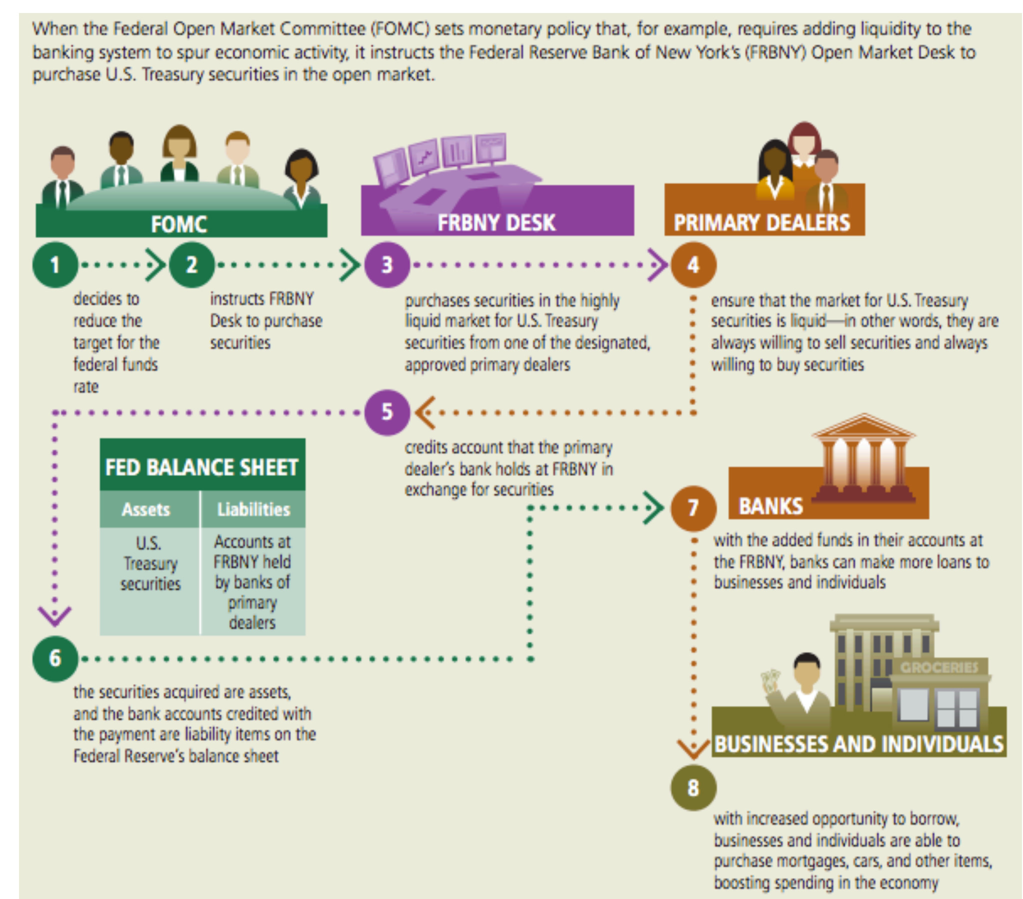
1.3.1 Conducting Monetary Policy

The Federal Reserve conducts the nation's monetary policy by managing the level of short-term interest rates and influencing the availability and cost of credit in the economy. Monetary policy directly affects interest rates; it indirectly affects stock prices, wealth, and currency exchange rates. Through these channels, monetary policy influences spending, investment, production, employment, and inflation in the United States. Effective monetary policy complements fiscal policy to support economic growth.



(Source: Federal Reserve)

The Open Market Operations are a cornerstone of the U.S. central banking and its impact on the economy can be understood with a simple example that is depicted below graphically.



(Source: Federal Reserve)

1.3.2 Promoting Financial System Stability

A financial system is considered stable when financial institutions— banks, savings and loans, and other financial product and service providers—and financial markets are able to provide households, communities, and businesses with the resources, services, and products they need to invest, grow, and participate in a well-functioning economy.

Over the past century, as the U.S. and global financial system have evolved, the Federal Reserve's role in promoting financial stability has necessarily changed with it. The 2007–09 financial crisis and the subsequent deep recession revealed shortcomings in the financial system infrastructure and the framework for supervising and regulating it. Indeed, reforms enacted under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 assigned the Federal Reserve new responsibilities in the effort to promote financial system stability and keep pace with changing dynamics and innovation in the broader economy.

Federal Reserve staff regularly and systematically assesses a standard set of vulnerabilities as part of a Federal Reserve System macro prudential financial stability review:

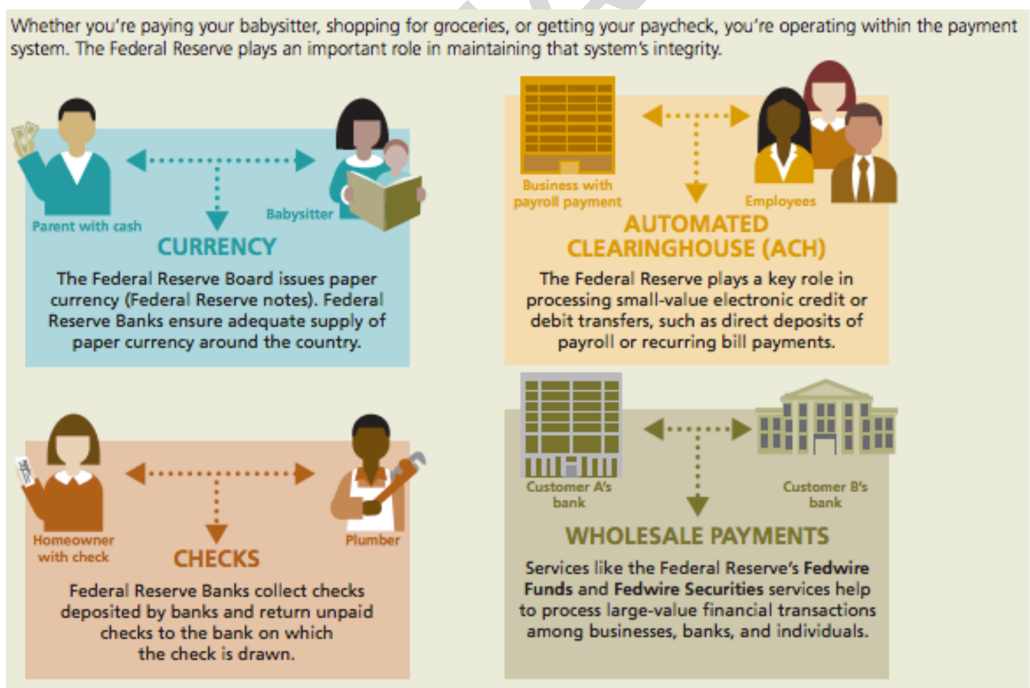
Four vulnerability assessments inform the broad efforts undertaken by the Federal Reserve—with entities both in the United States and abroad—to monitor financial system stability.

Asset valuations and risk appetites	Financial system leverage	Liquidity risks/maturity transformation	Nonfinancial sector borrowing
The "unwinding" of high prices of assets (e.g., housing prices in the mid-2000s) can destabilize the financial system and the economy	Financial system intermediaries (such as traditional banks, insurance companies, and hedge funds) with significantly more debt than equity can amplify an economic downturn	Traditional banks, money market funds, and exchange-traded funds are among the institutions that might experience a "run" by investors that amplifies an economic downturn	If credit exposure in U.S. households and nonfinancial businesses is high, these borrowers often curtail spending and disengage from other economic activity and may contribute to a severe downturn

1.3.3 Payment & Settlement Systems

The U.S. dollar payment and settlement system is composed of payment instruments and methods, systems, and institutions that have changed over time. The Federal Reserve provides currency and operates some elements of this system.

This system facilitates financial transactions and purchases of goods and services and the attendant movement of money at all levels of the U.S. economy—on behalf of individuals and institutions, buyers and sellers, consumers and businesses, investors and securities issuers—and supports interactions between the U.S. economy and others around the world.



1.3.4 Promoting Consumer Protection and Community Development

The Federal Reserve is committed to ensuring that consumer and community perspectives inform Federal Reserve policy, research, and actions, with the mission of promoting a fair and transparent consumer financial services marketplace and effective community development, Including for traditionally underserved and economically vulnerable households and neighbourhoods.

To fulfill this responsibility, the Federal Reserve performs a number of functions to implement various consumer protection, fair lending, fair housing, and community reinvestment laws and to improve understanding of the dynamics of the consumer financial marketplace

1.4 Evolution of U.S. Banking

Source: The Office of the Comptroller of the Currency

Banking has changed in many ways through the years. Banks today offer a wider range of products and services than ever before, and deliver them faster and more efficiently. But banking's central function remains as it has always been. Banks put a community's surplus funds (deposits and investments) to work by lending to people to buy homes and cars, to start and expand businesses, to put their children through college, and for countless other purposes. Banks are vital to the health of our nation's economy. For tens of millions of Americans, banks are the first choice for saving, borrowing, and investing.

The First Banks: 1791 to 1832
In most states of the early federal union, bank organizers needed special permission from the state government to open and operate. For a while, an additional layer of oversight was provided by the Bank of the United States, a central bank founded in 1791 at the initiative of the nation's first Secretary of the Treasury, Alexander Hamilton. Its Congressional charter expired in 1811. A second Bank of the United States was created in 1816 and operated until 1832.

In those days, city bankers tended to be extremely cautious about to whom they lent and for how long. To make sure they had enough cash available to meet unexpected demands from depositors, bankers generally made short-term loans only. Thirty to sixty days was the norm. Typically manufacturers and shopkeepers would use these funds to pay their suppliers and workers until they could sell the goods to customers. After that sale they would pay off the bank loan.

In less settled parts of the country, lending standards tended to be more liberal. There farmers could frequently obtain bank loans to buy land and equipment and finance the shipment of farm products to market. Because of the unpredictability of weather and market conditions, loan losses tended to be higher too.

Many Kinds of Money: 1832 to 1864
When the second Bank of the United States went out of business in 1832, state governments took over the job of supervising banks. This supervision often proved inadequate. In those days banks made loans by issuing their own currency. These bank notes were supposed to be convertible, on demand, to cash—hat is, to gold or silver. It was the job of the bank examiner to visit the bank and certify that it had enough cash on hand to redeem its outstanding currency. Because this was not always done, many bank note holders found themselves stuck with worthless paper. It was sometimes difficult or impossible to detect which notes were sound and which were not, because of their staggering variety.

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By 1860 more than 10,000 different bank notes circulated throughout the country. Commerce suffered as a result. Counterfeiting was epidemic. Hundreds of banks failed. Throughout the country there was an insistent demand for a uniform national currency acceptable anywhere without risk.

In response, Congress passed the National Currency Act in 1863. In 1864, President Lincoln signed a revision of that law, the National Bank Act. These laws established a new system of national banks and a new government agency headed by a Comptroller of the Currency. The Comptroller's job was to organize and supervise the new banking system through regulations and periodic examinations.

Creating a National Currency: 1865 to 1914

The new system worked well. National banks bought U.S. government securities, deposited them with the Comptroller, and received national bank notes in return. By being lent to borrowers, the notes gradually entered circulation. On the rare occasion that a national bank failed, the government sold the securities held on deposit and reimbursed the note holders. No owner of a national bank note ever lost his or her money.

National bank notes were produced and distributed through an involved process. Once the basic engraving and printing were done (at first by private printers, later by the U.S. Bureau of Engraving and Printing), the notes were entered on the books of the Office of the Comptroller of the Currency, then returned to the printer where the seal of the Treasury Department was stamped on each.

Next, the notes were shipped to the bank whose name appeared on them, where they were signed by two senior bank officers. The notes were then ready for circulation. National bank notes were the mainstay of the nation's money supply until Federal Reserve notes appeared in 1914.

National bank notes featured elaborate scenes and portraits drawn from American history. The complexity of their design was intended to foil counterfeiters. Today, collectors prize national bank notes as outstanding examples of the engraver's art.

The Banking Crisis: 1929 to 1933

The onset of the worldwide depression in 1929 was a disaster for the banking system. In the last quarter of 1931 alone, more than 1,000 U.S. banks failed, as borrowers defaulted and bank assets declined in value. This led to scenes of panic throughout the country, with long lines of customers queuing up before dawn in hopes of withdrawing cash before the bank had no more to pay out.

The banking crisis was the first order of business for President Franklin D. Roosevelt. The day after taking office, on March 5, 1933, he declared a bank holiday, closing all the country's banks until they could be examined and either be allowed to reopen or be subjected to orderly liquidation. The bulk of this work fell to the Office of the Comptroller of the Currency (OCC).

In June 1933, Congress enacted federal deposit insurance. Accounts were covered up to $2,500 per depositor (now $100,000). Other laws were passed regulating bank activities and competition, with the objective of limiting risks to banks and reassuring the public that banks were, and would remain, safe and sound.

A Revolution in Banking: 1970s to Today

During the last quarter century, banking has undergone a revolution. Technology has transformed the way Americans obtain financial services. Mobile banking, Online banking, Telephone banking, debit and credit cards, and automatic teller machines are commonplace, and electronic money and banking are evolving.

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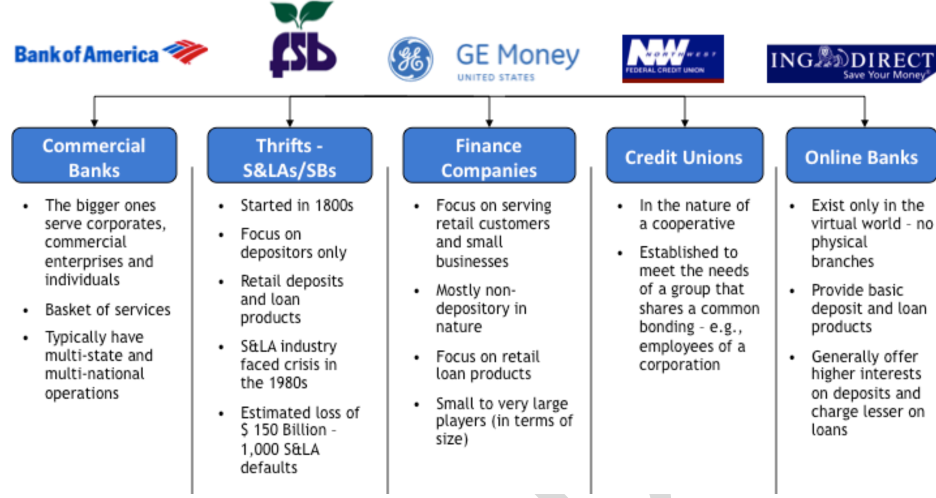
Thus, it can be seen that the banking tradition goes a long way in the USA with formal banks established in the late 1700s. The industry withered one of its greatest challenges during the 2007-2010 period

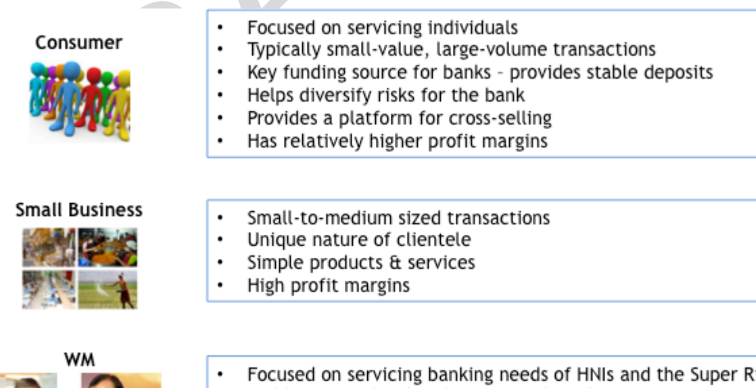
Currently, the banking industry in the USA consists of the following types of entities:



1.5 Banking Products & Services

Banks deal with different types of customers and offer different types of products and services to these customers. This section will provide us a brief overview of the different customer groups that banks deal with and the different products and services that are offered to them by banks.

Broadly, a bank deals with the following customer segments.



WM

- Focused on servicing banking needs of HNIs and the Super Rich
- Highly personalised and customised products & services
- Relationship-focused
- Large-value, small-volume transactions
- Investments-oriented (beyond banking)

Corporate

- Services the banking needs of large corporates/institutions
- Typically large-value, small-volume transactions
- Variety of loans and other services
- Intense competition

The typical products and services that a bank offers is mapped below to the different customer segments that it serves.

	Consumer	Small Business	WM	Corporate
Deposits	✔	✔	✔	✔
Loans	✔	?	✔	✔
Payments	✔	✔	✔	✔
Investments (TPPs)	✔	✔	✔	✔
Txn. Banking	✖	✖	✔	✔
Wealth Mgmt.	✔	✖	✔	✖

1.6 The Banker-Customer Relationship

The Banker-Customer Relationship: Banker-customer relationship arises from the various services rendered by banks to their customers. The relationship varies depending on the services. Thus:

A. Debtor-Creditor (Bank as the Debtor and Customer as the Creditor)

When a customer deposits money with the bank, the customer becomes a lender and the bank becomes a borrower. As such, the relationship is that of a Debtor and Creditor.

- The money is lent to the bank and the bank is free to use it in a way most beneficial to it.
- The customer should make demand of payment. The banker is not required to repay the debt voluntarily unlike in the case of commercial debt.
- Demand should be made at the branch where the account exists. Except in the case of drafts, traveller's cheque, ATM/credit card, etc., the bank is not required (though it may) to make the payment to the customer at other centres, although all the branches of a bank are constituents of the same bank.
- The demand should be made in proper manner. The customer should demand payment not verbally or by telephone call, but by cheque, draft, withdrawal form, order or otherwise. Further, demand should be made during working days and working hours. (Cards used for withdrawal from ATMs are a mutual arrangement between the Bank and the customer)
- The creditor (customer) does not call for any security from the debtor (bank) as in the case of commercial debts.

B. Creditor-Debtor (Bank is a Creditor and Customer is Debtor)

- When the bank lends money to the customer, the customer is the borrower and the bank is the lender. The relationship, therefore, is that of a Creditor and Debtor. The Customer/Borrower executes documents and offers security to the Bank before utilizing the loans.

C. Bailee-Bailor Relationship

- When a customer deposits certain valuables, bonds, securities or other documents with the bank, for their safe custody, the bank becomes a bailee and the customer is the bailor. The bank becomes custodian of the securities of the customer and hence a bailee and is liable for any loss caused to the bailor due to his negligence.

D. Bank as a Trustee

- If a customer keeps certain valuables or securities with the bank for safekeeping or deposits certain money for a specific purpose, the banker besides becoming a bailee is also a trustee.

E. Agent – Principal Relationship (Bank is Agent and Customer is Principal)

- Some of the ancillary services rendered by the bank are remittances, collection of cheques, bills, etc., on behalf of the customers. Banks also undertake to pay regularly, electricity bills, telephone bills, insurance premium, club fees, etc. In all these cases, the bank acts as an agent, his principal being the customer. The relationship of agency terminates on the death/ insolvency of the customer or on completion of the work assigned.

F. Lessor and Lessee (Bank is a Lessor and Customer is a Lessee)

- Banks provide safe deposit lockers to their customers who hire them on lease basis. The relationship, therefore, is that of lessor and lessee. In certain banks this relationship is termed as licensor and licensee.

G. Bank as consultant

- Banks provide consultancy services and advice to customers as in wealth management and merchant banking services.

H. Trustee and Beneficiary (Bank - Trustee and Customer- Beneficiary)

- When a trust is created appointing the bank as a trustee, the relationship is that of a trustee and a beneficiary.

The customer's constitution may vary. Accounts can be opened for individuals, proprietorships, partnership firms, limited companies, societies, trusts etc. Accounts of individuals may be singly or jointly operated. Other entities must specify people authorized to operate the account. Account holders are encouraged to make nominations to ensure that, in the event of their death, the balance in the accounts can be withdrawn without difficulty. There are special instructions for dealing with the accounts of minors, illiterate customers and incapacitated customers.

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Key Learnings:

At the end of this chapter one should be conversant with the following fundamental concepts:

- The BFSI landscape is a dominant part of every economy and that it plays an important role in the economic well-being of a nation.
- The Banking industry in turn is the cornerstone of this BFSI segment.
- Banks help channelise funds from the surplus sectors to the deficit sectors and thereby contributing to the economic development of a nation.
- Every country has a 'central bank' that is vested with the responsibility of not only administering the monetary policy but also regulating and supervising the banks.
- The Federal Reserve System (or simply the Fed) is the central bank of the USA.
- The Fed
    - Conducts the nation's monetary policy;
    - Promotes the stability of the financial system;
    - Promotes the safety and soundness of individual financial institutions;
    - Fosters payment and settlement system safety and efficiency; and
    - Promotes consumer protection and community development
- The U.S. has different types of banks including Commercial Banks, Savings Banks, Credit Unions, NBFCs and Online Banks etc.
- These banks cater to the needs of individual customers (Consumer Banking), small & medium enterprises (Business Banking), HNIs (Wealth Management) and large businesses & institutions (Wholesale Banking or Corporate & Investment Banking).
- Banks offer deposits, loans, third party products like investments & insurance, payment services (remittances & wire transfers) and wealth management services to their customers.
- Based on the product/service offered, the banker-customer relationship can take different hues – Debtor/Creditor or Creditor/Debtor and so on.

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1.7 Test Your Understanding

1. Which of the following is not a function of the U.S. Federal Reserve System?
   a. Monetary policy
   b. Payment system's safety
   c. Fiscal policy
   d. Supervision of banks

2. Channelizing funds from the surplus side to the deficit side of the economy is:
   a. Transformation
   b. Dis-intermediation
   c. Liquidation
   d. Intermediation

3. Wealth management services of a bank are typically targeted at _ _ _ customers.
   a. Small business
   b. Corporate
   c. High Networth Individual
   d. None of the above

4. Fedwire, a payment system, offered by the Fed is an example of a large value payment system.
   a. True
   b. False

5. When the FOMC decides to add liquidity to the banking system, it is likely to result in which of the following?
   a. Sales of Treasury Securities by the Fed
   b. Purchase of Treasury Securities by the Fed
   c. Direct lending to Corporates by the Fed
   d. None of the above

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Chapter Overview: Wholesale Banking

This chapter is designed to help the participants get a sound understanding of the Wholesale Banking business. Specifically, you will learn about the need & importance of the wholesale banking business, the typical customer profile, the loan products & services offered to these customers and the transaction banking services etc.

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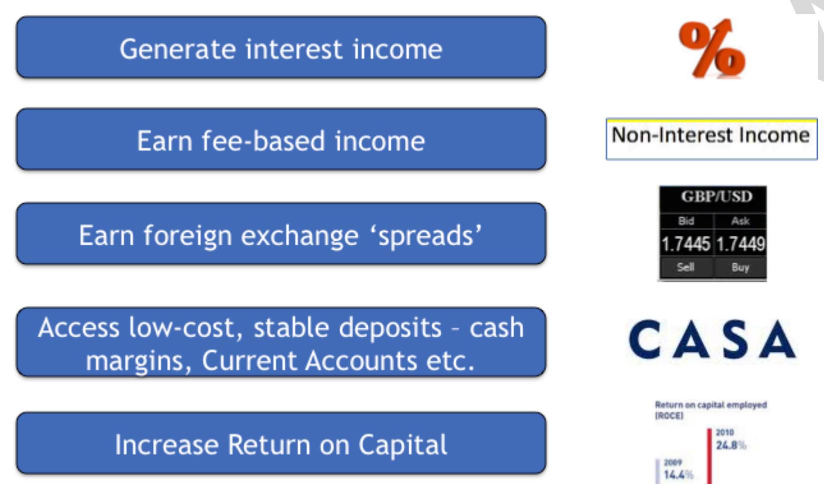
2. Wholesale Banking

Corporate Banking or Wholesale Banking refers to the business line, which caters to the banking needs of corporations, businesses, institutions, governments and other such entities.

Corporate banking is characterized by

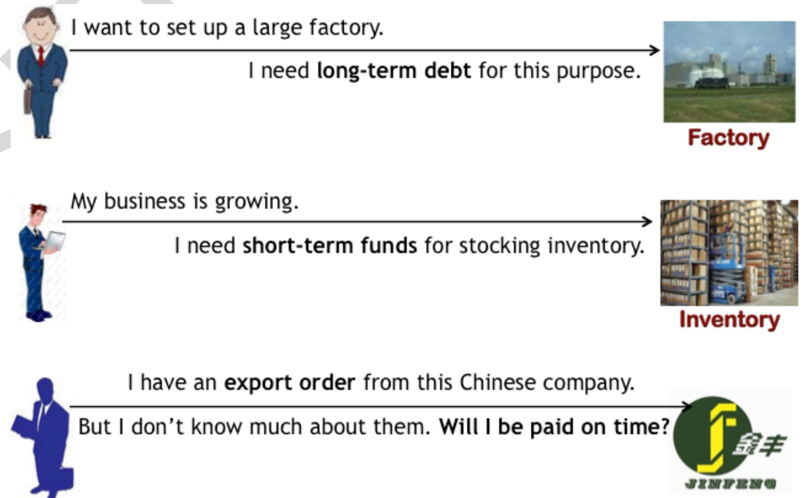
- Relatively small number of large-value accounts
- Strong relationship orientation
- Customized products and services
- High-degree of product innovation

Banks focus on corporate banking in a big way because it helps them to



2.1 Corporates & their Needs

Let's look at the following business situations to understand some of the common expectations of businesses and corporates vis-à-vis their banks.



Banking needs of businesses & corporates can be described as follows:

Funding Requirements	Trade Finance	Treasury Services	Foreign Exchange
• Raising of Equity and/or Debt capital • Short-term and Long-term loans — Domestic — Foreign-currency	• Facilitating domestic and international trade	• Cash management services • Savings & Investments	• Facilitating cross-border receipts and payments • Currency risk management

Domestic & Cross-border small-value and large-value receipts & payments

Funding Requirements – Corporates have a variety of funding needs that includes funds for meeting regular business operations or making long-term investments in productive assets.

Investment Banking, Capital Structuring and Advisory Services - Global Banks are ideally placed in helping companies raise large sums of capital. This could be through a public issue of shares, a private placement, raising of private equity and so on. Specialists in the Investment Banking division typically handle these activities.

International Trade - companies often have dealings with overseas entities. They may buy materials from other countries or have customers in other locations. Dealing with these vendors and customers involves handling important and sensitive trade documents carefully and reliably. Also, the movement of funds is also associated with these trade documents. Banks are reliable and have the expertise necessary to handle these with due care. Banks are also the mechanism by which money moves internationally. Combining the two, the International Trade division also known as Trade Finance division handles the international trade requirements of customers, handling their money and documents reliably and efficiently.

Foreign Exchange & Exposure Management - Companies often have assets and liabilities and receipts and payments in other countries, arising from their international operations. This involves dealing in the currencies of those other countries. A change in the value of the currency can have a significant impact on the profits and losses of the company. Therefore those movements need to be tracked and strategies are available for protecting from losses and safeguarding profits. Furthermore, the company routinely needs to buy and sell those currencies. The Wholesale Banking Group meets all these needs for the customer.

Cash Management Services - Large corporations have the need to efficiently manage the inflow of funds and to track it. Likewise, they have a number of payments to make and would like the outflow to be well managed. The Cash Management Function handles both aspects of the problem and is often a specialist desk inside the bank.

Management of Surpluses - Banks are well placed to assist large corporate customers in finding investment opportunities for their short-term surpluses. These could be the bank's own deposits products or money market instruments available through the bank.

2.2 Types of Loans

Loans originated by banks are classified into different types based on key loan characteristics like availability of security cover for the loan, disbursement and repayment methodology, and tenor (period) of the loan etc. A broad loan classification can be depicted as follows:

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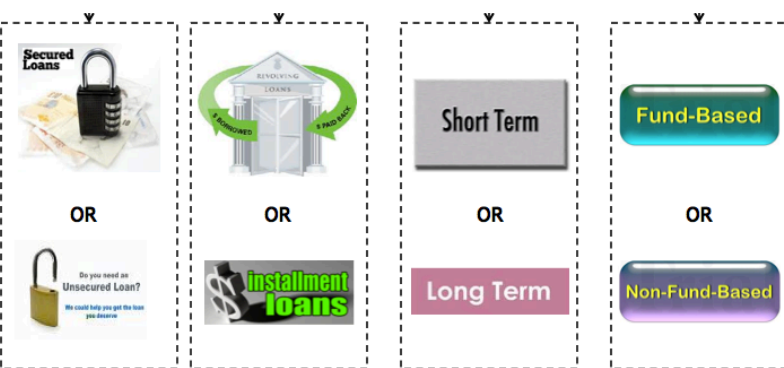

Secured Loans & Unsecured Loans: Loans that are backed up by a security (also known as collateral) are defined as Secured Loans. Common examples include mortgage loans (secured by a real estate property), automobile loans (secured by a car or boat or yacht or motorcycle), working capital loans (secured by stocks of finished goods, raw material and accounts receivables of the company) etc. Secured loans offer the bank the advantage of having a back up in case of borrower default, whereby the bank can repossess the assets pledged as security, sell them in the open market and recover its dues. For this purpose, interest rates and other terms & conditions on secured loans tend to better than other loans.

Loans that are not backed up by any kind of security and are made on the strength of the borrower's credibility and the business' cash flows are known as **unsecured loans**.

Revolving Loans & Installment Loans: Loan types where the borrower has the flexibility to draw down funds up to a pre-defined limit (loan limit), repay the utilization fully or partially and redraw the loan again subject to the same loan limit are known as **Revolving Loans**. Interest is charged only to the extent of loan usage. A line of credit, an Overdraft facility or a credit card issued by a bank are all examples of revolving loans.

An **installment loan** is one where the borrower is sanctioned a loan limit who draws the same fully or partially and then starts repaying the same in monthly, quarterly, half-yearly or annual installments. The loan limit is reduced with every repayment and hence the borrower cannot redraw the amounts repaid. The repayments are structured in such a fashion that the loan outstanding becomes **ZERO** at the end of the loan period. Interest is charged on the amount of loan outstanding and is calculated using the average daily balance method.

Installment loans are commonly repaid in the **Equated Monthly Installment** (EMI) format. EMIs have a Principal component and an Interest component. In the initial stages of loan repayment, interest payment constitutes a bulk of the EMI and as the loan ages, the interest component of the EMI goes down and the principal component increases.

Short-term & Long-term Loans: Loans are classified as short-term, medium-term or long-term based on the period for which the bank sanctions the loan. Loans that are repayable in less than one year are classified as short-term loans, those with a maturity of less than five years are classified as medium-term loans and where the maturity exceeds five years, it is known as a long-term loan. The loan period or loan tenor has an important bearing on the loan pricing. Generally speaking, the longer the tenor the higher the risk and correspondingly the interest rate for long-term loans is higher than the interest on short-term loans.

Fund-based and Non-fund based Loans: A fund-based loan is one where the transaction involves a cash outflow at the time of loan disbursement. On the other hand if a bank only promises to make a payment on behalf of its borrower customer and the cash outflow is contingent on the borrower's performance, the loan is said to be non-fund based in character. For e.g., an Overdraft facility is a fund-based loan, a Letter of Credit or Bank

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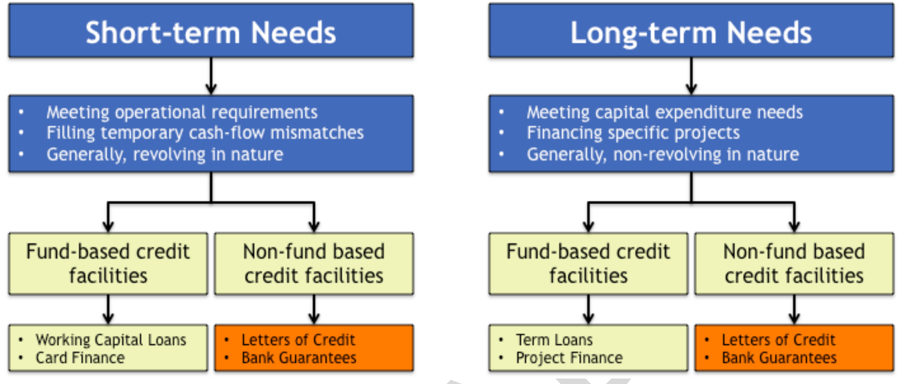
Guarantee transaction is an example of a non-fund based transaction. The bank only levies commission/non-interest charges on non-fund based loan transactions.

2.3 Corporate Lending & Loan Products

Banks originate different types of loans that cater to the needs of individuals (retail customers), HNIs (private banking customers), commercial enterprises (SME customers), large corporates (C&IB customers) and farmers (agricultural banking customers).

The funding needs of corporate customers can be illustrated as follows:



2.3.1 Overdraft/Working Capital Loans

The Overdraft loan is generally used for meeting day-to-day expenses or working capital limits. These are generally secured by the stocks of raw materials and finished goods. There are two types of OD limits – Intra-day limit and Overnight limit.

- The intra-day limit refers to the maximum amount that can be overdrawn during the day. The intra-day limit can be higher than the sanctioned OD limit. It helps the borrower to draw funds against expected credits in the account during the course of the business day.
- The Overnight limit refers to the maximum amount that can be overdrawn at the end of the day.

Interest can be **fixed or floating or interest reset**
- Interest is charged on the amount of usage
- Interest will be charged and is payable in monthly intervals

2.3.2 Term Loans

Growing businesses have a continuous need to invest monies in creating new production infrastructure like Land & Buildings, Plant & Machinery and other equipment's etc. These investments generate returns only over the medium to long-term and hence need to be funded by resources with similar maturity profiles. Banks make available **term loans** to meet such funding requirements of businesses.

Term loans are non-revolving or installment loans made for longer durations. Based on the loan tenor or loan period or loan maturity these are further classified as **STL (< 1 Year), MTL (1 Y to 5 Y) or LTL (> 5 Y).**

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Product Features

- ***Loan*** can be ***secured or unsecured***
- ***Loan*** can be ***drawn in parts*** (tranches)
  - Full loan to be drawn before a drawdown date fixed for the loan
- ***Disbursement*** *is generally through the* demand deposit account
  - In rare cases disbursement is by way of remittance to another bank account
- ***Interest*** can be ***fixed or floating or interest reset***
  - Interest will be charged and is generally payable in monthly intervals, but can also be paid in other frequencies subject to the terms of the Loan Agreement
- ***Structured*** and ***predictable repayments***
  - Generally in periodic (M/Q/A) installments or
  - A bullet payment at the end of the loan tenor

2.4 Bilateral Loans vs. Syndicated Loans

Let's look at the following business situations to understand the need for Syndicated loans.

A large multi-national company has approached Bank of America for a term-finance of 500 M $

Should Bank of America make this loan available on its own?

A medium-sized enterprise that is growing fast wants to increase the number of banking relationships to take care of its future financing requirements

What is the least painful way of doing this?

A small financially sound company is looking to raise 100 M $ immediately and is OK with paying necessary fees for the same

What can be a good alternative for this company?

A syndicated business loan is between an individual borrower and a group of lenders, while a bilateral loan is an agreement with only one lender. This primary difference means that syndicated loans are typically used by businesses to gain large amounts of financing. Bilateral loans are the more common type of personal loan, but they may be used in business if the circumstances are correct.

2.4.1 Bilateral Loans

Parties Involved: There are only two groups involved in this general loan category: the borrower and lender. The lender is one institution rather than many.
Expenses: This loan is usually less expensive for the borrower because the lender is assuming less risk. The straightforward nature of the loan allows the lender to set more specific terms than if the lender was working with an arranger.

Commonly Used By: Bilateral business loans are usually used by small business owners looking for initial capital or funds to expand. While there is no "cap" per se on the financing available through bilateral loans, a business seeking a tremendous amount of financing may need to secure it from more than one source.

Loan Terms: These loans can be arranged as overdraft loans, term loans or revolving credit. Overdraft loans allow for an initial principal that may be paid off at any time without notice to the lender. They have higher interest rates but are incredibly flexible. Term loans are typical installment loans were a monthly payment is made until the loan eventually matures and is paid off. Revolving credit lines, just like credit cards, have a certain financing limit. A borrower can use the line up to the limit and decide when to pay down the balance.

2.4.2 Syndicated Loans

Parties Involved: There are three groups involved in arranging a syndicated business loan: the borrower, arrangers, and the many lenders. The arrangers are the people who take on the task of locating the many lenders willing to participate in the loan. Arrangers are usually investment banks or professionals.

Expenses: These types of loans are typically more expensive because a fee is paid to the arranger. The more complicated the investment deal, the higher the fee. Arrangers may prefer the challenge of a complicated deal where the borrower has less than perfect credit in order to obtain larger payoffs. The complicated structure of a syndicated loan typically means higher fees to the lender as well.

Commonly Used By: Large corporations or very expensive projects are more likely to seek syndicated loans. The expense is only justified if the borrower cannot arrange financing in a more simple and straightforward form. When a company is in need of a huge amount of liquidity and does not have a great financial history, though, this type of loan may be the only real option.

Loan Terms: The cost to the borrower is usually arranged based on future profits and tend to be higher pay-offs for lenders.

2.4.3 Key Participants in a Syndicated Loan

The syndication process is initiated by the borrower, who appoints a lender through the grant of a mandate to act as the Arranger (also often called a Mandated Lead Arranger) on the deal. The Arranger is responsible for advising the borrower as to the type of facilities it requires and then negotiating the broad terms of those facilities. By the very nature of this appointment, it is likely that the Arranger will be a lender with which the borrower already has an established relationship, although it does not have to be. At the same time the Arranger is negotiating the terms of the proposed facility, one of the Arrangers appointed by the Borrower to act as Book runner also starts to put together a syndicate of banks to provide that facility.

Syndication is often done in stages, with an initial group of lenders agreeing to provide a share of the facility. This group of lenders is often referred to as Co-Arranger or Participating Banks. The Co-Arrangers then find more lenders to participate in the facility, who agree to take a share of the Co- Arrangers' commitment.

To facilitate the process of administering the loan on a daily basis, one bank from the syndicate is appointed as *Facility Manager* or the *Agent*. The Agent who is appointed acts as the agent of the lenders not of the borrower and has a number of important functions:

1. **Point of Contact**: (maintaining contact with the borrower and representing the views of the syndicate)
2. **Monitor**: (monitoring the compliance of the borrower with certain terms of the facility)
3. **Postman and Record-keeper***:* (it is the agent to whom the borrower is usually required to give notices)

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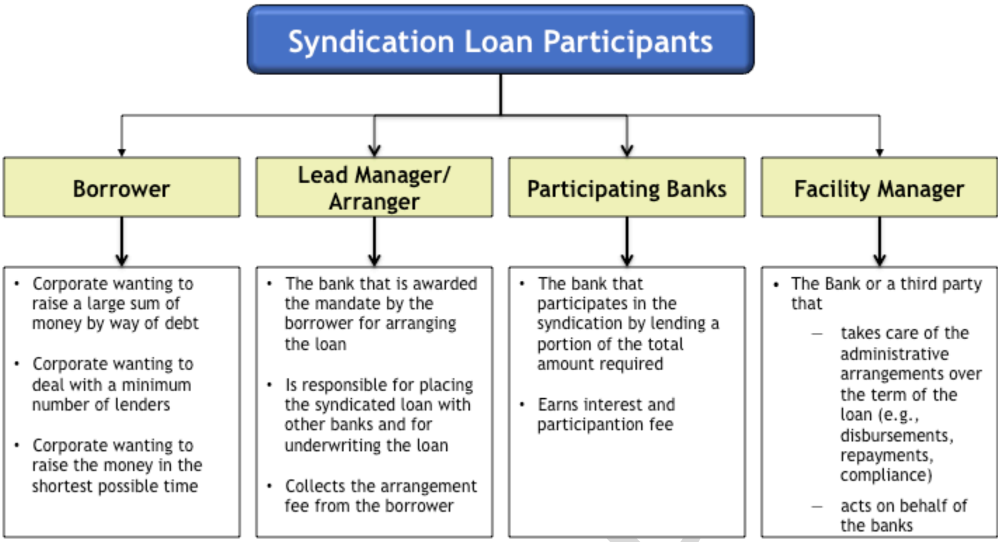
4. **Paying Agent**: (the borrower makes all payments of interest and repayments of principal and any other payments required under the Loan Agreement to the Agent. The Agent passes these monies back to the banks to whom they are due. Similarly the banks advance funds to the borrower through the Agent).



2.4.4 Types of Syndicated Loans

There are 3 types of syndications: an underwritten deal, "best-efforts" syndication, and a "club deal."

Underwritten deal
An underwritten deal is one for which the arrangers guarantee the entire commitment, and then syndicate the loan. If the arrangers cannot fully subscribe the loan, they are forced to absorb the difference, which they may later try to sell to investors. This is easy, of course, if market conditions, or the credit's fundamentals, improve. If not, the arranger may be forced to sell at a discount and, potentially, even take a loss on the paper. Or the arranger may just be left above its desired hold level of the credit. So, why do arrangers underwrite loans? First, offering an underwritten loan can be a competitive tool to win mandates. Second, underwritten loans usually require more lucrative fees because the agent is on the hook if potential lenders balk. Of course, with flex-language now common, underwriting a deal does not carry the same risk it once did when the pricing was set in stone prior to syndication.

Best-efforts syndication
A "best-efforts" syndication is one for which the arranger group commits to underwrite less than the entire amount of the loan, leaving the credit to the vicissitudes of the market. If the loan is undersubscribed, the credit may not close—or may need major surgery to clear the market. Traditionally, best-efforts syndications were used for risky borrowers or for complex transactions. Since the late 1990s, however, the rapid acceptance of market-flex language has made best efforts loans the rule even for investment-grade transactions.

Club deal
A "club deal" is a smaller loan (usually $25 million to $100 million, but as high as $150 million) that is pre marketed to a group of relationship lenders. The arranger is generally a first among equals, and each lender gets a full cut, or nearly a full cut, of the fees.

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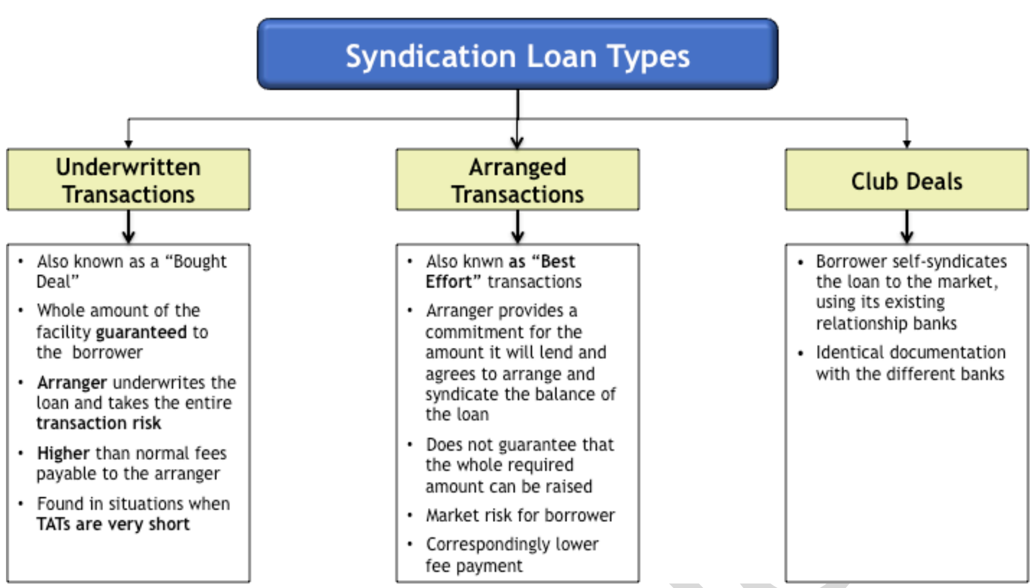


2.4.5 The Syndication Process

Before awarding a mandate, an issuer might solicit bids from arrangers. The banks will outline their syndication strategy and qualifications, as well as their view on the way the loan will price in market. Once the mandate is awarded, the syndication process starts.

The arranger will prepare an **Information Memo** (IM) describing the terms of the transactions. The IM typically will include an executive summary, investment considerations, a list of terms and conditions, an industry overview, and a financial model. Because loans are not securities, this will be a confidential offering made only to qualified banks and accredited investors. If the issuer is speculative grade and seeking capital from nonbank investors, the arranger will often prepare a "public" version of the IM. This version will be stripped of all confidential material such as management financial projections so that it can be viewed by accounts that operate on the public side of the wall or that want to preserve their ability to buy bonds or stock or other public securities of the particular issuer. Naturally, investors that view materially nonpublic information of a company are disqualified from buying the company's public securities for some period of time.

As the IM (or "bank book," in traditional market lingo) is being prepared, the syndicate desk will solicit informal feedback from potential investors on what their appetite for the deal will be and at what price they are willing to invest. Once this intelligence has been gathered, the agent will formally market the deal to potential investors. The executive summary will include a description of the issuer, an overview of the transaction and rationale, sources and uses, and key statistics on the financials.

Investment considerations will be, basically, management's sales "pitch" for the deal. *The list of terms and conditions* will be a preliminary term sheet describing the pricing, structure, collateral, covenants, and other terms of the credit (covenants are usually negotiated in detail after the arranger receives investor feedback).

The industry overview will be a description of the company's industry and competitive position relative to its industry peers. *The financial model* will be a detailed model of the issuer's historical, pro forma, and projected financials including management's high, low, and base case for the issuer. Most new acquisition-related loans kick off at a bank meeting at which potential lenders hear management and the sponsor group (if there is one) describe

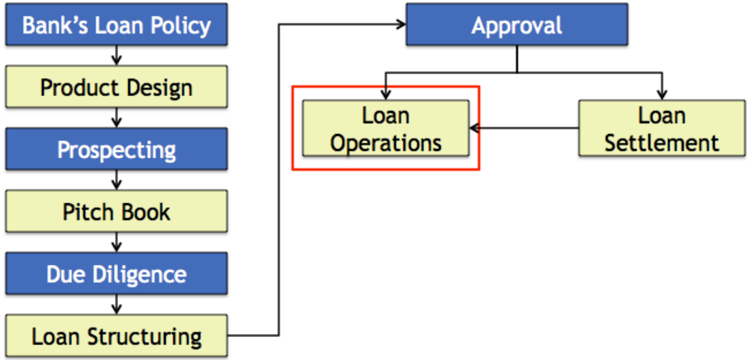
what the terms of the loan are and what transaction it backs. Management will provide its vision for the transaction and, most important, tell why and how the lenders will be repaid on or ahead of schedule. In addition, investors will be briefed regarding the multiple exit strategies, including second ways out via asset sales. (If it is a small deal or a refinancing instead of a formal meeting, there may be a series of calls or one-on-one meetings with potential investors.)

Once the loan is closed, the final terms are then documented in detailed credit and security agreements. Subsequently, liens are perfected and collateral is attached. Loans, by their nature, are flexible documents that can be revised and amended from time to time. These amendments require different levels of approval. Amendments can range from something as simple as a covenant waiver to something as complex as a change in the collateral package or allowing the issuer to stretch out its payments or make an acquisition.

2.5 The Life Cycle of a Loan

A complete understanding of the lending process will help put things in the right perspective about commercial lending.

Banks have formal policy documents and guidelines that capture the essence of each of key stage in the life cycle of a loan. While the operational details could vary from one bank to another, the following are broadly the key stages in the commercial lending process:



In this section, we will get a clear understanding of each of these different stages in the lending process.

This section of the Workbook is designed to help us understand the importance of each stage in the commercial lending process, the tasks and activities that are carried out at each of these stages and the linkages between the different stages.

2.5.1 Bank's Loan Policy

Banks are financial intermediaries that channelize the depositors' money to the borrowers after carefully considering the credibility and suitability of the borrowers. In this process the banks act as custodians and trustees of the depositors' monies and hence it becomes imperative for them to exercise utmost caution in selecting and dealing with borrowers.

The challenges for a global bank in this regard are manifold because it deals with borrowers from multiple geographies, which relationships are governed by different set of legal systems. Also, the bank employs credit officers from multiple countries who come from different backgrounds and are engaged in this process of choosing the borrowers for the bank.

So, how does a bank that has global operations ensure standardization of its lending process so that the credit decisions made by it are uniform across the globe and that borrowers are assessed based on a similar set of parameters?

Banks achieve this standardization by setting forth a uniform set of credit guidelines, rules, regulations and lending norms in the form of a **Loan Policy** document.

What the holy scriptures are to the believers, the **Bank's Loan Policies** are to every banker. It is the principal document that defines the **risk appetite** of the bank. It establishes minimum credit standards in booking new loans, policies and procedures in treatment of past-due and delinquent loans, and more generally, defines the type of customer a bank wants as a borrower.

These guidelines are issued at the highest level of the Bank and typically approved by the Bank's Board and/or Risk Management Committees.

The bank's loan policy document addresses the following:

- **Compliance:** adherence to external statutes and regulations,
- **Coverage:** the applicability of the policy in terms of geographies and markets
- **Roles & Responsibilities:** definition of roles & responsibilities of credit officers, risk officers, credit committees, risk committees and the Bank Board in respect of loans and lending decisions
- **Exposure norms:** legal lending limits, risk-adjusted lending limits that establish acceptability criteria based on loan amount, loan tenor, loan collateral, industry sector etc. - this helps to ensure growth of assets in an orderly manner.
- **Loan Grading** - internal risk rating models, external risk rating models, acceptance criteria based on loan grading
- **Loan Pricing** - rationale, linkage between loan grading and loan pricing
- **Credit Approval Authorities** - Authorization & Approval matrix for loans based on borrower type, borrower group, loan type, loan product and industry etc.
- **Exceptions** - definition, approval authorities and reporting requirements

2.5.2 Product Design

Innovation and design play a very critical role in defining the success of modern-day businesses. Leaders of yesteryears have been obliterated and new leaders created on the strength of innovation and design. Industry pioneers like Kodak, Sony and Research in Motion (Blackberry) have all been upstaged by companies like Apple on the strength of innovation and design of products & services.

In a world of iPods, what happens if you come up with a great design for cassette players or CD players?

In a world of touch phones, what happens if you come up with a great design for key phones?

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While the financial services landscape is not as dynamic as the consumer electronics industry, innovation and design play an equally important role in defining the success of modern-day banks and financial services companies.

Design, development and delivery of financial products that address stated and unstated needs of bank customers (both borrowers and depositors) are an important requirement for modern-day banks. Loan product design is an important stage in the lending process and is influenced by a host of internal and external considerations:

- Market needs and customer requirements
- Regulatory norms and guidelines
- Internal bank's loan policy rules and guidelines
- Competition from existing and new players
- Growth and profitability considerations of the bank
- Asset quality goals – for e.g., a self designated sub-prime lender is more likely to design products needed by customers with poor credit ratings than those with strong credit ratings

Product design is an on-going process with banks introducing new products and tweaking existing products to suit changing market requirements.

2.5.3 Business Prospecting

The next stage in the lending process involves the banks' Relationship Managers and Business Development Managers prospecting for new business and deepening existing business relationships. Banks employ both ***'Push'*** and ***'Pull'*** strategies to attract customers to it.

The Deutsche Bank brand and logo are so powerful (some surveys indicate that the brand is more powerful than that of Apple or Nike) that it **helps the bank to pull customers** to it. Businesses that are looking for a one-stop solution for all their banking needs or those looking for a bank with a truly multinational presence are easily attracted to Deutsche Bank given the banks' dominant position across product groups, depth of expertise in different market segments and strong presence in multiple markets.

Banks also devise well thought out ***'push'*** strategies that help it to attract new customers to its fold. This starts with developing a target list of prospects that satisfy pre-defined acceptability criteria of the bank in terms of business & financial performance, credit ratings and stock market performance (if applicable). Once the target list of prospects is developed, the bank then approaches them through multiple means including cold calling, business meetings and networking. In a few cases, where the bank is unable to get through to the prospect directly, it may start the relationship by participating in a loan syndication (a process where multiple banks come together to meet the funding needs of a corporate).

2.5.4 Pitch Book Development

Pitch book development involves developing a formal offering to an identified prospect after carefully considering the prospects' suitability, credibility and loan requirements and matching them with a suitable offering from the bank.

2.5.5 Due Diligence

Due diligence, as the name suggests, involves undertaking a thorough analysis of the borrower's business and financial performance by using an evolved set of tools and methodologies. It involves investigation and evaluation of a lending opportunity and spans

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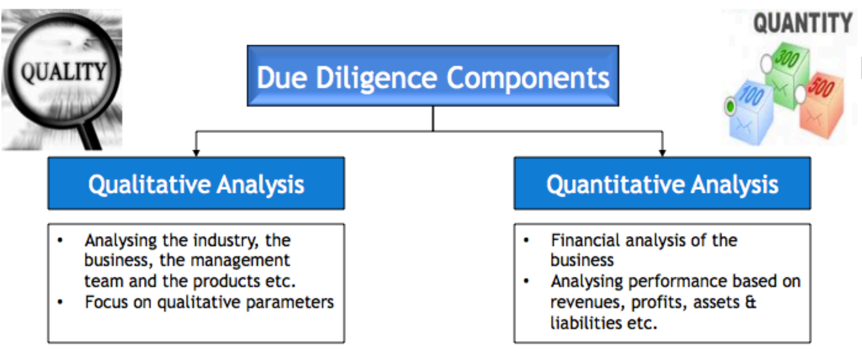
investigation into all relevant aspects of the past, present, and predictable future of the business of a target company.

Due diligence is critical from the banks' perspective because it helps the bank to

- Confirm that the business is what it appears to be
- Avoid a bad lending transaction – credit risk management
- Ensure compliance with the banks' lending criteria – risk perspective
- Ensure compliance with external regulations – compliance perspective

Due diligence has two important components:



2.5.5.1 Qualitative Analysis of a Business

The qualitative analysis of a business entails understanding the non-financial performance of the business in terms of its market position, the industry evolution, the intensity of competition in the industry, the product mix and product life cycle etc.

Such analysis is undertaken by using a comprehensive set of frameworks that include the BCG Matrix, SWOT Analysis, Value Chain Analysis, Porter's Analysis and PEST (Political, Economic, Social and Technology) Analysis etc.

2.5.5.2 Quantitative Analysis of a Business

Every business enterprise, whether small or big, publishes periodic financial statements, which if analysed appropriately, will provide deep insights into the performance of the company. The most common financial statements published by businesses are

- **The Balance Sheet** – which gives a snapshot of the company at a given point of time (say 31st December)
- **The Profit & Loss Account or the Income Statement** – which gives the net result of the operations of the company over a period of time (say, a period of 3 months or 12 months etc. – e.g., P&L statement for the year ended 31st December)
- **The Cash Flow Statement** – which helps understand the amount of cash that the company has been able to generate from its operations, financing and investing activities.

These financial statements are analysed using tools like Ratio Analysis to help draw meaningful inferences from the numbers. Some of the most commonly used ratios and their importance are highlighted below:

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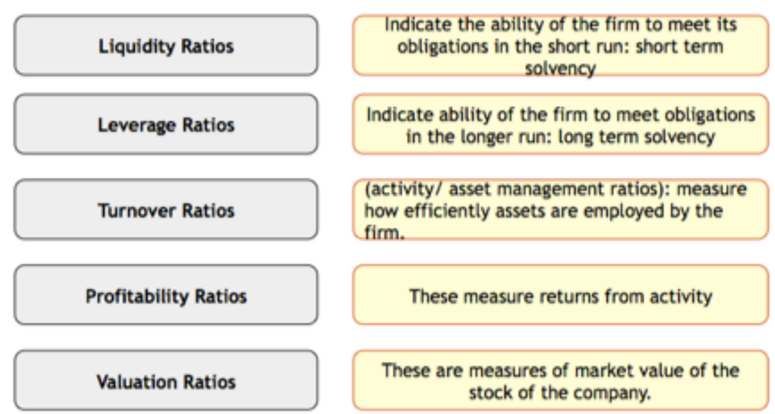


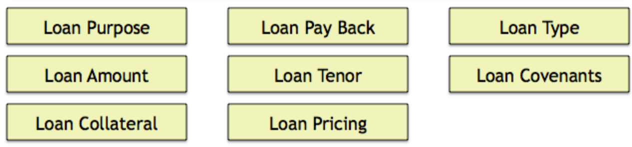
The due diligence process also relies on external credit ratings that are issued by Credit Information Bureaus (CIBs) for small and medium businesses and individuals and Credit Rating Agencies (CRAs) for large corporates.

- The financial health of large corporates can be gauged by looking at the credit ratings assigned to their debt issues or to the company as a whole by the leading global credit rating agencies like **Standard & Poor's (S&P), Moody's and Fitch** etc. These agencies analyze the performance of a company on both qualitative and quantitative parameters and assign ratings that are a measure of their health. The most common ratings read as AAA, AA, A, BBB, BB, B, C and D etc. A "AAA" rating indicates high safety and high probability of timely repayment of Principal and Interest, while a C or D rating indicates very high risk and such companies are already in default. Banks rely on these ratings to a large extent in arriving at their credit decisions.

2.5.6 Loan Structuring

Loan structuring is a critical stage in the lending process and involves designing a loan transaction so as to match the interests and needs of the Lender and the Borrower. Proper design of a loan transaction will help mitigate many risks that are inherent in any lending transaction. For example, a proper definition of the collateral, its appraisal, the frequency of its valuation and its marketability helps lower the credit risk of the transaction

Loan Structuring comprises the following:



We will now understand each of these items in greater detail.

2.5.6.1 Loan Purpose & Pay Back

Who is the issuer (borrower) and for what is the end-use of funds?

In many cases, the stated purpose for the borrowing is "general corporate purposes". In order to understand the credit, it is important to identify for what purpose the funds are actually being used in order to assess the likely source of repayment.

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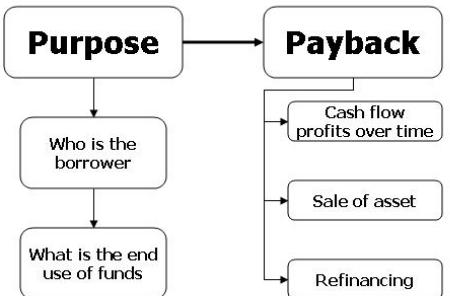
A useful aid is to consider the balance sheet of the borrower and determine the assets being financed. Even in the case of a refinancing, although the primary purpose of the debt issue is to replace an existing liability, the same principle holds – the debt is financing an asset.



What are the primary and secondary sources of repayment?

Once the true purpose of the funding has been established it is relatively straightforward to identify the source of repayment

There are three main sources of payback

- Cash flow profits over time - Cash generated from the core business operations
- Sale/liquidation of assets - Cash from sale of non-operating assets
- Refinancing - Cash from new debt and/or equity

In many circumstances, a company will expect to refinance its borrowings when they fall due, most companies do not expect, and do not plan, to be debt free. Therefore the analyst will need to assess the likelihood of the company being in a position to refinance its obligations at a future date. The ability of the company to do so will depend upon the market's assessment at that time of the company's ability to generate cash to service its obligations from its operations or the sale of assets. This "ultimate" or "secondary" repayment source needs also to be evaluated.

The most usual source of payback for a corporate borrower is cash flow profits over time. Sale or liquidation of assets, whether operating assets (businesses), loans or shares, is often a fall back option if all else fails. However, there are cases where debt is used to finance the purchase and or development of an asset and the primary source of repayment is intended to be the sale of the asset being financed, for example

- A company may use short-term debt to purchase seasonal inventories (e.g. such as toys and Jewellery, both of which have low sales during the year and a peak at Christmas). Lenders are repaid from the sale of that inventory. Because lenders are financing inventory at cost, the company merely needs to sell these inventories at a price, which will enable them to recover cost. The risk analysis will focus on the borrower/issuer being in a position to recover costs.

- A property developer borrows funds to buy land and develop a property with the intention of selling the building to the end user or an investor. In such circumstances, the primary source of repayment will be the sale of the asset. The value of the asset (i.e. the price which can be achieved) will however depend on the cash flow that building will generate by way of rental stream in the future.

The repayment of the loan can happen in multiple ways.

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- **Interest only** – the borrower pays the interest as and when it is charged to the account (typically on a monthly basis) and the Principal is repaid at the end of the loan tenure or in any other pre-determined frequency
- **EI** – equated installment basis (or EMI) that has a principal and an interest component with the interest being higher in the initial stages and the principal being higher in the later stages
- **Negotiated** – could be in monthly, quarterly, half-yearly or annual installments – this is negotiated by the borrower
- **Balloon Payment** – the borrower pays the loan in one or two Lumpsum payments
- **Irregular** – repayment made in irregular installments, the date of the interest payment and principal payment can be different as per the customer's instructions.

2.5.6.2 Loan Type

Offering the borrowers the right type of loans enhances the success factor of the transaction. It also helps understand the risks in the transaction and price it accordingly. For e.g., a borrower who is looking to fund his regular operations will need a revolving credit (say, an Overdraft) that will help him route his receipts and payments through the account and also save on interest costs (since interest will be charged only to the extent of usage). However, being revolving in nature the bank does not have clarity on the extent of usage and hence will add a premium to the interest rate to compensate for this risk.

2.5.6.3 Loan Amount & Tenor

The **loan amount** is an important aspect of loan structuring and it needs to be assessed very carefully. Failure to do so will result in either **under financing or over financing**, both of which are detrimental to the banks' interests. Under financing leads to a situation wherein the borrower does not have enough funds to implement the project successfully or is facing constant liquidity pressures both of which will impact the quality of the loan. On the other hand, over financing will lead to a situation wherein the borrower has more than what is required for establishing/operating the business and this could lead to a situation wherein the borrower is unable to service the loan properly.

A very common yardstick used by banks in arriving at the quantum of the loan is the **Loan to Value ratio (LTV).** This ratio helps the bank to impose a certain minimum **margin requirement** on the borrower failing which the transaction will not go through. For e.g., if a borrower wants to buy a piece of real estate that is valued at $ 100,000 and the bank insists that the borrower should bring in at least $ 20,000, it means that the bank will lend the remaining $ 80,000 or it is imposing a LTV of 80% (80,000/100,000).

The **loan tenor** refers to the loan period, which is commonly expressed in months or years. Proper assessment of the loan tenor is equally critical since it has a bearing on the ability of the borrower to service the loan. A short loan period will increase the repayment burden on a monthly or a quarterly basis and if the cash flows do not support such repayments, the loan runs the risk of default. A very long period will increase the risk for the bank since the industry, the market and the technology etc., are likely to undergo substantial changes in a long tenor.

2.5.6.4 Loan Covenants

Loan agreements have a series of restrictions that dictate, to varying degrees, how borrowers can operate and carry themselves financially. For instance, one covenant may require the borrower to maintain its existing fiscal year end. Another may prohibit it from taking on new debt. Most agreements also have financial compliance covenants, for example, that a borrower must maintain a prescribed level of equity, which, if not maintained, gives banks the right to terminate the agreement or push the borrower into default. The size of the covenant package increases in proportion to a borrower's financial risk.

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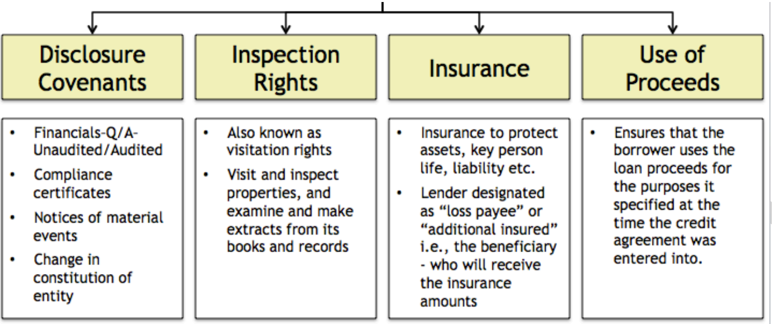
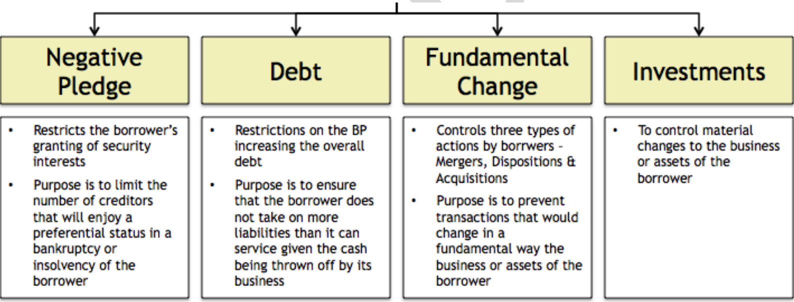
The three primary types of loan covenants are **affirmative, negative, and financial.**

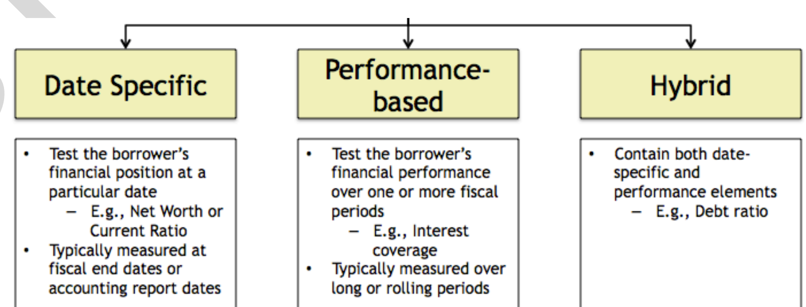
- **Affirmative covenants** state what action the borrower must take to be in compliance with the loan, such as that it must maintain insurance. These covenants are usually boilerplate and require a borrower to pay the bank interest and fees, maintain insurance, pay taxes, and so forth.



- **Negative covenants** limit the borrower's activities in some way, such as regarding new investments. Negative covenants, which are highly structured and customized to a borrower's specific condition, can limit the type and amount of investments, new debt, liens, asset sales, acquisitions, and guarantees.



- **Financial covenants** enforce minimum financial performance measures against the borrower, such as that he must maintain a higher level of current assets than of current liabilities.



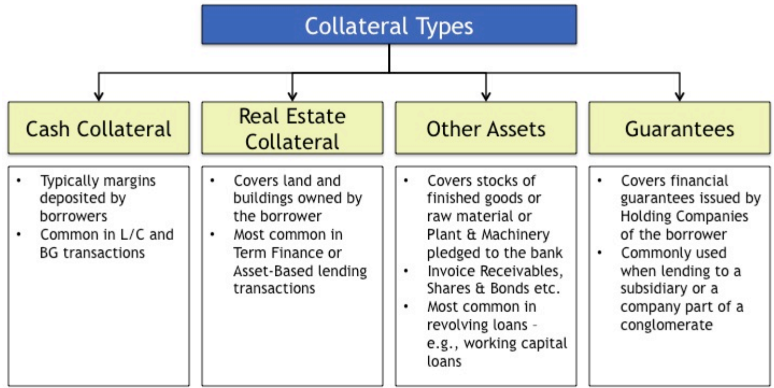
2.5.6.5 Loan Collateral

Collateral is any tangible or intangible asset (say a piece of real estate or an automobile or plant & machinery or a guarantee) that secures a loan against default. In the event of

default, it provides the bank (the lender) an avenue for cutting down its losses by repossessing the asset or invoking the guarantee and thereby recovering the loan outstandings.

The presence of collateral in a loan transaction has a positive influence on the loan structuring. A liquid and marketable collateral whose value can be determined easily helps secure better loan terms like lower interest rates, lower fees and charges, longer tenor or a higher quantum of loan etc.

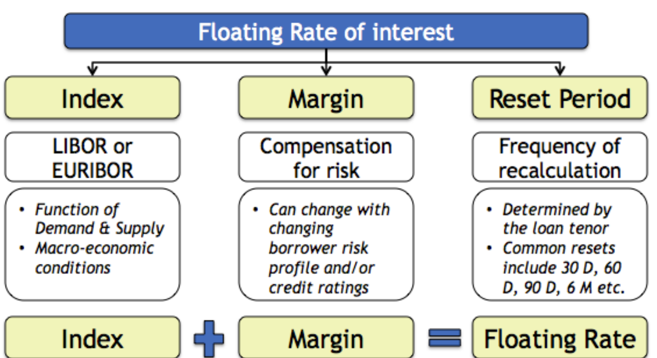
Banks accept a variety of assets as collateral. Some of the most common types of collateral accepted by banks are given below:



2.5.6.6 Loan Pricing

An important component of the loan structuring process is the pricing of a loan. Pricing refers to the rate of interest charged on the loan and the other types of fees and charges levied on the loan. Pricing of a loan is based on multiple considerations some of which are internal to the bank and some external to the bank. It considers both hard factors like the cost of funds (the rate at which the bank is able to borrow funds) and soft factors.

- **Fixed rate** is one where the rate of interest remains fixed for the complete loan tenor or for a predetermined period, say two-year blocks
- **Floating rate of interest** or **variable rate of interest** or **adjustable rate of interest** is one where the rate of interest is reset every few weeks or months based on the movements in the benchmark rate or the index. A floating rate is dependent on three parameters viz., a benchmark rate like the LIBOR or the bank's Base Rate, the margin or mark-up on the benchmark rate and the reset period i.e., the frequency at which the benchmark changes



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We will understand the benchmark rates LIBOR and EURIBOR in a little more detail in the following section:

LIBOR

The ***London Interbank Offered Rate*** is the average interest rate estimated by leading banks in London that they would be charged if borrowing from other banks. It is usually abbreviated to **Libor** or **LIBOR**. It is the primary benchmark, along with the Euribor, for short-term interest rates around the world.

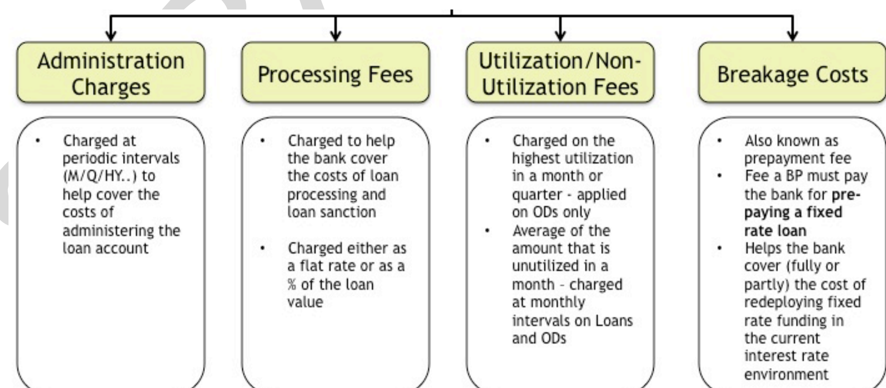
Interest reset is one where the rate of interest is fixed for a certain period of time say 3 months, and is reset for another 3 months at the end of the third month. At the end of the reset period, the borrower pays the interest and the principal is rolled over - interest reset frequency and repayment frequency can be different.

Interest is calculated and charged to the loan account on a monthly basis on an average daily balance method. Interest calculations are based on rates prevailing on dates when the loan is made and not on when the loan is repaid. Interest computation follows one of the two industry norms, namely the 360-Day Year rule or the Actual/Actuals method. The 360-Day Year rule as the very name suggests assumes that a year has 360 days (as against the normal 365 or 366 days) and is generally applied in all LIBOR-based loans. On the other hand the Actual/Actuals uses the actual number of days the loan has run against the actual number of days in a year (which could be 365 or 366) and is used in all Base-rate based loans.

Fees and Charges

The other important component in the determination of the loan pricing is the different types of fees and charges that are levied on the borrower (BP) through the life of the loan. Banks charge the borrowers a variety of fees that include loan-processing fees, loan account maintenance charges, delayed payment charges, loan prepayment charges or breakage costs and other periodic charges etc. While the interest charges levied by the bank will reflect as its interest income, the different type of fees and charges will reflect as fee income or non-interest income.

Brief details of these charges are given below:



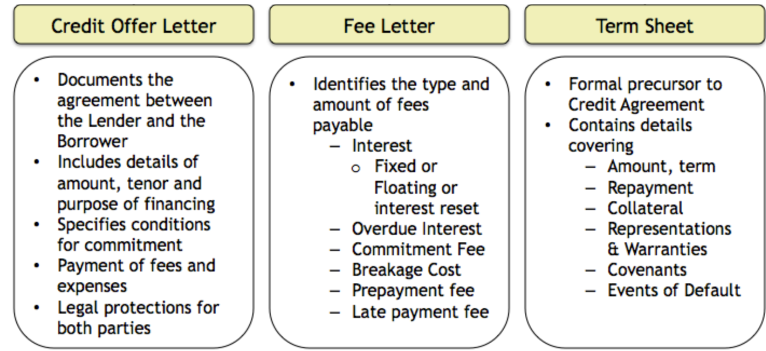
2.5.7 Loan Approval

Once the due diligence is complete and the loan is structured appropriately, the lending process moves to the next important stage, that of the loan approval by the appropriate authority in the bank. The appropriate authority can be the loan officer at the bank branch (at the lowest level) or the Banks' Board or the Risk Management Committee or Credit

Committee at the highest level. The loan type, tenor, amount, internal/external credit rating and borrower determine the level of authority that approves the loan. The appropriate authority may approve the loan as recommended by the loan origination officer or suggest modifications to the loan structure and request for a resubmission of the loan proposal or reject the loan proposal.

A formal ***Credit Offer Letter*** or ***Commitment Letter*** is issued to the Business Partner. Certain other documents outlining the transaction costs and other terms & conditions may also be issued to the Business Partner.

The basic set of documents that are generated at the time of loan approval include:



2.5.8 Loan Settlement

Once the loan is approved and the credit offer letter generated it is sent to the borrower for their acceptance. This acceptance then kick-starts two simultaneous processes viz., loan settlement and loan operations.

Loan settlement is the formal culmination of the lending process from an origination perspective. It is at this stage that the bank prepares all the loan documents; these are vetted by the borrowers' attorneys and then accepted and signed by the borrower. The contract is created in the banks' systems, the loan account is created and the limits are set up to facilitate the loan disbursal. These are some of the tasks that are actually carried out by the Loan Operations team.

Flawless loan documentation is critical for protecting the banks' interests. As long as the borrower is doing financially well and repaying the banks' dues on time, no one sees the need for documentation. However, when things are not smooth and the loan is facing the likelihood of default, it is the loan document that comes to the aid of the bank. They are the first line of defence in establishing the borrowers' contractual obligations in repaying the loan on time. The documents help protect the banks' interests and also establish the banks' rights over the securities (collateral), if any, which are pledged by the borrower in favour of the bank.

2.6 Loan Operations

Loan Operations commences with the receipt of the Loan Documentation. . It encompasses a whole set of activities that are designed to protect the bank's interest over the life of the loan, which can span from a few days to as long as 10 to 20 years. Loan Operations is also responsible for processing different types of transactions in loan accounts. These include both the borrower originated as well as the bank-originated transactions.

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The criticality of loan operations can be understood from the fact that a bank that is strong in this area will see higher loan recoveries and lower loan defaults and delinquencies (non-performing loans).

The key set of tasks and activities that encompass loan operations is highlighted below. These will be dealt in greater detail in the next chapter on Loan Operations.

Account Set Up
Loan Funding
Repayments
Limit Set Up
Disbursement
Account Monitoring
Collateral
Fees and Charges
Transactions Management
Default Management

2.6.1 Account Set-up

The first step in the loan operations process is the **setting up of the borrower's account in the system.** Correct (error free) setting up of the account with all relevant data points captured therein, is important for the bank from both an

- **External compliance** perspective
  - **KYC and Customer Due Diligence (CDD)** requirements
  - **Sanctions List** – e.g., the U.S. OFAC's SDN listing
  - **Politically Exposed Persons (PEP)** listing, and
  - **Anti-Money Laundering laws** –
- **Internal compliance** with the bank's operating guidelines and the bank's loan policies
  - Compliance with exposure norms
  - Correct processing of transactions
- **Other business considerations**
  - Client communication
  - Cross-seling of banks' products and services

The loan operations team captures critical information covering the legal name of the borrower, the borrower's group, if any; the legal form of the borrower, the nature of business, the registered office of the business and the corporate office (for communication), if different from the registered office etc.

2.6.2 Limit Set-up

Limit Set Up is one of the first steps from a Loan Administration perspective in the banks' relationship with the borrower. The limit reflects the ***maximum amount*** that the bank is willing to lend to a borrower group or a borrower under one or more of the facilities. This amount also reflects the ***maximum exposure/maxium risk*** that the bank is willing to take on the borrower Group or a borrower.

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2.6.3 Collateral Management

From an operational perspective the Loan Operations team has to link the collateral to the borrower or Facility etc., so that the limit can be activated and the borrower start using the limits. Establishing proper linkages between the limits and the collateral is also important from a compliance perspective since this has lot of influence on the bank capital calculations.

The Loan Operations team relies on the Booking Instruction Template in setting up collateral and linking it to the borrower Group or borrower or Facility etc. It is the source document that contains all details of the collateral that helps the Loan Operations team in managing the collateral. A duly filled-in and completed Booking Instruction Template helps move through the subsequent steps – Creation, Modification, Authorization, Linking and finally, Inactivation of the collateral, if needed.

2.6.4 Loan Funding

Loan funding refers to the process of finding the necessary funds for making a loan and allowing disbursements in the loan account. This is more of a Treasury/Finance Department function and is not in the purview of loan operations. However, since loan disbursement, which is managed by Loan Operations depends on successful loan funding, we will get a broad understanding of the loan funding process. A bank has access to multiple sources of funds, which can then be used for funding a loan. For e.g., the bank can use the depositor’s money or debt capital raised from the markets or short-term borrowings from the inter-bank money market.

2.6.5 Loan Disbursement

Disbursement can happen only if there is a **formal written request for disbursement** from the borrower to the Relationship Manager (RM) at the Bank or it is scheduled as per the terms of the Credit Agreement. The RM forwards the borrower’s request with her/his recommendations in the form of a **Disbursement Request Form** to the Loan Operations team. Once the Disbursement Request Form is received by the Loan Operations team, they use the **Disbursement Schedule** to capture the disbursement details of the Loan account.

Loan disbursement can happen in one of 3 ways namely Single Tranche, Multiple Tranches and Free Format. The default method chosen by the System is Free Format.

- In Single Tranche disbursement the full amount of the loan is released in one installment.
- In Multiple Tranches disbursement the loan amount is disbursed in pre-defined stages but before set date (something like an expiry date for disbursements)
- In Free Format the disbursal of the loan depends on the BPs’ needs and the disbursements (amount and dates) are decided by the BP

2.6.6 Loan Repayment

The Loan Operations team has to now focus on creating and setting up the ***Repayment Schedule*** for the contract (loan account). This stage is highly critical because it will indicate to the bank the expected dates of repayment (as per the established schedule) and work on its apportionment and accounting. If the repayments do not happen on time the Bank has to take corrective actions to rectify the same.

The Repayment Schedule captures key information pertaining to loan repayment like Installment Type, Installment Date, Repayment Mode and Installment Amount etc.

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Key Learnings:

At the end of this chapter one should be conversant with the following fundamental concepts related to corporate or wholesale banking.

- Corporate banking or Wholesale banking deals with corporates and provides a host of banking products & services.
- Corporate have a variety of needs that include loans, trade services, foreign exchange and treasury services.
- Banks provide short-term and long-term loans to corporates to meet their working capital needs (Overdrafts) and capital investments (Term Loans).
- Banks undertake detailed due diligence of their customers before sanctioning loans. This includes both qualitative and quantitative analysis of the borrower's performance.
- Loan operations deals with the life cycle of the loan once the bank sanctions it.
- Banks help corporates deal successfully with customers and suppliers in multiple countries by managing their trade-related documents and facilitating payments.
- They offer secure payment instruments like Letter of Credit and Bank Guarantees to facilitate easy trade.
- Banks help corporates deal in multiple currencies and also hedge the currency risk by offering foreign exchange and derivatives like forward contracts.
- Treasury services help banks in managing their receipts, payments and short-term surpluses/deficits.

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2.7 Test Your Understanding

1. Which of the following characterizes corporate banking?
    a. Small numbers
    b. Large transaction sizes
    c. Customized products
    d. All of the above

2. Loan disbursement can happen in which of the following ways?
    a. Single Tranche
    b. Multiple Tranches
    c. Free Format
    d. All of the above

3. The asset that secures a loan is called as Collateral.
    a. True
    b. False

4. Due diligence by banks of prospective borrowers includes which of the following?
    a. Qualitative analysis of performance
    b. Quantitative analysis of performance
    c. Both ‘a’ and ‘b’ above
    d. None of the above

5. Which of these ratios are calculated as part of loan underwriting/due diligence?
    a. Liquidity ratios
    b. Solvency ratios
    c. Profitability ratios
    d. All of the above

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Chapter Overview: Global Payment Systems

This chapter is designed to help the participants get a sound understanding of global payment systems. One of the core functions of a bank is to help its customers draw and deposit cash as well as move money across accounts. The last couple of decades have seen tremendous innovation in this space with smartphones and mobile-based payments being the next frontier in this space. We will understand how different payment systems like Checks, Electronic Fund Transfers (EFTs) and mobile-based payment systems work.

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3. Global Payment Systems

Moving money from one account to another within a bank or across banks within a country or between banks in different countries is a core function of banks. This ability to collect and clear funds on behalf of their customers is what differentiates a bank from any other financial institution.

This module will help you understand the different methods in which money can be moved from one account to another.

Let's take a look at some routine bank transactions:

1. Customer of bank **deposits a paper instrument** that needs to be collected and credited to her/his/its account
   a. Cheque/Demand Drafts/Travellers Cheques
   b. The cheque could be drawn on the same bank or another bank in the same country or another country
2. Customer's account is **electronically credited** with her salary
   a. Direct Deposit - Payroll, Direct Benefit Transfer (DBT), Dividends
3. Customer authorizes her home loan lender to **automatically debit** her savings account with another bank on the 5th of every month
   a. Direct Debit – utility payments, EMIs
4. Customer of Bank walks to an ATM and uses her Debit card to **withdraw cash**

What is common across all transactions:

- Funds movement is involved in all transactions
- Cash is withdrawn or moves from one account to another
  - Could be intra-bank (within the same bank) movement of funds, or
  - Inter-bank (two different banks) movement of funds
  - Could be domestic (Payer & Payee are in the same country) transfer of funds, or
  - Foreign (Payer & Payee are in two different countries) transfer of funds
  - Could be payer (the one who has to pay) initiated, or
  - Payee (the beneficiary) initiated

One MAIN principle in Payments

If A is going to pay B: it automatically means that A's Bank has to pay B's Bank.

No matter where the world goes (in evolution terms) for a payment to be made, money must reach the pocket of the recipient. "It isn't money if it isn't in my pocket!"

In practical terms, it implies that if one wants to pay B, one has to find a way to pay B's Bank; and one should know how to pay B's Bank. Being aware of this brings clarity to most of the problems faced in payment situations.

3.1 Participants in a Payment System

1. The Banks
Banks are intermediaries between users and payment systems as they hold a license to take deposits and effect payments for which they are subjected to regulation. They maintain accounts on behalf of their customers, which are debited or credited when a payment is effected or funds are received.

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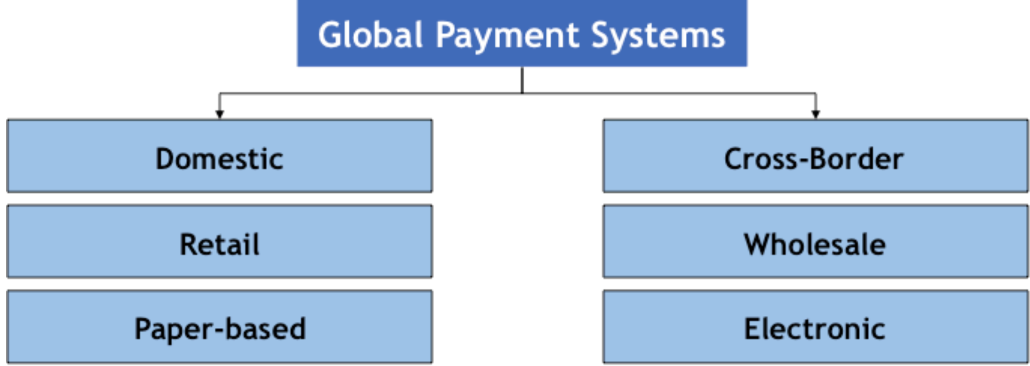
2. The Settlement agent
The settlement agent manages the settlement accounts of the direct members and transfers amounts between them to achieve finality.

3. The Central Bank
Central banks act generally as settlement agent. They also, most often, operate the large-value RTGS systems. Central banks are however responsible for oversight. They also maintain the settlement accounts or member banks.

3.2 Classification of Payment Systems

There are several ways to classify payment systems. The simplest and most intuitive way is given below:



For the purposes of this discussion, we will stick to a Retail vs. Wholesale distinction.

Retail payment systems:

- **Check** payment systems - mostly deferred net settlement
- Electronic Fund Transfers (**EFTs**) like ACH clearing and settlement – mostly deferred net settlement
- **Other electronic** payments - Internet banking, mobile banking & E Wallets etc.
- **Card-based** payment systems – ATM Networks, Bank Card Association clearing and settlement - mostly deferred net settlement
- **International Remittances** – money transfers - mostly deferred net settlement

Retail Electronic Payments are of Two Types

- Electronic Credits: These follow the format: Single Debit multiple Credits
- Electronic Debits: Single Credit multiple Debits (the debit needs to be pre-authorized)

While these are classified here as Retail: these are also used by corporates to reach money to retail individuals.

Wholesale payment systems:
Large Value Payment systems – RTGS – inter bank, intra bank – mostly real time gross settlement and also hybrid systems (mix of real time gross and net settlement systems).

3.3 Netting Systems

Any understanding of payment systems will be incomplete without a clear understanding of how banks settle funds between themselves and the role of the clearing corporation or clearing house in this process. This section will help us understand the two commonly used methods of settlement.

Net Settlement & Gross Settlement

Participating banks, can settle their payment balances with other banks either at the end of every day or they can settle it after every payment made or received. Broadly, there are two methods to settle payments:

- Net settlement
- Gross settlement

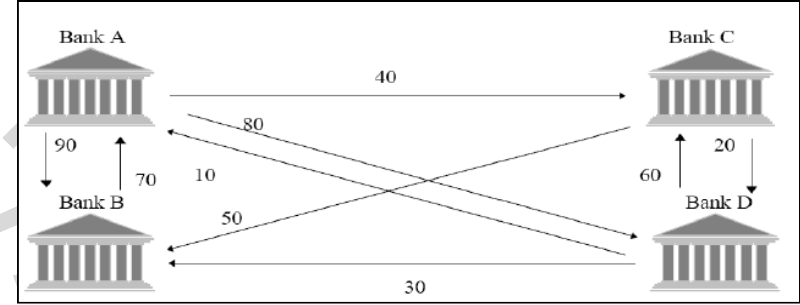
3.3.1 Net Settlement Mechanism

In the net settlement mechanism the total number of a particular bank's 'out' payments are offset against the total number of bank's 'in' payments. This means that as soon as the payment is made or received by a bank no actual transfer of funds takes place between the settling authority (assume central bank) and the bank instead only the entries are made into the account of the bank with the clearing house.

At the end of day, i.e. at the settlement time the final transfer of funds takes place, which is equivalent to the net position of the bank.

The process of Net Settlement can be divided into two steps, either of which may form the basis for producing the entries for posting to settlement accounts:

Bilateral Net Settlement - Let's take an example of banking system comprising of four banks. In it every bank deals with every bank bilaterally i.e. payments are offset between each pair of bank individually.

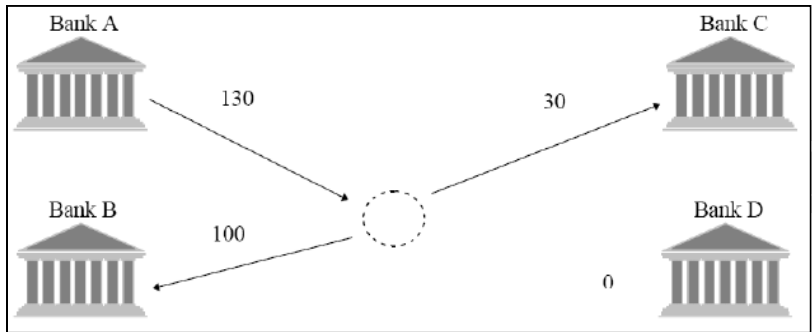


The diagram above shows the daylong actual flow of instructions between every bank pair. Let's take a look at the flow of funds in a tabular form.

From /To	A	B	C	D
A	-	90	40	80
B	70	-	0	0
C	0	50	-	20
D	10	30	60	-

Bilateral netting involves the off setting of the bilateral claims and obligations between each pair of banks. In the four-bank example this means that each bank will have three separate bilateral positions with respect to the other members of the system - positions that can be either a ‘net pay’ or a ‘net receive’, or a zero net obligation.

Multilateral Net Settlement – When bilateral net positions are calculated, then in the second step each bank in the system settles its overall net position with respect to all the other members of the system. There will only be one settlement account entry for each bank.



Under multilateral net settlement, Bank A is a net payer, Banks B and C are net receivers, while Bank D has a zero net position Payment systems with multilateral net settlement usually operate through a clearing house, a central location through which the payment instructions pass and which is responsible for calculating the multilateral net positions of the member banks and passing them on to the central bank for posting to the members’ settlement accounts.

This leads naturally onto the question of the timing of settlement. A netting operation requires the collecting together of details of in and out-payments submitted over a specified time period - often a whole business day, although it may involve shorter, more frequent periods. There is thus a delay between the initial submission of the payment instruction and the settlement across the accounts at the central bank.

Indeed, it may be the case that payment instructions pass through the clearinghouse and on to the receiving banks before settlement takes place. This has important implications for the risks in payment systems.

Role of clearing houses in Net Settlement

Lot of calculation is needed to come up to the final net payable or receivable position of each participant. *Question arises that “who on the behalf of every bank carries out these calculations”, it is the clearinghouse, which determines everybody’s net funds payable or receivable positions before passing on the result to the central bank.*

3.4 Processing of Paper Checks

In spite of technological advances and exponential growth in electronic, card-based and mobile payment systems, checks continue to be used as a mode of payment in the USA. We will understand the check clearing process in this section. But, before that, let’s take a quick look at the key players in the check-processing arena.

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	Payer: say, the buyer of goods and services		**Payee:** say, the seller of goods and/or services
	Payer's Bank: FI where the Payer has a Checking or a Savings Account		**Payee's Bank:** FI where the Payee has a Checking or a Savings Account
NACHA THE NATIONAL CLEARING HOUSE	**Clearing House:** the agency that facilitates inter-bank transfer of funds and holds the accounts of member banks		**Central Bank:** typically runs the clearing houses, payment platforms and regulates payment systems
FIS Metavante Viewpointe	**Image Exchange Networks:** institutions that provide image exchange (between banks) and image archiving services	ECCHO	**Industry Associations:** play a critical role in improving check processing
ENCIRCLE	**Check Verification/Gty. Providers:** institutions that provide access to customer check performance databases		

3.4.1 Different Ways of Check Processing

Technology has made its way into processing of these paper instruments in a big way and today there are multiple ways in checks are processed by banks and payees. These include:

> The check may be delivered to the payee, deposited and collected as a standard paper item – ***the old-fashioned way.***

> The paper check may be ***truncated*** into a digital image early in the collection process and be ***presented electronically (ECP).***

> The paper check may be imaged, only to be ***reborn somewhere*** along the collection path as a paper ***"substitute check."***

> The check may be ***remotely created*** by the payee, based on the drawer's MICR information, and then entered into the collection system as a paper item.

> Using the MICR information on the paper check, the payee may convert the check into an ***ACH debit entry (ECK).***

We will look at a couple of these important ones in greater detail below.

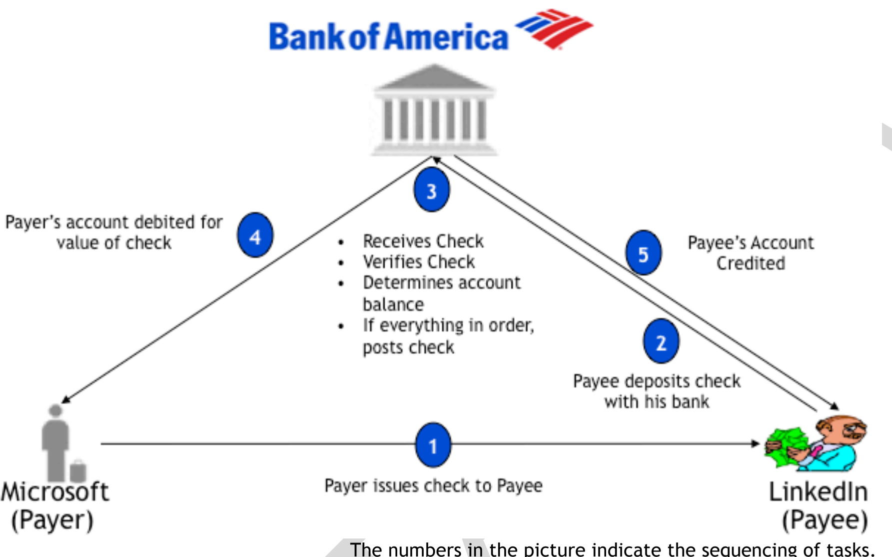
3.4.1.1 Traditional Processing of Checks

Check-based payments can result in an intra-bank transfer of funds or inter-bank transfer. We will take a simple example and understand these processes.

Intra-Bank Transfer

Let's take a recent transaction wherein Microsoft, Inc., successfully bid for LinkedIn. This deal was valued at $ 26 billion. Let's also assume that both Microsoft and LinkedIn deal with the same bank i.e., Bank of America. Let's also further assume that Microsoft (the buyer or the payer) pays LinkedIn (the seller or the Payee or the beneficiary) the deal amount by way of a Check.

Now, how will this transaction flow?



The numbers in the picture indicate the sequencing of tasks.

This intra-bank transfer of funds is also known as a **Book Transfer.**

Life would be simple if all of us had accounts with only one Bank. But, life is never simple.

- There are thousands of banks spread across the globe, and
- The LinkedIn's, Microsoft's, Tatas and the Fords of the world have their accounts with different banks, and
- Money constantly changes hands across this vast network

This is the basis for **inter-bank** transactions. So how does this **inter-bank** movement of funds take place?

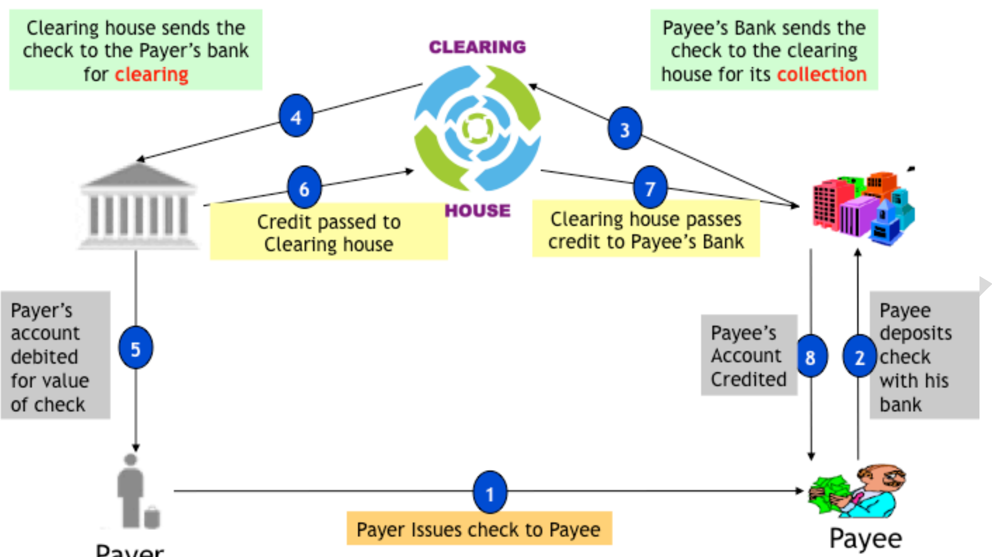
Inter-Bank Transfer

Inter-Bank transfer of funds is accomplished with the help of a Clearing House. The **Clearing House** is an integrating layer that

- Has the accounts of all banks to facilitate movement of money between banks
- Provides the infrastructure backbone for processing millions of checks
  - **Receives** checks from multiple banks
  - **Sorts** checks bank-wise
  - Facilitates **swapping** of checks amongst banks
  - Handles check returns
- Calculates 'net' positions of different banks
- Provides 'intra-day' funding

Extending our previous example, let's assume that Microsoft, Inc., and LinkedIn have their accounts with two different banks.

Now, how will this transaction flow?



The numbers in the picture indicate the sequencing of tasks.

Processing of checks used to be completely manual in the beginning and this created a host of problems particularly at a time when the check processing volumes were increasing in the USA. Bank of America played a key role jointly with General Electric (GE) and Stanford University to address these problems. The outcome was the first major technological breakthrough in the processing of checks.

Bank of America introduced automation in check processing through the use of Magnetic Ink Character Recognition (MICR). This involved encoding checks with routing numbers in machine-readable form. This facilitated automated sorting and handling of checks. The Routing Number of banks was printed using a special font and ink, an example of which is shown below.

E13B numbers

The E13B font numbers are illustrated below:

0 1 2 3 4 5 6 7 8 9

3.4.1.2 Electronic Check Presentment

The traditional way of processing checks has certain serious disadvantages.

- Costly
- Time Consuming
- Error and Fraud Prone

The industry and the central bank worked jointly to address the above shortcomings and what emanated from this effort is what is commonly called as **Check 21**, which was brought into effect through a law called The Check Clearing for the 21st Century Act. The Check 21 way of

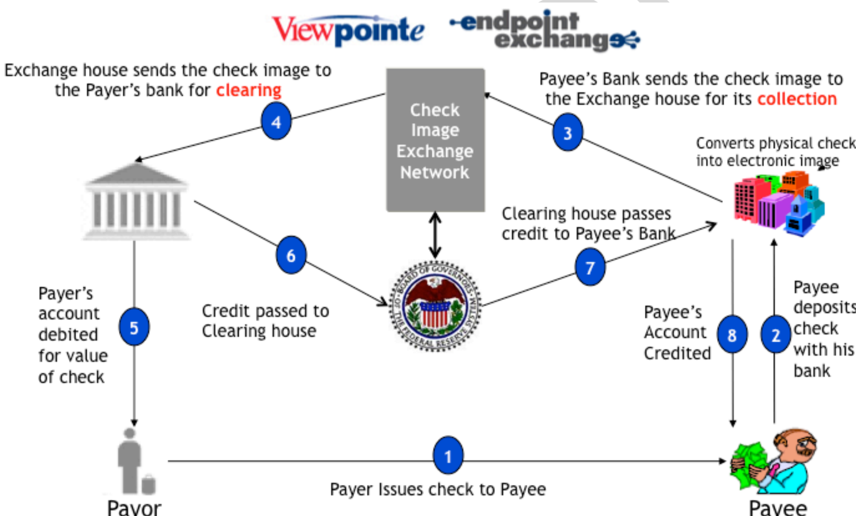
processing checks uses **imaging technology** for check clearing. This method Enables banks/FIs to ***convert*** original paper checks to electronic images for clearing and processing. The electronic image of the check is moved for clearing purposes, instead of the physical check. This provides a faster, efficient method of check clearing.

Check 21 allows banks to create and process a substitute check, also known as an **Image Replacement Document** (IRD) in lieu of an original check. Its purpose is to improve the speed and reliability of the check-clearing process by taking as much of the paper out of the process as possible. It helped develop the **Substitute Check** that is the legal equivalent of the original check and it is the electronic copy or image of the original check.

This act created a new negotiable instrument called "substitute check"

- If this substitutable check meets the criteria of the act then it is legally substitutable to the paper-written traditional check
- This substitute check can be processed similar to the paper check
- Involved Parties cannot refuse to accept these substitute checks if they follow all the requirements by the act "Parties" involve all the banks, Federal Reserve, consumers, customers and other financial services institutions.

Now, how will this transaction flow?



Difference in Process for Check21 compared to conventional clearing:

The only difference is in the manner the receiver's bank sends the instrument to the payer's bank: the image is transmitted rather than the physical instrument being dispatched. All other aspects of clearing are identical where Check21 is used.

3.5 Electronic Fund Transfer Systems

Electronic fund transfer (EFT) systems have gained prominence in the last couple of decades and have grown exponentially. ACH and Fedwire are the two widely used EFT systems in the USA. While ACH is used for routine retail payments, Fedwire is used mostly by corporates and that too for large value payments. It is to be noted that corporates also use ACH for their B2C (Business-to-Consumer) payments.

3.5.1 ACH Transactions

The Automated Clearing House (ACH) is a network for electronically exchanging funds and related information among individuals, businesses, financial institutions, and government entities. ACH rules and regulations are established by the National Automated Clearing House Association (NACHA).

The payments transferred over the ACH have represented recurring credit payments intended for the accounts of the receivers. Typical payments are salaries, consumer and corporate bill payments, interest and dividends, and Social Security and other entitlement programs originated by the U.S. Treasury. The ACH has the ability to process large volumes of payments efficiently and to allow an originator to debit the banking account of the payer because of which it is increasingly used for other types of payments, such as insurance premiums, purchases of stock, and consolidation of corporate cash balances also.

Participants in the ACH Payments Network

1. **Originator** - The Originator is the entity that agrees to initiate ACH entries into the payment system according to an arrangement with a Receiver. The Originator is usually a company directing a transfer of funds to or from a consumer or another company's account. In the case of a consumer-initiated entry; however, the Originator may be an individual initiating funds transfer activity to or from his or her own account.
2. **Originating Depository Financial Institution (ODFI)** – An institution that receives the payment instruction from the Originator and forwards the entry to the ACH operator. A DFI may participate in the ACH Network as a RDFI (see below) without being an ODFI; however, if a DFI chooses to originate ACH entries, it must also agree to act as an RDFI.
3. **ACH Operator** - A central processing facility operated by the Federal Reserve Bank or other private sector organization. The operator receives electronic entries from ODFIs and distributes entries to the appropriate RDFIs (see figure 9.5 below), and performs the settlement functions for the affected financial institutions.
4. **Receiving Depository Financial Institution (RDFI)** – is a financial institution, which receives ACH entries from the ACH Operator and posts to the receiver (depositor) account.
5. **Receiver** – An individual or organization, which has authorized an Originator to initiate an ACH entry to the Receiver's account with the RDFI.
6. **Third Party Processor** - A third party processor may serve as an agent for an ODFI or RDFI. The ODFI and RDFI are still responsible for compliance with ACH rules and regulations.

ACH Credit & Debits

ACH payments may be either credit or debit transactions. In an ACH credit transaction, funds flow from the originator to the receiver, and in a debit transaction, funds flow from the receiver to the originator. ACH credit payments include direct deposit of payrolls, government benefit payments and corporate payments to contractors and vendors.

Examples of ACH Credits

- Payroll direct deposits
- Social Security payments
- Dividend and interest payments
- Corporate bill payments to customers

Examples of ACH Debits

- Insurance premium collections
- Mortgage and loan payments
- Consumer bill paying
- Corporate cash concentration

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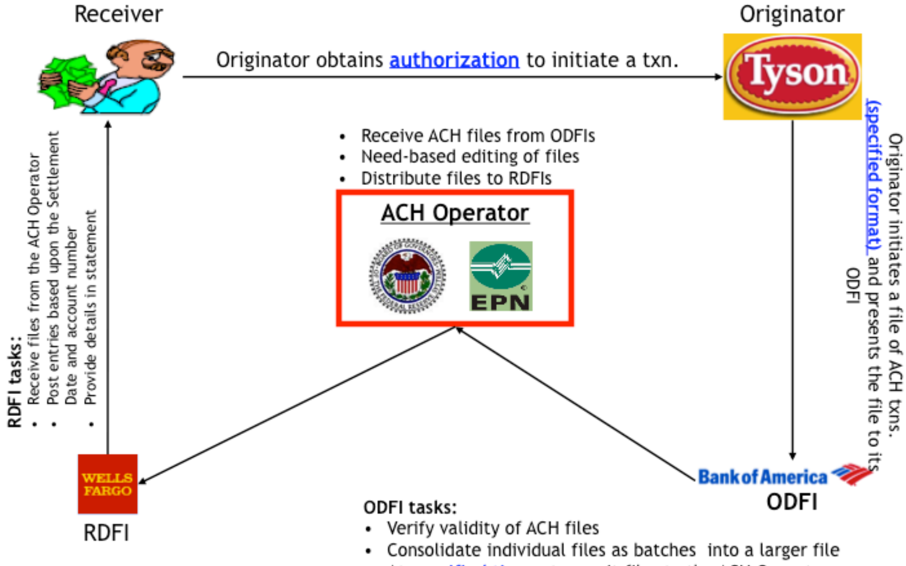
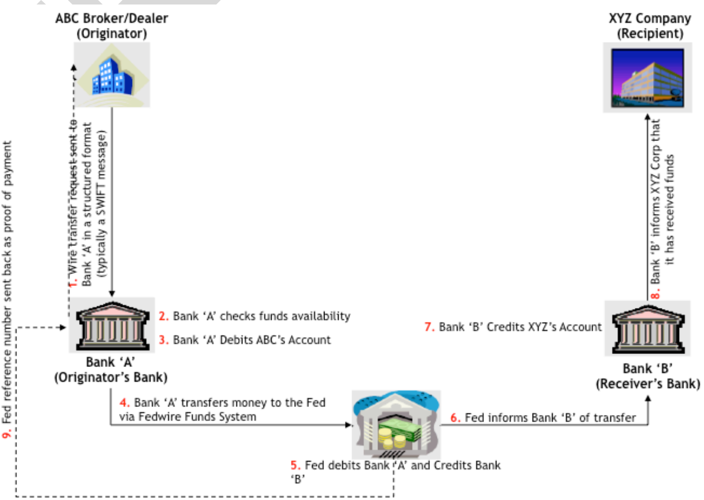
ACH data transmissions always flow in the same direction i.e. are unidirectional - from Originator to the ODFI to the ACH operator to the RDFI. This is true whether the item is a debit or a credit.



3.5.2 Fedwire Transactions

Another EFT system that is used for high-value transactions is the Fedwire RTGS system. Fedwire is a gross settlement system in which both processing and final settlement of funds transfer can take place continuously (i.e. in real time). Transfers are settled individually, that is, without netting debits against credits. The system effects final settlement continuously rather than periodically at pre-specified times provided that a sending bank has sufficient covering balances or credit. Settlement process is based on the real-time transfer of central bank money.



Key Learnings:

At the end of this chapter one should be conversant with the following fundamental concepts related to how different retail payment systems work.

- Money is constantly moving across hands and represents the culmination of different types of transactions.
- A bulk of this money movement is facilitated by banks through their **Collection** and **Clearing** services. The Payer, the Payee, their Banks and Clearing Houses participate in this movement of money.
- The movement of money can be between accounts in the same bank (Intra-bank) or between accounts in different banks (Inter-bank).
- Another way of looking at the movement of funds is if its between two parties in the same country (domestic) or in two different countries (cross-border).
- Movement of money happens in multiple modes – Paper-based (Checks), Electronic, Card-based (Debit or Credit cards) and Other Electronic ways (Mobile, Online and E Wallets etc.).
- Check 21 is one of the most important technology breakthroughs in the field of check processing. It allows images of checks to be processed instead of physically moving the checks from one place to another.
- There are multiple electronic fund transfer systems in place in the USA. ACH is most widely used for B2C and C2C transactions.
- Fedwire, a real time gross settlement system is used for large value payments.

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3.6 Test Your Understanding

1. Image-based processing of checks is known as _ _ _ _ _
    a. Image 21
    b. Check 21
    c. ACH
    d. Fedwire

2. ACH can be used only for credit transactions and not for debit transactions.
    a. True
    b. False

3. Fedwire is a batch settlement system.
    a. True
    b. False

4. Which of the following is real-time payment processing system?
    a. Check 21
    b. ACH
    c. Fedwire
    d. None of the above

5. When both the payer and the payee have their accounts in the same bank, the transaction is an example of
    a. Inter-bank transaction
    b. Intra-bank transaction

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Chapter Overview: Trade & Supply Chain Services

This chapter is designed to help the participants get a sound understanding of the different products and services that banks make available to corporate customers in the area of international trade. You will learn about the unique features of international trade and the specific payment instruments like Documentary Collections and Documentary Credits that are used in international trade.

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4. Trade & Supply Chain Services

4.1 Introduction to International Trade

As the name implies, is the exchange of products, services, and money across national borders; essentially trade between countries. When consumers in the U.S. purchase Swiss-made watches, Guatemalan-grown fruits, Chinese-made toys and electronics, and Japanese-manufactured automobiles, they experience the end result of international trade. Also known as foreign trade, international trade has been maintained since the dawn of time.

This type of trade gives rise to a world economy, in which prices, or supply and demand, affect and are impacted by global events. Political change in Asia, for example, could result in an increase in the cost of labor, thereby increasing the manufacturing costs for an American sneaker company based in Malaysia, which would then result in an increase in the price that you have to pay to buy the tennis shoes at your local mall. A decrease in the cost of labor, on the other hand, would result in you having to pay less for your new shoes.

Trading globally gives consumers and countries the opportunity to be exposed to goods and services not available in their own countries. Almost every kind of product can be found on the international market: food, clothes, spare parts, oil, jewelry, wine, stocks, currencies and water. Services are also traded: tourism, banking, consulting and transportation. A product that is sold to the global market is an export, and a product that is bought from the global market is an import. Imports and exports are accounted for in a country's current account in the balance of payments.

Global trade allows wealthy countries to use their resources - whether labor, technology or capital - more efficiently. Because countries are endowed with different assets and natural resources (land, labor, capital and technology), some countries may produce the same good more efficiently and therefore sell it more cheaply than other countries. If a country cannot efficiently produce an item, it can obtain the item by trading with another country that can. This is known as specialization in international trade.

International trade not only results in increased efficiency but also allows countries to participate in a global economy, encouraging the opportunity of foreign direct investment (FDI), which is the amount of money that individuals invest into foreign companies and other assets. In theory, economies can therefore grow more efficiently and can more easily become competitive economic participants.

For the receiving government, FDI is a means by which foreign currency and expertise can enter the country. These raise employment levels and, theoretically, lead to a growth in the gross domestic product. For the investor, FDI offers company expansion and growth, which means higher revenues.

As international trade opens up the opportunity for specialization and therefore more efficient use of resources, international trade has potential to maximize a country's capacity to produce and acquire goods.

4.1.1 Role of Banks in International Trade

Commercial banks play an important role in international trade. **Commercial banks act as intermediaries between importers and exporters**. They have insight and wide practical experience in foreign trade coupled with legal knowledge of provisions in different countries. Banks have correspondents in most countries, through whom they deal with the counter parties. Some banks may have their own branches in other countries.

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As banks are major financial institutions they are trustworthy and can be relied upon by their customers. They provide advisory services on various subjects to their importing and exporting customers. They collect payment from overseas countries from importers in foreign countries and also remit funds to the exporters abroad on behalf of their customers. Banks offer various types of services to local and international business communities. These services include financial facilities to exporters and importers by way of loans and overdrafts, discounting and purchasing of bill of exchange.

The finance of international trade forms an important part of any major bank's services package. Many have specialized departments to handle the various aspects involved, comprising experienced staff able to cope up with the demands of customers with overseas business to transact.

- **Credit Information:** By using the standard form of bank-to-bank status enquiry it is possible for banks based in the domestic region to obtain information on importers e.g. in respect of their creditworthiness, from banks overseas.
- **Economic and Political Reports:** Many large international banks employ economists who provide reports on a number of countries, which are useful to exporters, particularly if the country concerned is politically unstable or its economy is weak.
- **Exchange Control Regulations:** Many countries have restrictions on the amount of local and/or foreign currency that can be taken into and out of the country at any one time. Consequently, an exporter who is unaware of the current situation may export goods to a country and then find that the importer is unable to transfer the funds due in settlement without the sanction of the Central Bank. Banks are able to provide their customers with advice to avoid such problems.
- **Sale and Purchase of Foreign Currencies/Exchange Contracts:** Banks sell and purchase foreign currencies to and from their customers/non-customers and travelers. An exporter may find that before payment in foreign currency is received the exchange rate has reduced thus reducing profit on the transaction. It is possible for an exporter to enter into a forward exchange contract with a bank, which enables the bank to fix the exchange rate at which the currency will be converted on a specified date/period in the future. The exporter can then price goods safe in the knowledge that the rate will not change whatever happens in the foreign exchange markets. The bank covers its own commitment by matching deals in the market.
- **Collection of Bills:** An exporter who has drawn a bill of exchange on an overseas buyer is able to obtain reimbursement by asking their bank to send the bill to the importer's bank i.e. an exporter's bank will 'collect' the proceeds.

4.2 Payment Methods in International Trade

The method of payment determines how payment is going to be made, i.e. the obligations that rest with both buyer and seller in relation to monetary settlement. However, the method of payment also determines – directly or indirectly – the role the banks will have in that settlement.

'**Methods of payment'** represents the defined form of how the payment shall be made, i.e. on open account payment terms through a bank transfer, or through documentary collection or letter of credit.

'**Terms of payment'** defines the obligations of both commercial parties in relation to the payment, detailing not only the form of payment and when and where this payment shall be made by the buyer, but also the obligations of the seller; not only to deliver according to the contract, but also, for example, to arrange stipulated guarantees or other undertakings prior to or after delivery.

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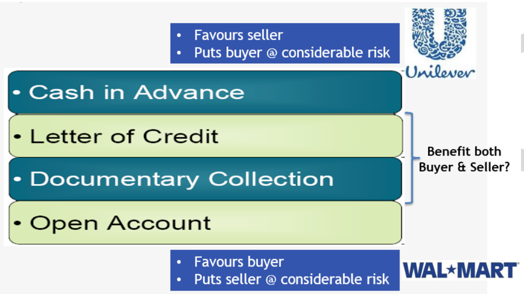
Key Points

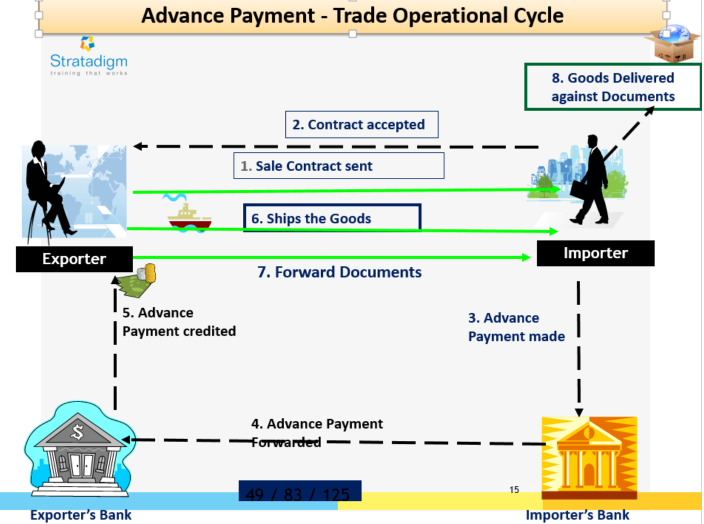
- International trade presents a spectrum of risk, causing uncertainty over the timing of payments between the exporter (seller) and importer (foreign buyer).
- To exporters, any sale is a gift until payment is received.
- Therefore, the exporter wants payment as soon as possible, preferably as soon as an order is placed or before the goods are sent to the importer.
- To importers, any payment is a donation until the goods are received.
- Therefore, the importer wants to receive the goods as soon as possible, but to delay payment as long as possible, preferably until after the goods are resold to generate enough income to make payment to the exporter.

Methods of payment can be categorized in different ways, depending on the purpose. This is often based on the commercial aspect seen from the exporter's perspective in terms of security. In security order, the basic methods of payment could be listed as follows:



4.2.1 Cash-in-Advance

With this payment method, the exporter can avoid credit risk, since payment is received prior to the transfer of ownership of the goods. Wire transfers and credit cards are the most commonly used cash-in-advance options available to exporters. However, payment in advance is the least attractive option for the buyer, as this method creates cash flow problems. Foreign buyers are also concerned that the goods may not be sent if payment is made in advance. Thus, exporters that insist on this method of payment as their sole method of doing business may find themselves losing out to competitors who may be willing to offer more attractive payment terms.



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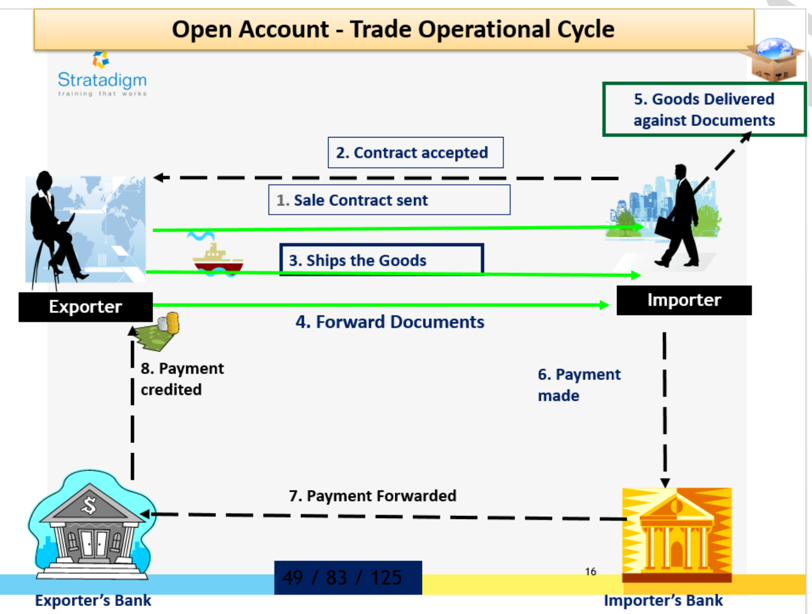
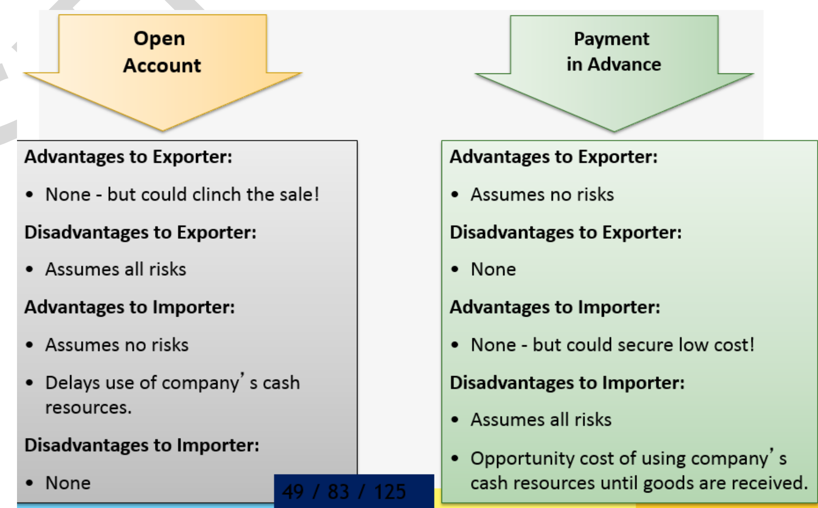
4.2.2 Open Account

An open account transaction means that the goods are shipped and delivered before payment is due, usually in 30 to 90 days. Obviously, this is the most advantageous option to the importer in cash flow and cost terms, but it is consequently the highest risk option for an exporter. Due to the intense competition for export markets, foreign buyers often press exporters for open account terms since the extension of credit by the seller to the buyer is more common abroad. Therefore, exporters who are reluctant to extend credit may face the possibility of the loss of the sale to their competitors. However, with the use of one or more of the appropriate trade finance techniques, such as export credit insurance, the exporter can offer open competitive account terms in the global market while substantially mitigating the risk of nonpayment by the foreign buyer.



A comparison of the risks in the two Clean Payment systems viz., the Open Account and Payment in Advance is given below:

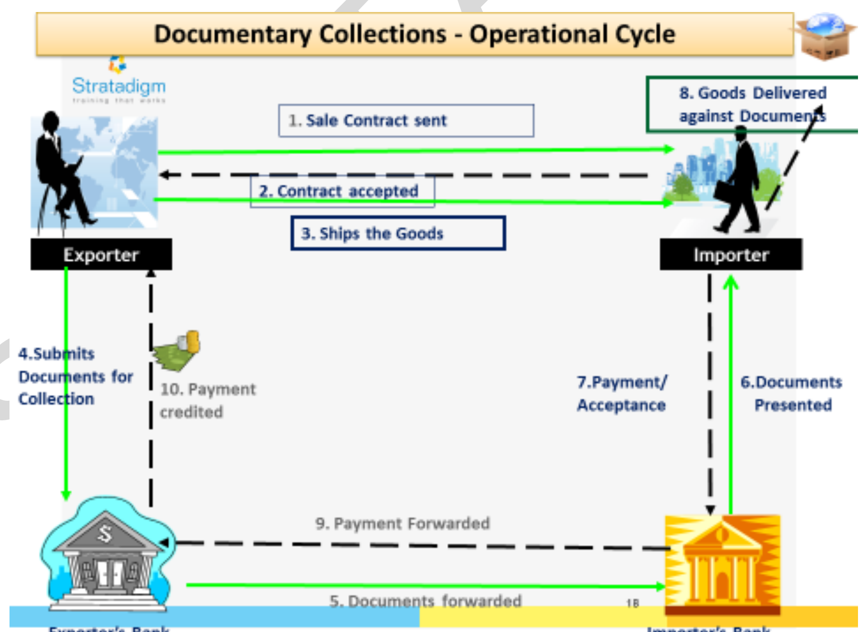


4.2.3 Documentary Collections

A documentary collection is a transaction whereby the exporter entrusts the collection of a payment to the remitting bank (exporter's bank), which sends documents to a collecting bank (importer's bank), along with instructions for payment. Funds are received from the importer and remitted to the exporter through the banks involved in the collection in exchange for those documents. Documentary collections involve the use of a draft that requires the importer to pay the face amount either on sight (document against payment—D/P) or on a specified date in the future (document against acceptance—D/A). The draft lists instructions that specify the documents required for the transfer of title to the goods. Although banks do act as facilitators for their clients under collections, documentary collections offer no verification process and limited recourse in the event of nonpayment. Documentary Collections are generally less expensive than letters of credit.

A documentary collection is a transaction whereby the exporter entrusts the collection of a payment to the remitting bank (exporter's bank), which sends documents to a collecting bank (importer's bank), along with instructions for payment.

- Funds are received from the importer and remitted to the exporter through the banks involved in the collection in exchange for those documents.
- Documentary collections involve the use of a draft that requires the importer to pay the face amount either on sight (document against payment—D/P) or on a specified date in the future (document against acceptance—D/A).
- Documentary collections offer no verification process and any funds provided against documents by banks are normally "with recourse". Bills for collection are generally less expensive than letters of credit.
- A documentary collection offers more security to the exporter than trading on open account.



Operation cycle explained:

- Under a documentary collection both parties use their banks as intermediaries to the transaction.

- The exporter will send a collection order to its bank that will include the appropriate transport documents as well as details of the terms and conditions of the transaction.
- Its bank (known as the remitting bank) will then forward the collection order to its correspondent bank in the importer's country (known as the collecting bank), which will collect payment from the importer (or the importer's bank).
- The collecting bank will not release the shipping documents until receipt of payment or acceptance of payment.
- The importer will either make a payment or will promise to pay the collection order through the signing of a bill of exchange, which is a commitment to pay on a set future date, perhaps in 30, 60 or 90 days (the usance period), depending on the initial agreement between the importer and exporter.
- In return the importer will receive the title documents from the collecting bank enabling it to take control of the goods.
- The collecting bank will then pay the remitting bank the funds either immediately (if a cash payment was made by the importer) or in the future (if the delivery of the documents was against an acceptance).
- The remitting bank then pays the exporter.
- In this process the banks offer no guarantee of payment, unless the collecting bank avalises the bill, which is explained separately.
- In case if the collecting bank is the banker to the Buyer, the documents would be sent to such collecting bank.
- However, if the Buyer's Bank is not a Correspondent Bank of the Remitting Bank, the Remitting Bank may opt to send the documents to its own Correspondent Bank in the Buyer's jurisdiction with instructions present the documents through Buyer's Bank.
- In such cases the Buyer's Bank is called as "Presenting Bank" and Remitting Bank's Correspondent bank to whom the documents are sent is called as "Collecting Bank"

Documents against Payment (DP)

- Under the terms of collection against payment, the importer is required to pay before the documents of title are released.
- From the exporter's perspective there is a risk of the importer not taking up the documents. In these circumstances the importer will not usually be able to take delivery of the goods, meaning the goods will need to be stored and insured at the port while the dispute between the parties is resolved.
- Exporters usually include a standard 'store and insure' provision in the contract as protection against such events.

Documents against Acceptance (DA)

- Under the terms of collection against acceptance, the importer is able to take delivery of the goods on acceptance of a bill of exchange.
- In such a case the risk of a dispute resulting in the need to store goods at the port is reduced compared to collection against payment.
- However, the importer could refuse to take delivery of the goods for other reasons.
- In contrast to open account, the exporter does at least hold an accepted bill of exchange as security, although in both cases the importer does hold title to the goods.
- Although the exporter should be able to anticipate the collection of funds at the end of the accepted bill's term, there is still a risk the importer will refuse to honour the bill.
- In these circumstances the exporter will need to pursue payment through the courts in the importer's jurisdiction.
- In effect the exporter's security is dependent on the likelihood of the importer's jurisdiction honoring obligations under a bill of exchange if the importer decides not to pay.

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4.2.4 Letters of Credit

Definition: *"Letter of Credit is an arrangement by means of which a Bank (Issuing Bank) acting at the request of a Customer (Applicant / Buyer / Importer) undertakes to pay / Accept & Pay (Honour) to the Beneficiary of LC (Beneficiary / Seller / Exporter) a predetermined amount (LC amount) before a given date (LC Expiry date) according to stipulated terms against presentation of stipulated documents".*

Letters of credit (Letters of Credit) are among the most secure instruments available to international traders. An LC is a commitment by a bank on behalf of the buyer that payment will be made to the exporter provided that the terms and conditions have been met, as verified through the presentation of all required documents. The buyer pays its bank to render this service. An LC is useful when reliable credit information about a foreign buyer is difficult to obtain, but you are satisfied with the creditworthiness of your buyer's bank. An LC also protects the buyer since no payment obligation arises until the goods have been shipped and documents are delivered as required by LC.

The issue and subsequent processing of a Letter of Credit are governed by a set of rules and regulations issued by the International Chamber of Commerce, Paris. This set of rules is commonly referred to as the UCP (Uniform Customs and Practices for Documentary Credits).

Advantages of Letter of Credit

- They are ideal instruments for settling international trade payments safely, surely and speedily.
- With banks acting as fiduciary agents, they inspire an element of confidence and security into the transaction-taking place between commercial parties.
- They bridge the gap (distance and time (of payment)) between the parties.
- They are ideal instruments for securing finance by commercial parties (both buyer and seller).
- Sellers need not rely on buyers to make payment since they have the guarantee of Bank to make payment.
- They enable seller to receive money in his own country and also possible financial assistance.
- They assure seller that the buyer has completed all the necessary Trade and Exchange control formalities.
- They assure buyer that his money will not be paid till such time as seller has not shipped the goods by him and produce the necessary documents.
- Buyer need not have to block his funds till the seller had shipped the goods.

Common Parties to Letter of Credit

1. **Applicant:** is normally a buyer of the goods who has to make payment to the beneficiary. A LC is initiated and issued at his request and on the basis of his instructions.
2. **Issuing Bank:** is one, which issues the credit i.e., it is the bank, which creates a letter of credit and undertakes to make payment.
3. **Beneficiary:** is normally a seller of the goods, who has to receive payment from the applicant. A credit is issued in his favour to enable him or his agent to obtain payment on surrender of stipulated documents and comply with the terms and conditions of the LC. If LC is a transferable one and he transfers the credit to another party, then he is referred to as the First or Original Beneficiary.
4. **Advising Bank:** advises the credit to the beneficiary thereby assuring the genuineness of the credit. It is normally situated in the country/place of beneficiary.
5. **Confirming Bank:** adds its guarantee to the credit opened by another bank, thereby undertaking the responsibility of payment under the credit in addition to that of the issuing bank.

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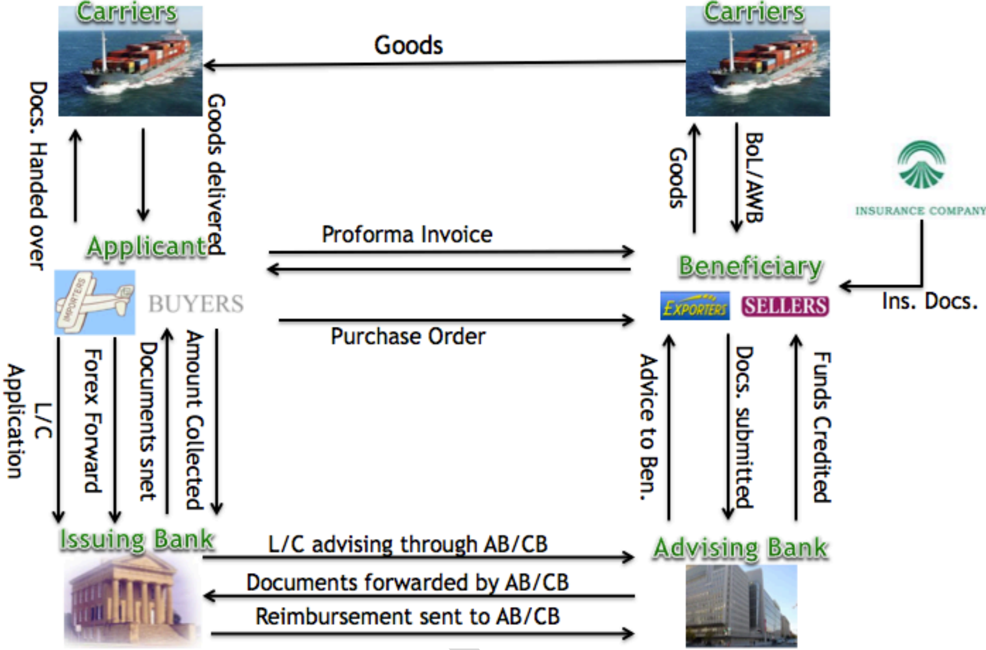
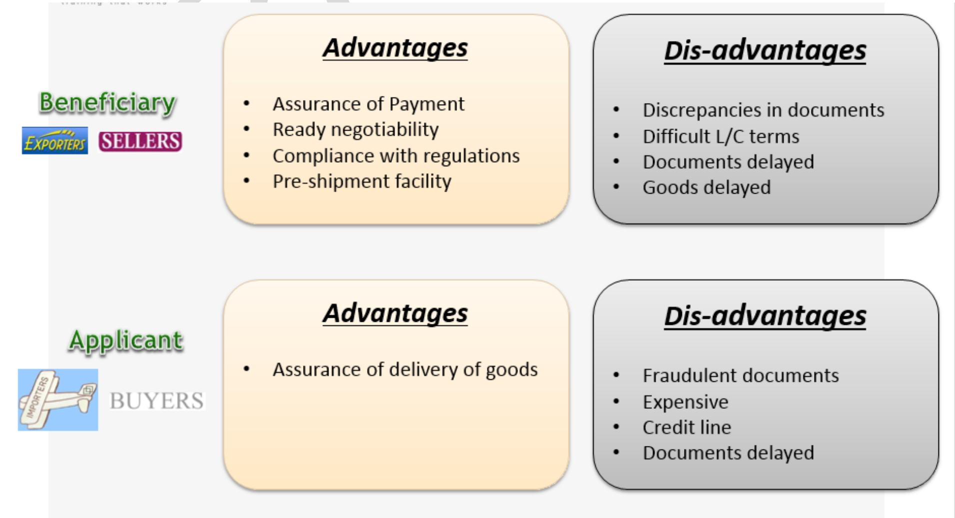
A Typical LC Transaction Cycle:

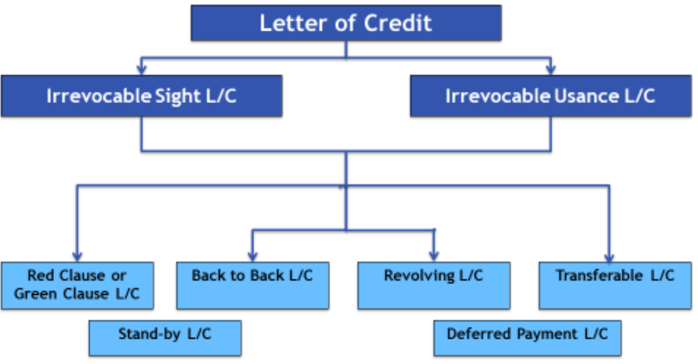
A Letter of Credit begins its life with the buyer (Applicant) approaching his bank to issue a LC in favour of its supplier (Beneficiary) and ends with the beneficiary submitting all documents covered under the LC and the issuing bank debiting the DDA of the applicant for the value of the LC and making the payment to the beneficiary. There are a host of intermediate stages in between and all of these key steps are captured in the process flow depicted below.



The relative advantages and dis-advantages to the Applicant (Buyer) and the Beneficiary (Seller) of the L/C are given below for quick reference.



Various types of Letters of Credit:



Red Clause L/C
An exporter needs pre-shipment finance but is unable to arrange funding from regular banking channels in his country. Importer/buyer/LC applicant can help the Exporter by arranging for this type of LC.

Green Clause L/C
In the previous example, importer can extend his support to provide funding that will take care of storage in the port of shipment.

Revolving L/C
ABC Exporters gives a discount of 2% for bulk orders. It also insists on L/C payments. XYZ Importers wants to place a bulk order but wants the deliveries to be spread over a year. Stand-alone L/Cs to cover individual shipments will push up the transaction costs substantially. In such cases Revolving LC can be issued to individual shipments. The revolving could take place (reinstatement) either on amount-basis or on time-basis or on quantity-basis.

Transferable L/C
United Export Trading Company located near Masjid, Mumbai is a recognized trading house that deals in multiple products. It procures export orders and L/Cs in its own name and then backfills the orders using a network of suppliers in India. Many of these suppliers also insist on L/C as a mode of payment for their sales to United. United have an option to get the LC transferred in favour of such supplier by making him as second beneficiary.

Back to Back L/C
United has an L/C issued in its favour by an importer through a reputed bank. But these L/Cs are not transferable. United has an option to issue Back-to-Back LCs in favour of such Suppliers who are insisting for LCs in the above example. Such Back-to-Back LCs will have similar clauses as that of original Export LC except to the dates and amounts which should be before / below that of original Export LC.

4.2.5 Bank Guarantees

In international trade, it is difficult for the buyer of goods or services to accurately assess the professional ability and financial position of a supplier. He therefore, quite rightly, demands that the seller's **ability to perform be secured** and for this purpose a bank guarantee is arranged. In general, the use of the bank guarantee or the standby letter of credit as instruments for securing payment is restricted in international trade to payment guarantees or standby letters of credit.

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A bank guarantee may be defined as the irrevocable obligation of a bank to pay a sum of money in the event of non-performance of a contract by a third party. The guarantee is a separate obligation independent of the principal debt or the contractual relationship between the creditor and the principal debtor. Under the terms of the guarantee the bank has to pay on first demand provided that the conditions contained in the guarantee are fulfilled. Guarantees are, as a rule, subject to the laws of the country of the issuing bank.

As in the case of the documentary credit and the documentary collection, the International Chamber of Commerce in Paris has issued "Uniform Rules for Demand Guarantees (URDG) (ICC No. 758)".

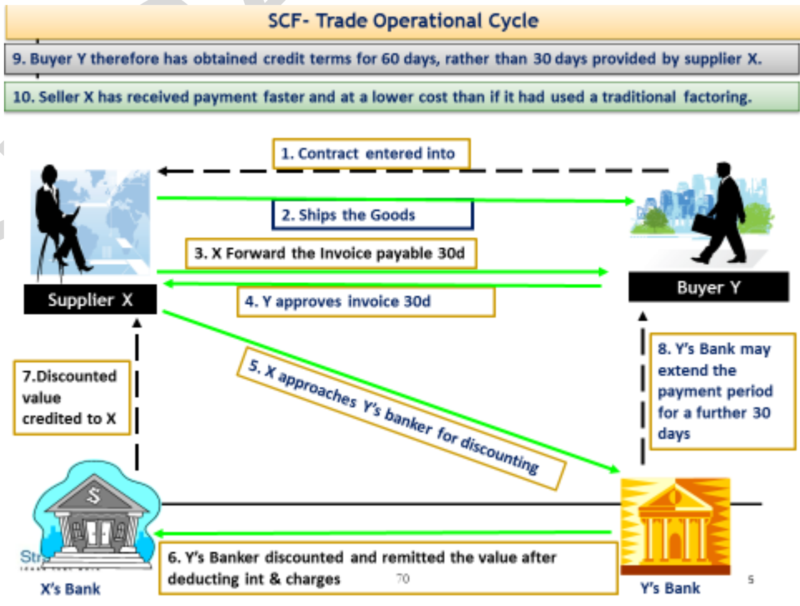
4.3 Supply Chain Finance

A set of technology-based business and Financing processes that link the various parties in a transaction - buyer, seller and financing institution to lower financing costs and improved business efficiency.

Supply chain finance (SCF) provides short-term credit that optimizes working capital for both the buyer and the seller. Supply chain finance generally involves the use of a technology platform in order to automate transactions and track the invoice approval and settlement process from initiation to completion.

The growing popularity of SCF has been largely driven by the increasing globalization and complexity of the supply chain, especially in industries such as automotive, manufacturing and the retail sector.

In any business the buyer will attempt to delay payment as long as possible, while the seller seeks to be paid as soon as possible. SCF works especially well when the buyer has a better credit rating than the seller and can therefore access capital at a lower cost. The buyer can leverage this advantage to negotiate better terms from the seller such as an extension of payment terms, which enables the buyer to conserve cash or use it for other purposes. The seller benefits by accessing cheaper credit, while having the option to sell its receivables to receive immediate payment.



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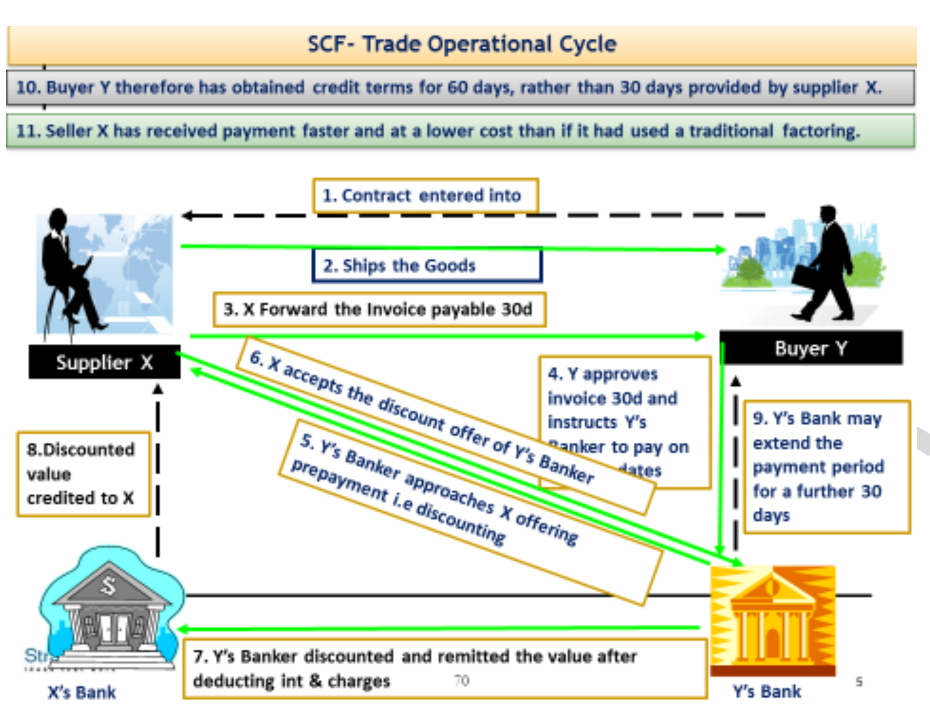

SCF – How it works

- Under supply chain Financing, a Buyer sends its approved payables list to its bank, specifying the dates on which invoice payments are to be made.
- The bank makes these payments on behalf of the Buyer.
- However, in addition to this basic payables function, the bank also contacts the Buyer's suppliers with an offer of early payment, in exchange for a FINANCING charge for the period until maturity.
- If a supplier agrees with this arrangement and signs a receivables sale contract, then the bank delivers payment from its own funds to the supplier, less its fee.
- Once the Buyer's maturity dates are reached, the bank debits Buyer's account, transferring some of the cash to those suppliers electing to be paid on the pre-arrangement settlement date, and transferring the remaining funds to its own account to pay for those invoices that it paid early to suppliers at a discount.

SCF – Benefits

- Supply chain financing works very well for suppliers, since they may be in need of early settlement.
- In addition, they receive a much higher percentage of invoice face value than would be the case if they opted for a factoring arrangement with a third party, where 80% of the invoice is typically the maximum amount that will be advanced.
- Also, the amount of the discount offered by the bank may be quite small, if the company is a large and well-funded entity having excellent credit.
- Finally, the arrangement is usually non-recourse for the supplier, since the arrangement with the bank is structured as a receivables assignment.

4.3.1 Factoring

Seller sells receivables to a 3rd party who undertakes collection, administration and credit protection (includes reverse factoring).

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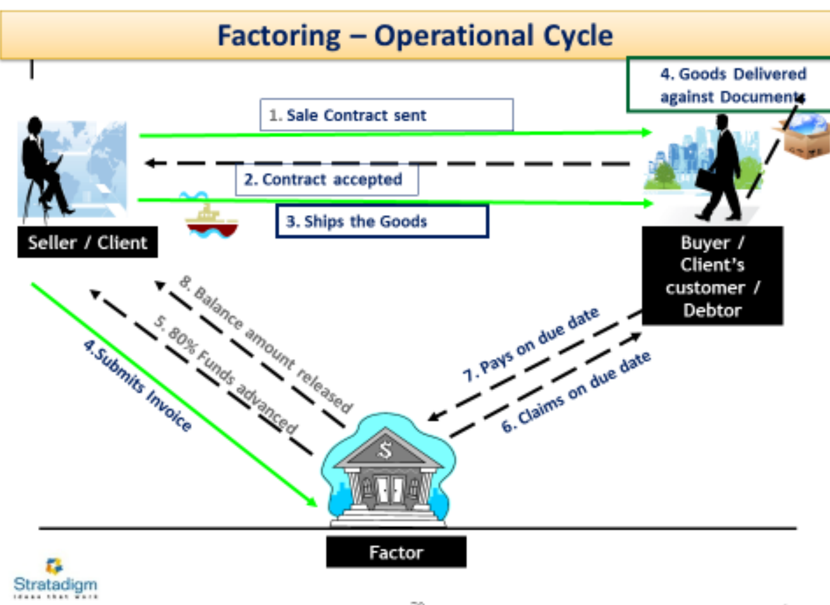
"Factoring means an arrangement between a factor and his client which includes at least two of the following services to be provided by the factor:

- Finance
- Maintenance of accounts
- Collection of debts
- A firm uses factoring when the available **Cash Balance** held by the firm **is insufficient** to meet current obligations and **accommodate its other cash needs**, such as new orders or contracts.
- Protection against credit risk



Services offered by a factor

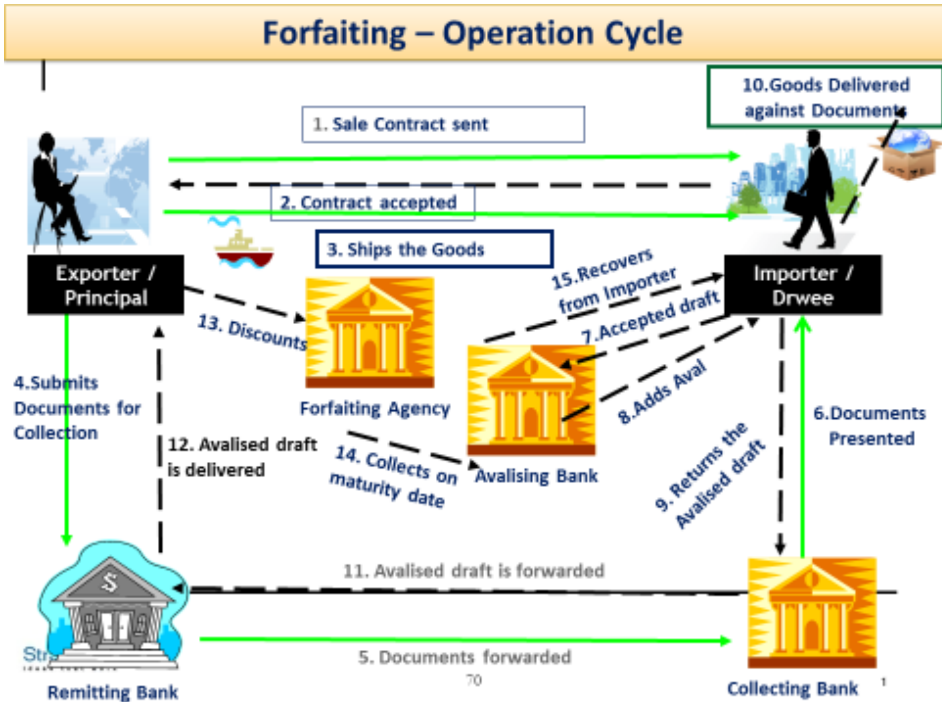
- Follow-up and collection of Receivables from Clients.
- Purchase of Receivables with or without recourse.
- Help in getting information and credit line on customers (credit protection)
- Sorting out disputes, due to his relationship with Buyer & Seller.

Mechanics of factoring

- The Client (Seller) sells goods to the buyer and prepares invoice with a notation that debt due on account of this invoice is assigned to and must be paid to the Factor (Financial Intermediary).
- The Client (Seller) submits invoice copy only with Delivery Challan showing receipt of goods by buyer, to the Factor.
- The Factor, after scrutiny of these papers, allows payment (usually up to 80% of invoice value).
- The balance is retained as Retention Money (Margin Money). This is also called Factor Reserve.
- The drawing limit is adjusted on a continuous basis after taking into account the collection of Factored Debts.
- Once the invoice is honored by the buyer on due date, the Retention Money credited to the Client's Account.
- Till the payment of bills, the Factor follows up the payment and sends regular statements to the Client.

4.3.2 Forfaiting

"Forfait" is derived from French word, means "surrender". Forfaiting is a mechanism by which the right for export receivables of an exporter (Client) is purchased by a Financial Intermediary (Forfaiter) without recourse to him. It is different from International Factoring in as much as Forfaiting deals with receivables relating to deferred payment exports, while Factoring deals with short-term receivables. Exporter under Forfaiting surrenders his right for claiming payment for services rendered or goods supplied to Importer in favour of Forfaiter. Bank (Forfaiter) assumes default risk possessed by the Importer. Credit Sale gets converted as Cash Sale. Forfaiting is arrangement without recourse to the Exporter (seller)



Forfaiting defined

- Operated on fixed rate basis (discount)
- Finance available up to 100% of value (unlike in Factoring)

Essential requisites of forfaiting transactions

- Exporter to extend credit to Customers for periods above 6 months.
- Exporter to raise Bill of Exchange covering deferred receivables from 6 months to 5 years.
- Repayment of debts will have to be avallised or guaranteed by another Bank, unless the Exporter is a Government Agency or a Multi National Company.
- Co-acceptance acts as the yardstick for the Forfaiter to credit quality and marketability of instruments accepted.

4.3.3 Other Financing Methods

Invoice Discounting

The seller sells invoices to a 3rd party but the original seller continues to monitor them.

Securitization
Facilities run by major banks which **purchase receivables** from companies based on an advance rate **(i.e. 80%)**, requirements on default and dilution, reporting requirements.

- Bank or facilitator issues Asset Based Commercial Paper (ABCP) or Medium-Term Notes, normally rated A1/P1 or above and placed with investors, typically money market funds.
- Financiers rely only on information provided by the seller, making fraud risk significant
- These receivables are often comingled with other asset classes by financiers, such as credit cards, loans, mortgages
- Securitized products have become costly and unattractive because of conditions imposed by financiers.

Export Credit Insurance – insured receivable

- Assists banks, lenders with balance sheet and securitization transactions by covering undisputed receivables against political and commercial risk.
- Normally a small discretionary credit limit granted to sellers.
- Underwriters usually pay 90% in case of non-payment by the buyer.

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Key Learnings:

At the end of this chapter one should be conversant with the following core concepts related to international trade and supply chain finance.

- **International Trade** is the exchange of products, services, and money across national borders; essentially trade between countries
- Commercial banks act as **intermediaries** between importers and exporters.
- The basic methods of payment could be listed as follows:
    - Open Account
    - Cash in advance
    - Documentary collection
    - Documentary letter of credit
- A **documentary collection** is a transaction whereby the exporter entrusts the collection of a payment to the remitting bank (exporter's bank), which sends documents to a collecting bank (importer's bank), along with instructions for payment.
- In simple words, a **Letter of Credit** is an irrevocable promise of a bank to make a certain payment subject to satisfaction of pre-set conditions.
- **Factoring** is a financial transaction whereby a business sells its accounts receivable (i.e., invoices) to a third party (called a factor) at a discount in exchange for immediate money
- **Forfaiting** is a mechanism by which the rights for export receivables of an exporter (Client) are purchased by a financial intermediary (Forfaiter) without recourse to the exporter.
- Other financing methods include invoice discounting, securitization and export credit from banks

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4.4 Test Your Understanding

1. a mechanism by which the rights for export receivables of an exporter (Client) are purchased by a financial intermediary without recourse to the exporter.
   a. Factoring
   b. Forfaiting
   c. Securitization
   d. All of the above

2. A Letter of Credit is an irrevocable promise of a bank.
   a. True
   b. False

3. Which of the following are parties to a L/C transaction?
   a. Buyer
   b. Seller
   c. Bank
   d. All of the above

4. Bank Guarantees are governed by which of the following set of rules?
   a. UCPDC
   b. URR
   c. URDG
   d. None of the above

5. A financial transaction whereby a business sells its accounts receivable (i.e., invoices) to a third party at a discount in exchange for immediate money is called as
   a. Factoring
   b. Forfaiting
   c. Securitization
   d. All of the above

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Chapter Overview: Transaction Services – Cash Management

This chapter is designed to help the participants get a sound understanding of the different products and services that banks make available to corporate customers in the area of international trade. You will learn about the unique features of international trade and the specific payment instruments like Documentary Collections and Documentary Credits that are used in international trade.

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5. Transaction Management - Cash Management Services

Cash management from the perspective of a corporate would in all probability read as:

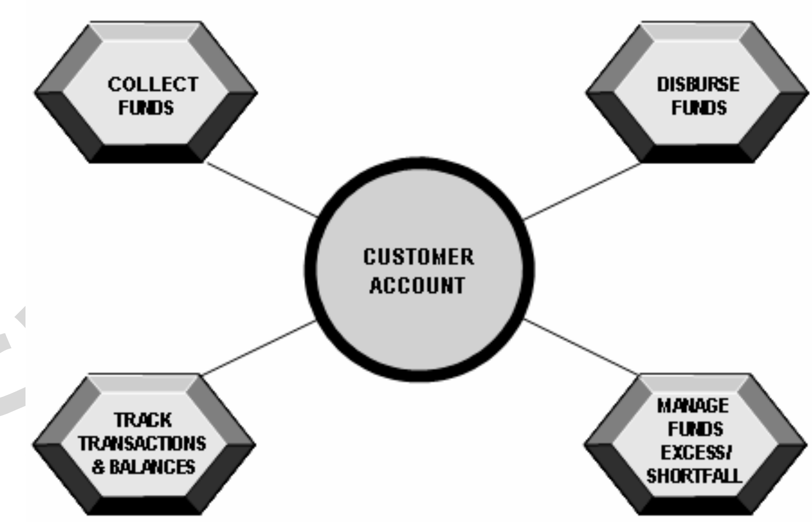
> 'The effective planning, monitoring and management of liquid/near liquid resources.'

'The provision of products and services to corporate customers including:

- Bank accounts
- Deposit and withdrawal facilities
- Information on bank accounts and positions
- Money transfers and collection services
- Investment facilities
    - *Interest bearing*
    - *Money market deposits*
- Financing facilities
- Pooling and netting.

While the selling process has evolved for most banks into a solutions-driven approach, the core elements of the cash management solutions remain transactional products. The most fundamental cash management product offered by banks remains the bank account (also referred to as a current, checking or demand account). All companies need at least one bank account and the ability to collect funds into it and disburse funds from it.

Moreover, they need a bank to effect these transactions with timeliness and accuracy. They also need a method for tracking balances and transactions, and a way to manage surpluses and shortfalls. These are the basic cash management functions, and the more sophisticated products that are discussed in future chapters are all derived from this simple model.



Benefits of good cash management

Much time is spent quantifying the benefits of cash management, both by companies and banks. The Institute of Chartered Accountants handbook lists the benefits of good cash management to companies as follows:

- Better control of financial risk.
- Opportunity for profit.
- Strengthened balance sheet.
- Increased confidence with:
  - Customers.
  - Suppliers.
  - Shareholders.

One should also add improved operational efficiencies, not mentioned in the handbook, as a significant benefit of good cash management.

Better control of financial risk

Control of financial risk is a clear benefit of good cash management to the company. Even a profitable company can become bankrupt if it runs out of cash, and at all stages of the cash cycle, security of principal is paramount.

Good cash management techniques are reflected in the balance sheet, as well as in the profit and loss account.

Opportunity for profit

Many treasury managers claim that their departments are set up as cost centres rather than profit centres. In the current business environment, however, few functions can continue to exist if they do not ultimately contribute positively to the company's bottom line. Good cash management offers an opportunity to reduce costs and enhance financial returns. The problem lies in quantifying the value to the company. Today, many treasury departments have established benchmarks and goals that help measure their contribution to shareholder value. A second issue lies in return versus risk. At what risk should the treasury department seek to improve profitability?

From a cash management perspective, the treasury policy will determine the company's appetite for risk.

Strengthened balance sheet

Reduced borrowing and borrowing costs, increased return on investments, improved receivables and payables practices - all these improve a company's balance sheet.

Increased confidence in company

Well-managed cash positions lead to timely payment of salaries and bills and are important to customers, suppliers and shareholders.

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Key Learnings:

At the end of this chapter one should be conversant with the fundamental concepts related to cash management services.

- Cash management helps corporates collect their monies on time – Receipts Management.
- Cash management helps corporates make their payments on time – Payments Management.
- Cash management helps corporates deploy their short-term surpluses in a profitable way – bank deposits or Money Market funds
- Cash management services offered by banks leverage payments technology in a big way.
- Cash management ensures adequate liquidity for corporates at all times.

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5.1 Test Your Understanding

1. Cash management services offered by a bank include which of the following?
    a. Receipts management
    b. Payments management
    c. Surplus management
    d. All of the above

2. A corporate wanting to streamline its Accounts Receivables is likely to choose which of the following services?
    a. Receipts management
    b. Payments management
    c. Investment management
    d. All of the above

3. A corporate wanting to streamline its Accounts Payables is likely to choose which of the following services?
    a. Receipts management
    b. Payments management
    c. Investment management
    d. All of the above

4. A corporate wanting to streamline its deployment of short-term surpluses is likely to choose which of the following services?
    a. Receipts management
    b. Payments management
    c. Investment management
    d. All of the above

5. Modern payment systems and technologies help banks offer cash management services.
    a. True
    b. False

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Chapter Overview: Transaction Services – Capital Issues

This chapter is designed to help the participants get a broad overview of the business of raising equity and/or debt capital from the global financial markets. Specifically, you will learn about the different types of financial assets that are created and traded in these markets; the market structures; and the primary and secondary markets etc.

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6. Transaction Services – Capital Issues

Investment Banking is a Capital Market activity. It has nothing to do with Commercial Banking by nature. At the commercial bank, depositors seek low risk and hold the bank answerable for their moneys; an Investment Bank plays an intermediary role; and both sides to the deal must handle their risks themselves.

This intermediary role arises from the need of businesses for long term capital as seen in the preceding short narrative. While commercial banks provide businesses with certain forms of longer-term capital such as term loans, banks cannot meet the really long-term needs.

The ultimate need for long-term capital is the need for equity, wherein the current owner of a business seeks other, newer owners to join him in investing capital in the business. These newer owners might be private groups (individual or institutional) or members of society at large. If the investment is sought privately it is called a 'private placement'. If the investment is sought from the public at large it is called a public issue.

Another form of long-term capital is the need for debt or loans. The borrowing organization issues paper containing promises to pay interest and repay the loan amount. These basic promises together with other terms and conditions constitute the paper known as 'bonds' or 'fixed income securities'.

Investment Banks provide the service of helping entities raise equity and debt. In doing so, the Investment Bank assesses the business proposition being made by the raiser of capital. Ideally, the Investment Bank must take on such assignments only if the business proposition is worthy.

The investing public is supposed to judge an Investment Bank by the quality of the deals it brings to the market and this reputation is precious to the Investment Bank.

Investment Banks earn a fee from the capital raiser for this work, which can range from to 4% to 6% of the amount raised. Certain deals, which are high profile and trophies, are competed for by multiple Investment Banks; on such deals the fees tend to be lower as an outcome of price competition.

Sometimes, when an issue of shares or bonds is available at a very attractive price compared to what the Investment Bank feels is the future prospect for that company, the Investment Bank might invest its own capital in the deal. In such cases, if the future price turns out as anticipated, the Investment Bank makes additional investment profits on the deal, beyond the percentage fee it charged for raising money.

Investment Banks also engage in Underwriting in a public issue. Underwriting is a commitment if the investing public does not pick up the shares or bonds on offer, the Underwriter will pick up some percentage of the shortfall. The Investment Bank/Underwriter earns an underwriting fee for such commitments.

Internationally, an Investment Bank takes deals to markets; in some deals it puts its own capital and in others it does not.

Investment Banks also have brokerage desks. These brokerage desks help customers complete transactions of customers in the stock exchanges or other markets. Brokerage earns the Investment Bank commissions.

Investment Banks might put their own money into a given deal; the Investment Bank also adopts the same approach in its brokerage business. In some economies (like India) every trade must be routed by a broker to a stock exchange at which it is a member. However,

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there is no corresponding restriction in major markets like US, UK and parts of Europe. In such situations, the Investment Bank might buy what a customer wants to sell at a given price, if it thinks the customer is seeking a price on which it can make a profit. The same is true of the situations in which the customer is buying; if the price is such that the Investment Bank anticipates extra profit, it may sell the security from its own holdings to that customer.

For Investment Banks, potential clients include insurance companies, pension funds, mutual funds and other fund managers. These entities are provided investment research and advice by Investment Banks. These entities are the source of a large proportion of the buy and sell orders that they get at the brokerage desk.

From this perspective an Investment Bank is a "**Sell side firm**"; their customers, the insurance, pension and mutual fund companies etc., are the "**Buy side firms**".

So from the brokerage desk the Investment Bank earns commissions as well as makes extra trading profits, dealing in its own money, which is known as **proprietary trading**. Trades carried out for customers are, on the other hand, referred to as **agency trades**.

Investment Banks also advise on **Mergers and Acquisitions** (M&A) and charge a fee for such expertise, helping clients buy other companies. If the seller is not interested then it is even more interesting and profitable for the Investment Bank involved.

Investment Banking is a glamorous business. Those who work in Investment Banking make significant money for their firms and for themselves, whether from M&A or from trading. Conveying the flavour of that business in a book on the subject is difficult; far easier to appreciate it by reading "Cold Steel", a book on Lakshmi Mittal's 2006-07 battle for the takeover of Arcelor.

Investment Banking (IB) as an activity can be pursued in a separate company; it can also be pursued as a division of a larger bank as the Investment Banking division.

Today, large banks are present in both Commercial Banking as well as Investment Banking. These operate as divisions within the same organization.

We can now list the sources of income in Global Markets as:

1. Fee from issuance of equity and debt
2. Sale of products to customers of Global Markets and other divisions of the bank
3. Trading profits from buying low and selling high (to meet customer needs)

The usage of trading desks by clients from Business Banking, Wealth Management and Consumer Banking already provides a good base. Encouraging the usage with good advice and create confidence for line managers in other LoBs will help increase volumes.

Trades at Bank of America are done exclusively for clients and the bank as a matter of policy, does not engage in proprietary trading.

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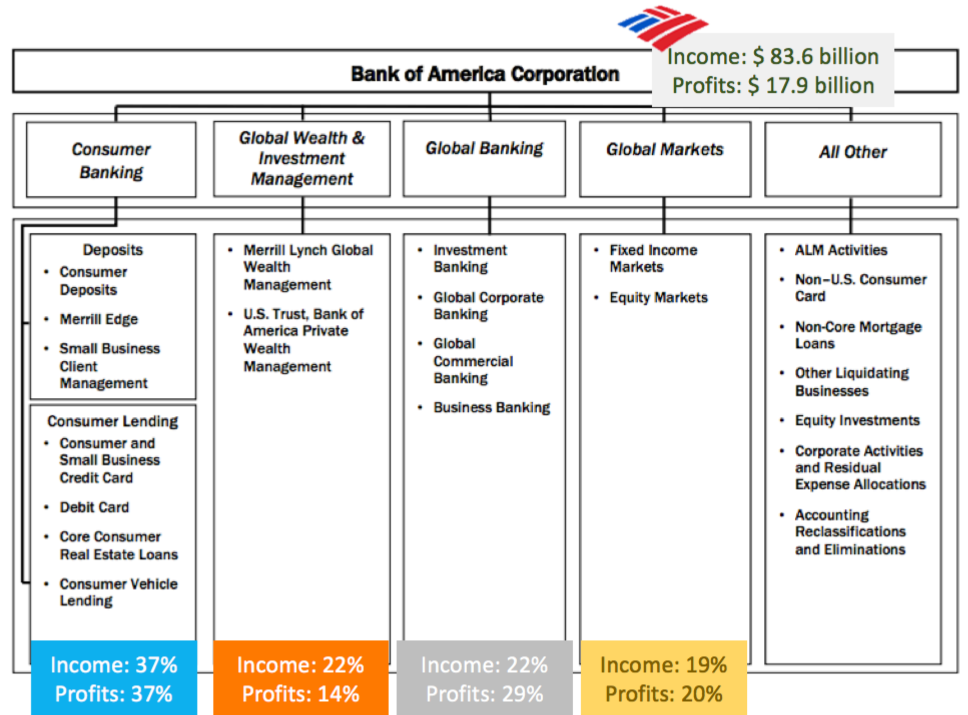
6.1 Bank of America in Global Markets

Global Markets offers sales and trading services, including research, to institutional clients across fixed-income, credit, currency, and commodity and equity businesses. Global Markets product coverage includes securities and derivative products in both the primary and secondary markets. Global Markets provides market-making, financing, securities clearing, settlement and custody services globally to our institutional investor clients in support of their investing and trading activities. We also work with our commercial and corporate clients to provide risk management products using interest rate, equity, credit, currency and commodity derivatives, foreign exchange, fixed-income and mortgage-related products. As a

result of our market-making activities in these products, we may be required to manage risk in a broad range of financial products including government securities, equity and equity-linked securities, high-grade and high-yield corporate debt securities, syndicated loans, MBS, commodities and asset-backed securities (ABS). The economics of certain investment banking and underwriting activities are shared primarily between Global Markets and Global Banking under an internal revenue-sharing arrangement. Global Banking originates certain deal-related transactions with our corporate and commercial clients that are executed and distributed by Global Markets.



(Extract from Bank of America Annual Report describing the Global Markets LoB)

6.2 The Origin of Markets

A group of adventurous traders in the city of London decided to set forth in a ship for the far-off land known as India. It was then a land of milk and honey and Indians are all too familiar from schoolbooks of this glorious past of which no trace of evidence remains. Exotic silks, spices, gems and treasure troves were all too alluring.

Cardamom, cinnamon, cloves, tea and pepper were luxury goods when first discovered. At first, the price per unit was worth a prince's ransom. Later the sheer volume of trade made the business hugely profitable. Kingdoms and Empires came to be built on these products. A fascinating account of the evolution of world trade is to be found in the book titled "How Trade Shaped the World" by William Bernstein.

With such dreams in their sights, this group of traders needed to fund their adventure. You need to buy a ship, hire men, carry cash (in gold), run the risk of perils of the sea, pirates and acts of god to go all the way to India, come back running those same risks. If you did this successfully, the rewards were awesome!

But where to get the money? That too, for such a risky venture? The adventurers (we can imagine) sat at the local coffee shop talking about such grandiose plans. One of the friends around the table told them of a rich man he knew who might be interested in this proposition.

So off they went to see the rich man. They told him of the great opportunity and how any one investing in this venture (adventure) would reap huge rewards. The rich man heard them out and asked how he would benefit from the venture.

"Well, sir, when we get back we will report to you on how much profits we made. Since you fund the venture you own a large part of it. We own the other part of it for actually travelling and doing all the hard work!". And the rich man said: "Sounds good. How do I know you will stick to this promise?"

"Well, sir, we have a common friend here who will vouch for the fact that we will not sail away with your money. As for the promise, we will write it on a parchment that you own this enterprise to extent of the money you give us."

The rich man wanted to know when he would get his original amount back. The traders told him that all he would get was profits from the venture. His original money got him ownership of the enterprise itself. The friend interjected. He told his rich friend, "Look, if the venture does well there will be others who will be interested in buying-in into buy in to this enterprise. You can always sell that certificate of ownership, which we give you to the buying person in exchange for money. In fact, we expect our venture to do so well that you can sell the certificate for more than what you paid!"

"All of this sounds perfect," said the rich man. "In fact, too good to be true! When I, the richest man in London find it so difficult to buy into this, how can I be certain of finding someone else to buy from me?"

To this the friend said, "Sir. If there is no one else willing to buy, I will buy from you. You can always find me at Jonathan's Coffee House on Exchange Alley." And the friend added that if no one else were willing to sell on a given day then he would sell.

And thus were sown, from private funding the seeds of the enterprise that eventually became the Crown in the Jewel of the British Empire. Of course, the story narrated above is not to be found in any history book and liberally fictionalized; but it is not far from how things started out. Let us see where each part of the story fits what we know of capital markets today.

The money required for the venture is of course the term we previously defined as capital.

The adventurers are promoters. The entity of which they promised ownership is now known as the 'company'.

The friend who took them to see the 'rich man' is the investment banker.

Promising to buy and sell when no one else would was a much-needed way of instilling confidence in the new proposition of tradable ownership of an enterprise. This is the origin of the term market making. The market maker is often the original friend who brought the deal to the investor: after all, if the person who brought the deal is himself not willing to back the deal, then who will?

The paper on which the traders wrote out the promise of ownership is the share certificate. It is now referred as equity, common stock or simply shares. While each of these terms has a history to them, in the modern context they are interchangeable terms and all mean the same thing: they represent ownership of an enterprise.

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6.3 Financial Assets - Equities

Stocks are a type of security that gives stockholders a share of ownership in a company. Stocks are also called as "equities". In the modern economy the difference between the terms stocks and shares is blurred. They can be used interchangeably with no loss of value or meaning. From a language perspective, the following usage throws some light on the how these terms might be employed.

- "I have shares in Microsoft." "I own the Microsoft stock."
- "I have 15 shares in Microsoft and am looking to increase my exposure to that stock."

Generally speaking 'stocks' as a term is more prevalent in the USA. A share is a commonly used term in UK, India and some other parts of the world.

Investors buy stocks for various reasons. Here are some of them:
- Capital appreciation, which occurs when a stock rises in price
- Dividend payments, which come when the company distributes some of its earnings to stockholders
- Ability to vote shares and influence the company

Companies issue stock to get money for various things, which may include:
- Paying off debt
- Launching new products
- Expanding into new markets or regions
- Enlarging facilities or building new ones

6.3.1 Benefits and risks of stocks

Stocks offer investors the greatest potential for growth (capital appreciation) over the long haul. Investors willing to stick with stocks over long periods of time, say 15 years, generally have been rewarded with strong, positive returns.

But stock prices move down as well as up. There's no guarantee that the company whose stock you hold will grow and do well, so you can lose money you invest in stocks.

If a company goes bankrupt and its assets are liquidated, common stockholders are the last in line to share in the proceeds. The company's bondholders will be paid first, then holders of preferred stock. If you are a common stockholder, you get whatever is left, which may be nothing.

Even when companies aren't in danger of failing, their stock price may fluctuate up or down. Large company stocks as a group, for example, have lost money on average about one out of every three years. If you have to sell shares on a day when the stock price is below the price you paid for the shares, you will lose money on the sale.

Market fluctuations can be unnerving to some investors. A stock's price can be affected by factors inside the company, such as a faulty product, or by events the company has no control over, such as political or market events. Stocks usually are one part of an investor's holdings. If you are young and saving for a long-term goal such as retirement, you may want to hold more stocks than bonds. Investors nearing or in retirement may want to hold more bonds than stocks. The risks of stock holdings can be offset in part by investing in a number of different stocks. Investing in other kinds of assets that are not stocks, such as bonds, is another way to offset some of the risks of owning stocks.

A public company or publicly traded company is a company that offers its securities (stock, bonds, etc.) for sale to the general public, typically through a stock exchange, or through

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market makers operating in over the counter markets. A company with many shareholders is not necessarily a publicly traded company. Publicly traded companies are able to raise funds and capital through the sale of its securities. This is the reason publicly traded corporations are important: prior to their existence, it was very difficult to obtain large amounts of capital for private enterprises.

Few important dimensions of Equity are given below:

- **Face Value** (or Par Value): The nominal value of a security stated by the issuer. For stocks, it is the original cost of the stock shown on the certificate

  It used to be that the par value of common stock was equal to the amount invested (as with fixed-income securities). However, today most stocks are issued with either a very low par value (such as $0.01 per share) or no par value at all.

  You might be asking yourself why a company would issue shares with no par value. Corporations do this because it helps them avoid a liability to stockholders should the stock price take a turn for the worse. For example, if a stock was trading at $5 per share and the par value on the stock was $10, theoretically, the company would have a $5-per-share liability. Par value has no relation to the market value of a stock. A no par value stock can still trade for tens or hundreds of dollars - it all depends on what the market feels the company is worth.

- **Class Of Shares**: Types of listed company stock that are differentiated by the level of voting rights shareholders receive. For example, a listed company might have two share classes, or classes of stock, designated as Class A and Class B.

  Owners of companies that have been privately owned and go public often create class A and B share structures with different voting rights in order to maintain control and/or to make the company a more difficult target for a takeover. Obviously, it's the original owners that end up with the preferential voting class of stock.

- **Dividend**: The simple answer is that Dividends are payments by a company to its shareholders. For more detailed answers, about cash dividends please find several definitions below. Please also refer to our stock dividend, dividend reinvestment plan and cash stock option pages.

  - The part of the profits made by a company that it pays to its shareholders.
  - A distribution wealth to the shareholders of a company, made out of the earnings during a period (year, half year, quarter or month).
  - The reward an investor receives for investing in the company. The higher the dividend, the higher the reward.
  - A taxable payment from a company to its shareholders.

- **Equity Dilution**: Equity Dilution is a general term that results from the issue of additional common shares by a company. The company can dilute the equity capital by issuing shares through a rights issue, conversion of debt into equity, private placement of shares, QIBs, GDR issues, domestic public issue and issuance of stock options among others.

- **American Depositary Receipt (**ADR): A negotiable certificate issued by a U.S. bank representing a specified number of shares (or one share) in a foreign stock that is traded on a U.S. exchange. ADRs are denominated in U.S. dollars, with the underlying security held by a U.S. financial institution overseas. ADRs help to reduce administration and duty costs that would otherwise be levied on each transaction.

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- **Global Depositary Receipt (**GDR): A bank certificate issued in more than one country for shares in a foreign company. A foreign branch of an international bank holds the shares. The shares trade as domestic shares, but are offered for sale globally through the various bank branches.

- **Equity Derivative:** What does an Equity Derivative mean? **A derivative instrument with underlying assets based on equity securities.** An equity derivative's value will fluctuate with changes in its underlying asset's equity, which is usually measured by share price.

- **Earnings Per Share (EPS):** It is the total net income of the company divided by the number of shares outstanding. They usually have a GAAP EPS number (which means that it is computed using all of mutually agreed upon accounting rules) and a Pro Forma EPS figure (which means that they have adjusted the income to exclude any one time items as well as some non-cash items like amortization of goodwill or stock option expenses). The most important thing to look for in the EPS figure is the overall quality of earnings. Make sure the company is not trying to manipulate their EPS numbers to make it look like they are more profitable. Also, look at the growth in EPS over the past several quarters / years to understand how volatile their EPS is, and to see if they are an underachiever or an overachiever. In other words, have they consistently beaten expectations or are they constantly restating and lowering their forecasts?

- **Price to Earnings (P/E):** Now that you have several EPS figures (historical and forecasts), you'll be able to look at the most common valuation technique used by analysts, **the price to earnings ratio**, or P/E. **To compute this figure, take the stock price and divide it by the annual EPS figure**. For example, if the stock is trading at $10 and the EPS is $0.50, the P/E is 20 times. To get a good feeling of what P/E multiple a stock trades at, be sure to look at the historical and forward ratios.

  P/Es change constantly. If there is a large price change in a stock you are watching, or if the earnings (EPS) estimates change, the ratio is recomputed.

- **Growth Rate:** Valuations rely very heavily on the expected growth rate of a company. For starters, you can look at the historical growth rate of both sales and income to get a feeling for what type of future growth that you can expect. However, companies are constantly changing, as well as the economy, so don't rely on historical growth rates to predict the future, but instead use them as a guideline for what future growth could look like if the company encounters similar circumstances. To calculate your future growth rate, you'll need to do your own investment research. The easiest way to arrive at this forecast is to listen to the company's quarterly conference call, or if it has already happened, then read a press release or other company article that discusses the company's growth guidance. However, remember that although companies are in the best position to forecast their own growth, they are not very accurate, and things change rapidly in the economy and in their industry. So before you forecast a growth rate, try to take all of these factors into account.

- **PEG Ratio:** This valuation technique has really become popular over the past decade or so. It is better than just looking at a P/E because it takes three factors into account; the price, earnings, and earnings growth rates. To compute the PEG ratio (a.k.a. Price Earnings to Growth ratio) divide the Forward P/E by the expected earnings growth rate (you can also use historical P/E and historical growth rate to see where it's traded in the past). This will yield a ratio that is usually expressed as a percentage.

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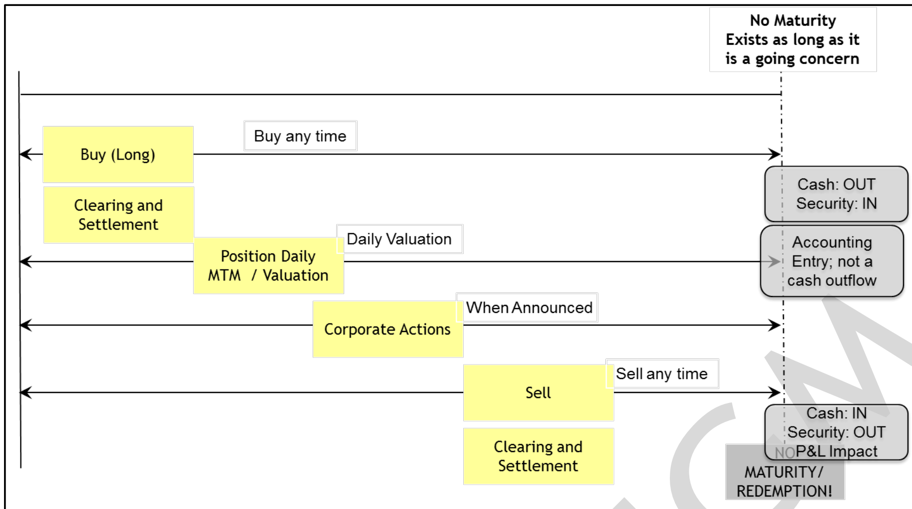
6.3.2 Life Cycle of Equity Stocks



6.3.3 Data Points in Equity Trading

Equity – Required Fields & Data

TRADE	POSITION	CORPORATE ACTIONS
Buy/Sell	Security Reference	Corporate Action Event Type
Security Reference	Quantity	Announcement Date
Quantity	Location (Depository/ Custodian)	Record Date
Price	Market or Valuation Price	Ex-Date
Commissions	Market Value (MTM)	Payment Date
Fees	Daily MTM P/L	Cash / Non-Cash
Gross Proceeds	Account	Mandatory/Voluntary
Net Proceeds	Client Id	
Account (Proprietary/ Customer)	Valuation Date	
Exchange		
Broker		
Client Id		
Trade Date		
Settlement Date		

6.4 Financial Assets - Bonds

A Bond is a debt investment in which an investor loans money to an entity (corporate or governmental) that borrows the funds for a defined period of time at a fixed interest rate. Bonds are commonly referred to as fixed-income securities and are one of the three main asset classes, along with stocks and cash equivalents.

Bonds are issued by companies, municipalities, states and U.S./foreign governments to finance a variety of projects and activities. We have mapped the Issuers with the different types of securities that they issue below.

Bonds issued by Municipal Corporations to fund local infrastructure projects

Tenor of Loan	Who took the loan: Corporate	Government	Others
Short Term	Commercial Paper	T-bills	Certificates of Deposit *(Issuer: bank)*
Medium Term	Fixed Income Securities	T-Notes	-
Long Term	Bonds	T-Bonds	Munis etc. *(municipalities: USA)*

*In conversation, when the term '**bond**' is used it includes both medium and long term instruments. But it never includes short term instruments which are strictly referred to as '**money market instruments**' only.*

The most common process of issuing bonds is through underwriting. In underwriting, one or more securities firms or banks, forming a syndicate, buy an entire issue of bonds from an issuer and re-sell them to investors. The security firm takes the risk of being unable to sell on the issue to end investors. Primary issuance is arranged by book runners who arrange the bond issue, have the direct contact with investors and act as advisors to the bond issuer in terms of timing and price of the bond issue.

In the case of government bonds, these are usually issued by auctions, called a public sale, where both members of the public and banks may bid for bond. Since the coupon is fixed, but the price is not, the percent return is a function both of the prices paid as well as the coupon. However, because the cost of issuance for a publicly auctioned bond can be cost prohibitive for a smaller loan, it is also common for smaller bonds to avoid the underwriting and auction process through the use of a private placement bond. In the case of a private placement bond, the bond is held by the lender and does not enter the large bond market.

6.4.1 Important Features of Bonds

- **Nominal, principal or face amount** — the amount on which the issuer pays interest, and which, most commonly, has to be repaid at the end of the term. Some structured bonds can have a redemption amount, which is different from the face amount and can be linked to performance of particular assets such as a stock or commodity index, foreign exchange rate or a fund. This can result in an investor receiving less or more than his original investment at maturity.

- **Issue price** — the price, at which investor's buy the bonds when they are first issued, which will typically be approximately equal to the nominal amount. The net proceeds that the issuer receives are thus the issue price, less issuance fees.

- **Maturity date** — the date on which the issuer has to repay the nominal amount. As long as all payments have been made, the issuer has no more obligations to the bondholders after the maturity date. The length of time until the maturity date is often referred to as the term or tenor or maturity of a bond. The maturity can be any length of time, although debt securities with a term of less than one year are generally designated money market instruments rather than bonds. Most bonds have a term of up to thirty years. Some bonds have been issued with maturities of up to one hundred years, and some even do not mature at all. In the market for U.S. Treasury securities, there are three groups of bond maturities:

- Short term (bills): maturities between one to five year; (instruments with maturities less than one year are called Money Market Instruments)
- Medium term (notes): maturities between six to twelve years;
- Long term (bonds): maturities greater than twelve years.

- **Coupon** — the interest rate that the issuer pays to the bondholders. Usually this rate is fixed throughout the life of the bond. It can also vary with a money market index, such as LIBOR, or it can be even more exotic. The name coupon originates from the fact that in the past, physical bonds were issued which had coupons attached to them. On coupon dates the bondholder would give the coupon to a bank in exchange for the interest payment.

6.4.2 Bond Issuers

As the major determiner of a bond's credit quality, the issuer is one of the most important characteristics of a bond. There are significant differences between bonds issued by corporations and those issued by a state government/municipality or national government. In general, securities issued by the federal government have the lowest risk of default while corporate bonds are considered to be riskier ventures. Of course there are always exceptions to the rule. In rare instances, a very large and stable company could have a bond rating that is better than that of a municipality. It is important for us to point out, however, that like corporate bonds, government bonds carry various levels of risk; because all national governments are different, so are the bonds they issue.

Companies use debt to increase the owners' profits.

Typically, a company will borrow money – either through a loan from the bank, or through bonds sold to investors – in order to expand. If a company wants to open a new factory, or a new store, but doesn't have enough money on hand to do so, then it may borrow the money to finance its growth.

Companies with little or no growth can still use debt to increase owners' profits, however. A company with little or no growth obviously doesn't need to borrow money to expand. However, sometimes a slow-growing but stable company can borrow money in order to reduce the amount of money the owners have to keep tied up in the business. This allows the owners to invest that money elsewhere, increasing their profits.

The trouble with borrowing money, of course, is that eventually it has to be paid back.

The company that borrows money in order to expand is taking the risk that the expansion will turn out to be unprofitable. Even if it is unprofitable, the company still has to repay its loans. If it cannot generate enough income to keep making the payments on its debt, then its lenders may take over some (or all) of the company, leaving the original owners with little or nothing.

- **Corporate Bond:** A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds. Corporate bonds are considered higher risk than government bonds. As a result, interest rates are almost always higher, even for top-flight credit quality companies.

- **Government Bond:** is a bond issued by a national government denominated in the country's own currency. Bonds are debt investments whereby an investor loans a certain amount of money, for a certain amount of time, with a certain interest rate,

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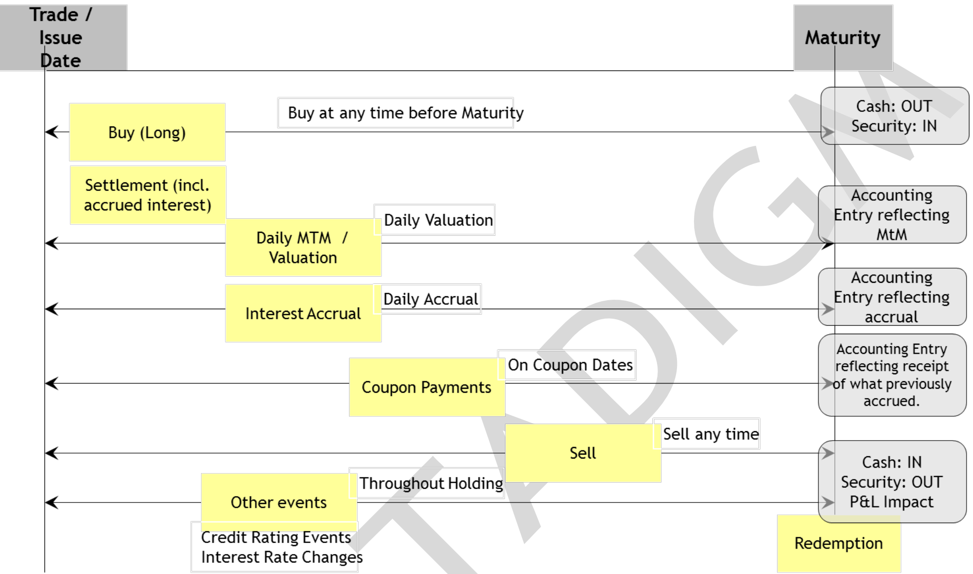
to a company or country. Bonds issued by national governments in foreign currencies are normally referred to as sovereign bonds.

- **Municipal Bond:** - A debt security issued by a state, municipality or county to finance its capital expenditures. Municipal bonds are exempt from federal taxes and from most state and local taxes, especially if the investor lives in the state in which the bond is issued.

6.4.3 Life Cycle of Bonds



6.4.4 Data Points in Bonds Trading

Bonds - Required Fields & Data

TRADE	POSITION	LOAN MASTER
Borrow/Lend	Issuer	Previous Interest Date
Principal Amount	Serial Number	Next Interest Date
Currency	Original Principal	Maturity Date
Gross Amount	Outstanding Amount	Day Count Fraction
Interest Rate	Accrued Interest	Interest Rate
Fixed or Float	Current value of Loan	Accrued Interest
Interest Rate Benchmark	Interest Rate	Credit Rating
Interest Payment Dates	Daily P/L	Interest Rate Benchmark
Maturity Date	Account	Rate Reset Dates
Account (Proprietary/ Customer)	Client Id	Collateral Type
Broker	Total Interest Received	
Client Id	Collateral Value	
Collateral Type		
Collateral Amount		
Transaction Date		
Settlement Date		

6.5 Financial Assets – Money Market Instruments

Tenor of Loan	Who took the loan: Corporate	Government	Others
Short Term	Commercial Paper	T-bills	Certificates of Deposit *(Issuer: bank)*
Medium Term	Fixed Income Securities	T-Notes	-
Long Term	Bonds	T-Bonds	Munis etc. *(municipalities: USA)*

Money market securities are securities with maturities of up to twelve months, so they are short-term debt obligations. Money market debt is an important segment of the global financial markets, and facilitates the smooth running of the banking industry as well as providing working capital for industrial and commercial corporate institutions. The market allows issuers, who are financial organizations as well as corporates, to raise funds for short-term periods at relatively low interest rates. These issuers include sovereign governments, who issue Treasury bills, corporates issuing commercial paper and banks issuing bills and certificates of deposit. At the same time, investors are attracted to the market because the instruments are highly liquid and carry relatively low credit risk. Investors in the money market include banks, local authorities, corporations, money market investment funds and individuals; however, the money market essentially is a wholesale market and the denominations of individual instruments are relatively large.

Although the money market is traditionally defined as the market for instruments maturing in one year or less, frequently the money market desks of banks trade instruments with maturities of up to two years, both cash and off balance-sheet. In addition to the cash instruments that go to make up the market, the money markets also consist of a wide range of over-the counter off-balance sheet derivative instruments. These instruments are used mainly to establish future borrowing and lending rates, and to hedge or change existing interest rate exposure. Banks, central banks and corporates carry out this activity. The main derivatives are short-term interest rate futures, forward rate agreements, and short-dated interest rate swaps.

The cash instruments traded in the money market include the following:

- **Treasury Bill (T-Bill):** T-bills are non-interest bearing, direct obligations of the United States government. They have an initial maturity of one year or less and are regularly sold at auction (in competitive and non-competitive bidding) by the Federal government. They are sold at discount from their maturity (par, face) value, which ranges from $10,000 to $1 million. The investor’s entire return comes in the form of the appreciation in price that occurs as the bill approaches maturity.

- **Negotiable Bank CDs:** Negotiable certificates of deposit are money market instruments sold by banks, typically in maturities less than six months. They are issued in denominations ranging from $100,000 to $10 million. The standard round-lot trading unit among dealers is $1 million. These negotiable instruments are traded in the secondary market and are a major tool used by large banks to manage their liquidity.

- **Commercial Paper (CP):** Commercial paper is unsecured, short-term, discount securities issued by financial organizations (about 75 percent) and corporations with high credit ratings. CP is a cheap alternative to borrowing from banks or other lending institutions. CP is generally sold in denominations of $100,000 or more and maturities are limited to 270 days or less, allowing corporations to avoid the registration requirements in the Securities Act of 1933. Typical maturities are around 30 days. Commercial paper can be sold directly to investors or to commercial paper dealers.

- **Eurodollar CDs:** Eurodollar CDs are certificates of deposit issued by banks outside the U.S. and denominated in U.S. dollars. (Technically, any certificate of deposit that is denominated in a currency outside the bank of origin can be called a Eurodollar Cd. However, the great majority are in U.S. dollars). They are short-term CDs (less than 12 months maturity) and typically yield a higher interest rate than the domestic CDs of U.S. banks.

- **Repurchase Agreements:** "Repos" are transactions in which one party sells securities to another party (usually at a discount from the fair market value) and agrees to buy the securities back at a later date. Repos may be overnight or on a term basis, ranging from a few days to over 30 days, but most are for a term not exceeding two weeks. The securities used in repos are known as "collaterals" and may be Treasury securities, other money market instruments, federal agency securities, or mortgage-backed securities. Repo rates may be lower than the Federal funds rate due to the collateralized nature of the transaction.

- **Bankers' Acceptances:** Bankers' acceptances are short-term, negotiable securities issued by a bank for a customer, usually to finance export/import financing. The "draft" can be traded in the secondary market and represents an outstanding liability of the issuing bank. They are typically traded at a discount from face value.

- **Federal Funds:** Federal funds are reserve balances of insured banks at Federal Reserve Banks that are used to meet reserve requirements. Excess funds are loaned overnight by banks at the "fed funds rate" to other banks with insufficient reserve balances.

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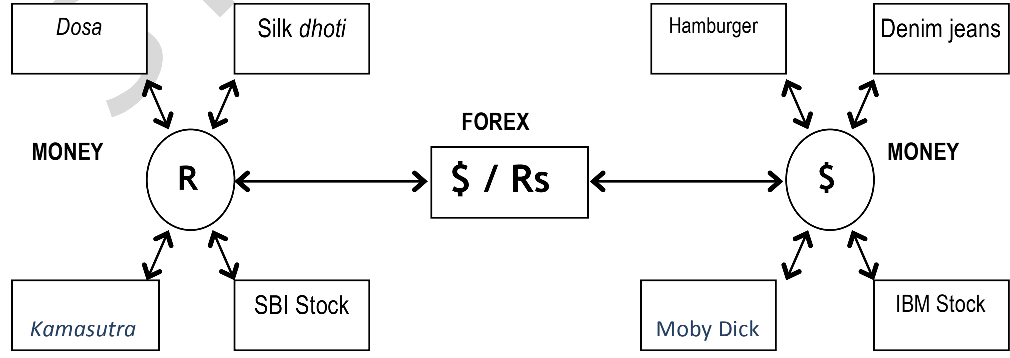
6.6 Financial Assets - Foreign Exchange

Money is the medium of exchange for goods and services. Money comes in different "brands": US dollar, British pound, Indian rupee, etc., each having its legal jurisdiction. Foreign exchange is the medium of exchange for different "brands" of money.



6.6.1 Need for Foreign exchange

We need foreign exchange to buy or sell goods and services in other jurisdictions or countries. Currencies are national but trade is international. Trade goes beyond national boundaries because of comparative and competitive advantages. Foreign exchange stems from the "coexistence between nationalism of currencies and internationalism of trade." We may say that forex is international clearing mechanism.

To be qualified as a forex trade, two criteria must be satisfied. First, there must be two currencies in the trade: forex trade is always a currency pair. Second, the rate of exchange between the two currencies must be fixed.

Consider the following two transactions:

- A bank accepts a foreign currency time deposit from a customer at fixed rate of interest; and
- A bank opens a foreign currency import letter of credit (L/C) on behalf of its importer-constituent in favour of a foreign supplier.

Which of the two transactions is a forex transaction? **None of them is.**

The first has only one currency and therefore is a money transaction. The second transaction has two currencies— local and foreign currencies—but the rate of exchange between them is not fixed as yet. We can say that the second transaction will surely become a forex transaction in future (when the importer makes the payment), but as of today, it has not entered the forex book of the bank.

6.6.2 Forex Transaction

To be qualified as a forex transaction, two criteria must be satisfied.

- Two currencies are involved. If the transaction involves only one currency, it is a money transaction and not a forex transaction.
- Rate of exchange between the two currencies must be fixed. Not only two currencies must be involved, but also the rate of exchange must be fixed.

6.6.3 Currency Pair

Every forex transaction is a currency pair, and the forex price (or exchange rate) is the price of one currency in terms of the other.

Base Currency and Quoting Currency

Of the two currencies in the pair, one is called the base currency (BC) and the other, the quoting currency (QC). Base currency is the currency that is priced: it is bought and sold like a commodity (whence the name "commodity currency") and ceases to act in the traditional role of money. Quoting currency is the currency that prices the base currency, and is thus acting in the role of money. What is quoted in the market as forex price (or exchange rate) is the price of base currency in units of quoting currency. This statement always holds in all "quotation styles" and must be memorized.

Forex Price (or Exchange Rate) = Price of BC in QC

The amount of BC is fixed (usually at one unit) and the amount of QC varies as the price of base currency varies over time. Accordingly, BC and QC are also called "constant/fixed amount currency" and "variable amount currency", respectively.

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6.6.4 Exchange Rate Determinants

The three theories on this are:

- Trade Balance
- Interest Rate Differentials
- Purchasing Power Parity

The first two (Trade Balance and Interest Differentials) are better at explaining rate determination – by working out demand and supply of currencies.

The Purchasing Power Parity theory is better at explaining what a currency can buy: and thus a surrogate for economic prosperity of the people in an economy

6.7 Financial Assets - Funds

Investors have a range of investments to choose from and can buy them directly or indirectly. Direct investment is where an individual personally buys shares in a company, such as buying shares in BP, the oil company. Indirect investment is where an individual buys a stake in a collective investment vehicle, like a unit trust that invests in the shares of a range of different types of companies, including BP.

Achieving an adequate spread of investments through holding direct investments can require a significant amount of money and, as a result, many investors find indirect investment very attractive.

There are a range of funds available that pool the resources of a large number of investors to provide access to a range of investments. These pooled funds are known as **Collective Investment Schemes (CISs),** mutual funds or simply funds, or collective investment vehicles.

The term 'collective investment scheme' is an internationally recognized one, but investment funds are also known by other names in different countries, such as mutual funds, unit trusts or investment companies with variable capital. An investor is likely to come across a range of different types of investment fund as many are now established in one country and then marketed internationally.

A Mutual Fund is a professionally managed type of collective investment scheme that pools money from many investors and invests it in stocks, bonds, short-term money market instruments and other securities. Mutual funds have a fund manager who invests the money on behalf of the investors by buying / selling stocks, bonds etc.

6.7.1 Rationale behind Collective Investment

Collective investment schemes pool the resources of a large number of investors, with the aim of pursuing a common investment objective. This pooling of funds brings a number of benefits, including:

- Economies of scale;
- Diversification;
- Access to professional investment management;
- Access to geographical markets, asset classes or investment strategies which might otherwise be inaccessible to the individual investor;
- In some cases, benefit of regulatory oversight; and
- In some cases, tax deferral.

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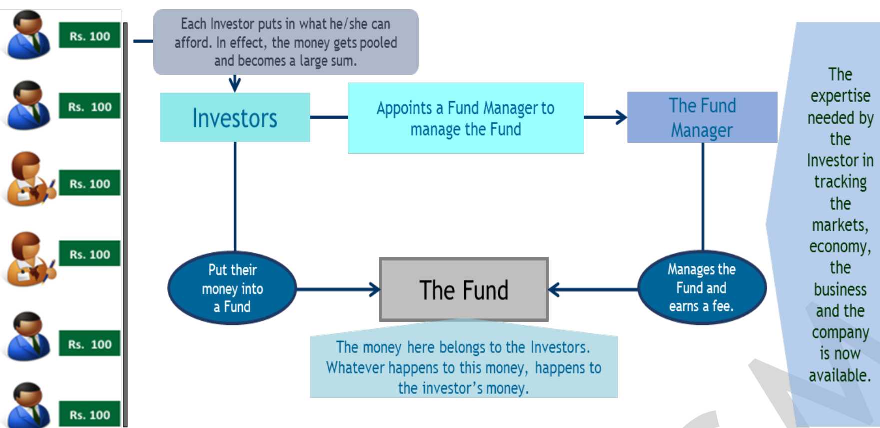
6.7.2 Structure of a Mutual Fund



Mutual Fund Structure - constituents

- **Sponsor:** Sponsor is basically a promoter of the fund. For example ABC Bank is the sponsor of the mutual fund ABC Mutual Funds. The fund sponsor raises the money from the public, who become shareholders. The pooled money is invested in the securities. Sponsor appoints the trustees.
- **Trustees:** two third of the trustees are independent professional who own the fund and supervise the activities of the AMC. IT has the authority to sack the employees for non-adherence to the rules of the regulator. It safeguards the interest of the investor. Trustees are the people authorized to act on behalf of the Trust
- **Asset Management Company:** Trustees appoint the Asset Management Company (AMC), to manage investor's money. The AMC in return charges a fee for the services provided and this fee is borne by the investors as it is deducted from the money collected from them. It is the AMC, which in the name of the Trust, floats new schemes and manages these schemes by buying and selling securities. Whenever the fund intends to launch a new scheme, the AMC has to submit a Draft Offer Document to SEBI. This draft offer document, after getting SEBI approval becomes the offer document of the scheme. The Offer Document (OD) is a legal document and investors rely upon the information provided in the OD for investing in the mutual fund scheme.

The role of the AMC is to manage investor's money on a day-to-day basis. Thus it is imperative that people with the highest integrity are involved with this activity. The AMC cannot deal with a single broker beyond a certain limit of transactions. The AMC cannot act as a Trustee for some other Mutual Fund. The responsibility of preparing the OD lies with the AMC. Appointments of intermediaries like independent financial advisors (IFAs), national and regional distributors, banks, etc. is also done by the AMC. Finally, it is the AMC, which is responsible for the acts of its employees and service providers. As can be seen, it is the AMC that does all the operations. All activities by the AMC are done under the name of the Trust, i.e. the mutual fund. The AMC charges a fee for providing its services.

6.7.3 Types of Mutual Funds

A. Open Ended Vs. Closed Ended

Open-ended Fund: In open-ended MFs, the fund house continuously buys and sells units from investors. New units are created and issued if there is demand, and old units are eliminated if there is redemption pressure. There is no fixed date on which the units would be permanently redeemed or terminated. If you want to invest in an open-ended fund, you buy units from the

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fund house. Similarly, when you redeem your units, the fund house directly pays you the value of the units.

Close Ended Fund: Similar to a company, a closed-ended fund issues a fixed number of shares in an initial public offering, which trade on an exchange. Share prices are determined not by the total net asset value (NAV), but by investor demand. Unlike standard mutual funds, you cannot simply mail a check and buy closed fund shares at the calculated net asset value price. Shares are purchased in the open market similar to stocks

Each fund has a predetermined investment objective that tailors the fund's assets, regions of investments and investment strategies. At the fundamental level, there are three varieties of mutual funds:

- Equity Funds
- Debt Funds
- Money Market Funds

B. Exchange Traded Fund

An exchange-traded fund (ETF) is an investment fund, usually designed to track a particular index. This is typically a stock market index, such as the FTSE 100. The investor buys shares in the ETF which are quoted on the stock exchange, like investment trusts. However, unlike investment trusts, ETFs are 'open-ended funds'. This means that, like OEICs, the fund gets bigger as more people invest and gets smaller as people withdraw their money.EFT shares may trade at a premium or discount to the underlying investments, but the difference is minimal and the ETF share price essentially reflects the value of the investments in the fund. The investor's return is in the form of dividends paid by the ETF, and the possibility of a capital gain (or loss) on sale.

C. Hedge Funds

Hedge funds are reputed to be high risk. However, in many cases, this perception stands at odds with reality. In their original incarnation, hedge funds sought to eliminate or reduce market risk. That said, there are now many different styles of hedge fund – some risk-averse, and some employing highly risky strategies. It is, therefore, not wise to generalize about them.

The most obvious market risk is the risk that is faced by an investor in shares – as the broad market moves down, the investor's shares also fall in value. Traditional 'absolute return' hedge funds attempt to profit regardless of the general movements of the market by carefully selecting a combination of asset classes, including derivatives, and by holding both long and short positions (a 'short' position may involve the selling of shares which the fund does not at that time own in the hope of buying them back more cheaply if the market falls. Alternatively, it may involve the use of derivatives).

Many hedge funds have high initial investment levels meaning, that access is effectively restricted to wealthy investors and institutions. However, investors can also gain access to hedge funds through funds of hedge funds.

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Key Learnings:

At the end of this chapter one should be conversant with the following fundamental concepts related to the bank's ability to raise equity and/or debt capital for businesses.

- It provides them multiple services with special focus on raising capital.
- Capital includes both Equity (ownership) and Debt (loan).
- Other types of financial assets include Money Market instruments, Foreign Exchange and Collective Investment Schemes or Funds.
- Derivatives are financial instruments that derive their value from that of an underlying and this could be an equity share or a bond or an interest rate etc.
- Financial assets are created in the Primary Market and traded in the Secondary Market.
- The primary market brings together the Issuer and the Investor and the secondary market brings together the investors (buyer and seller).
- Markets are also classified as Cash vs. Derivatives or Exchange-traded vs. OTC.
- OTC trades can be further classified as Cleared or Bilateral.

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6.8 Test Your Understanding

1. Which of the following is NOT a money market instrument?
    a. Equity
    b. T-Bill
    c. CP
    d. CD

2. Equity represents pro-rata ownership.
    a. True
    b. False

3. The holder of a bond will receive periodic coupons.
    a. True
    b. False

4. Coupon and interest rates are one and the same.
    a. True
    b. False

5. Corporates can raise equity and/or debt capital.
    a. True
    b. False

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Chapter Overview: Regulations Overview

This chapter is designed to help the participants get a broad overview of the regulatory aspects of banking. Central banks and other regulators closely monitor the functioning of banks to ensure that consumer interests are protected, banks are not aggressive in their lending, they have adequate liquidity at all times and most importantly they are not used as conduits for money laundering. In the aftermath of the 2008 global financial crisis, the regulators in USA passed even more stringent rules that impact the functioning of banks. We will get a quick run through of some of the key regulations in this section.

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7. Regulations Overview

The 9/11 terrorist attacks traumatized the world and alerted the most powerful nations of the world to the dangers posed by international terrorism. In that incident the conspirators had used the banking system to access funds. Donors made money available at the counters of specific banks around the world. In the absence of the current standards, the hijackers were able to collect cash across the counters at various banks.

Money is essential to carrying out such nefarious plans. At the time, the access to money through the banking system was ridiculously simple. In the investigations that followed, while some of the trail was reconstructed there were no faces, names or addresses to go after. Donors remained anonymous and perhaps are still active.

Anti-Money Laundering and Combating the Financing of Terrorism combined with Know Your Customer requirements make what the 9/11 conspirators did, tough to replicate. It can be argued that they would still find a way to execute such attacks. But it should be made as tough as it can be made; and certainly no leading bank of the world would want to be complicit through acts of omission.

Know Your Customer (KYC) is the colloquial term for what regulators of the world called Customer Due Diligence. Knowing one’s customer, as any banker – indeed any businessman will tell you, is as old as banking itself. How else to deal on behalf of, lend to and speak for your client, which is what bankers do for a living?

However, terrorism and other supposedly lesser crimes like drug smuggling, gun running and trafficking in humans have brought the focus on how money flows and who transacts with the bank. This is especially true of payments and payments systems but is not restricted to any one area of banking, financial services, capital markets or insurance.

These concerns now embrace non-financial organizations too as the world gets serious about combating national and international crime and strengthening security in general. Banks and financial organizations have made substantial investments in global financial and payment infrastructure. These enable money to be moved effortlessly across continents. A few transfers later it would be hard to detect who the sender was and who the recipient was. A number of banks, which might have served as a transit point could well be clueless about the nature of the transaction. This swift and sophisticated infrastructure is meant to be used for ‘good’; not ‘evil’.

Whether good or evil, all work in the modern world requires money. In the effort to combat the forces cited above the regulators of the world have worked hard over the last several years to prevent such entities / persons from misusing the financial systems of the world.

It is always the case that criminals try to stay a step ahead of the law enforcers. If the money from criminal activities could be brought into the banking system and shown to be legitimate, then the world’s financial infrastructure could be put to misuse and detection could be avoided. This process of penetrating the financial system and changing the color of ill-gotten wealth into legitimate wealth is Money Laundering.

So, there are two issues here:

- Who is trying to access the financial system?
- What is the transaction, which they are conducting?

The KYC or Customer Due Diligence process focuses on banks operating as gatekeepers to the world’s financial system. The other aspect – transaction monitoring – is an ongoing activity to see if any malafide persons have crept in; or any normal person has somehow been persuaded to carry out some malafide transactions.

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Whether it is a deposit relationship or lending relationship or a relationship for provision of certain services only (e.g., safe deposit lockers or remittances etc.) banks today have to exercise utmost caution to ensure that they are dealing with the right kind of customers. Banks have to ensure that they are not used as a conduit for money laundering i.e., routing money gained by illegal means with the intention of converting such monies into legal money.

The need for due diligence by Banks in opening and operating customer accounts cannot be overstated in an environment where there are constant attempts to use the financial system for funding illegal activities.

Financial sector regulators around the world are increasingly recognizing the importance of ensuring that their banks and financial institutions have adequate controls and procedures in place so that they know the customers with whom they are dealing. Adequate due diligence on new and existing customers is a key part of these controls. **Without this due diligence, banks can become subject to reputational, operational, legal and concentration risks, which can result in significant financial costs.**

7.1 Anti-Money Laundering

Businesses like drug trafficking, human trafficking, illegal arms trade, extortion and other activities like bribery and tax evasion etc., generate lots of illegal cash. Hoarding of physical cash and its use is difficult because it raises suspicion and hence people holding them are always looking for ways and means of converting them into easily usable money.

A country (in)famous for its drug lords and their narcotic drug trade

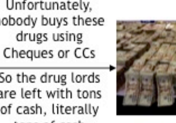
Cocaine that's worth $1 million on the street weighs about 20 kg, while a stash of U.S. dollars worth $1 million weighs about 116 kg.

The mafia deals in narcotic drugs

Sells them in intl. markets at exorbitant prices

Unfortunately, nobody buys these drugs using Cheques or CCs

So the drug lords are left with tons of cash, literally tons of cash



The MAFIA has a real problem on hands – **what to do with all these $s?**

- Cash is risky/Cash can be confiscated/Cash cannot be used that easily
- **So, how does the MAFIA overcome this problem?**

The mafia in the above example cannot carry the cash and is looking to introduce it into the global financial system and thereafter put through multiple transactions on such accounts to give the money a coat of legality. **This is the essence of money laundering**.

In simple terms, money laundering is a process in which assets obtained or generated by criminal activity are moved or concealed to obscure their link with the crime.

In India, funds acquired through illegitimate (mostly tax evasion, corruption and embezzlement) are popularly known as `black money' to distinguish them from those acquired legitimately (`white money'). Money laundering makes sense in this context as well.

Money laundering typically involves the following stages:

Money Laundering Process

Move the money through a series of banks and accounts...

A/c 1
A/c 2
A/c 3
A/c 4
A/c 5
A/c 6
A/c 7
A/c 8
A/c 9
Deploy into 'genuine' transactions

Placement	Layering	Integration
These 3 steps are the process called 'Money Laundering'		
Easy to detect start of ML	*Relatively Difficult to detect*	*Almost impossible to detect*

Smurfing & Placement– This is the beginning of the laundering process. Ill-gotten money is introduced into the global financial system by breaking it down into smaller amounts (below certain regulated thresholds) and depositing them over a period of time so that these transactions do not attract attention from the banks.

Layering – In this stage the money is moved across banks in different countries (typically countries with very weak banking regulations) and from there moved to other countries for setting up fake businesses and purchases of assets etc. The objective of moving the money multiple times is to make it difficult to trace its origins.

Integration – This stage involves moving money back to the country where the launderer resides and operates his illegal business.

Money laundering takes many forms, including:

- Trying to turn money raised through criminal activity into 'clean' money (that is, classic money laundering);
- Handling the benefit of acquisitive crimes such as theft, fraud and tax evasion;
- Handling stolen goods;
- Being directly involved with any criminal or terrorist property, or entering into arrangements to facilitate the laundering of criminal or terrorist property; and
- Criminals investing the proceeds of their crimes in the whole range of financial products.

The techniques used by money launderers constantly evolve to match the source and amount of funds to be laundered, and to stay ahead of law enforcement agencies.

7.2 KYC - A tool to fight Money Laundering

KYC is an acronym for **"Know your Customer"**, a term used for customer identification process. It involves making reasonable efforts to determine true identity and beneficial ownership of accounts, source of funds, the nature of customer's business, reasonableness of operations in the account in relation to the customer's business, etc., which in turn helps the banks to manage their risks prudently.

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The objective of the KYC guidelines is to ***prevent*** banks being used, intentionally or unintentionally by criminal elements for ***Money Laundering Activities***. KYC procedures also enable banks to know/understand their customers and their financial dealings better which in turn help them manage their risks prudently.

The foremost of the compliance requirements for banks today are the Know your customer (KYC) and Anti-Money Laundering (AML) requirements.

The objective of KYC guidelines is to prevent banks allowing themselves to be used, intentionally or unintentionally, by criminal elements for money laundering activities. KYC procedures also enable banks to know/understand their customers and their financial dealings better, which in turn help them manage their risks prudently. Banks should frame their KYC policies incorporating the following four key elements:

Customer Acceptance Policy (CAP)

Banks should develop a clear Customer Acceptance Policy laying down explicit criteria for acceptance of customers. The Customer Acceptance Policy must ensure that explicit guidelines are in place on the following aspects of customer relationship in the bank.

- No account is opened in anonymous or fictitious/ benami name(s);
- Parameters of risk perception are clearly defined in terms of the nature of business activity, location of customer and his clients, mode of payments, volume of turnover, social and financial status etc. to enable categorization of customers into low, medium and high risk (banks may choose any suitable nomenclature e.g. level I, level II and level III); customers requiring very high level of monitoring, e.g. Politically Exposed Persons may, if considered necessary, be categorized even higher;
- Documentation requirements and other information to be collected in respect of different categories of customers depending on perceived risk and keeping in mind the requirements of various laws;
- Not to open an account or close an existing account where the bank is unable to apply appropriate customer due diligence measures i.e. bank is unable to verify the identity and /or obtain documents required as per the risk categorization due to non-cooperation of the customer or non-reliability of the data/information furnished to the bank. It may, however, be necessary to have suitable built-in safeguards to avoid harassment of the customer. For example, decision to close an account may be taken at a reasonably high level after giving due notice to the customer explaining the reasons for such a decision;

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- Circumstances, in which a customer is permitted to act on behalf of another person/entity, should be clearly spelt out in conformity with the established law and practice of banking as there could be occasions when an account is operated by a mandate holder or where an account may be opened by an intermediary in the fiduciary capacity and
- Necessary checks before opening a new account so as to ensure that the identity of the customer does not match with any person with known criminal background or with banned entities such as individual terrorists or terrorist organizations etc.

Banks should prepare a profile for each new customer based on risk categorization. The customer profile may contain information relating to customer's identity, social/financial status, nature of business activity, information about his client business and their location etc. The nature and extent of due diligence will depend on the risk perceived by the bank. However, while preparing customer profile banks should take care to seek only such information from the customer, which is relevant to the risk category and is not intrusive. The customer profile will be a confidential document and details contained therein shall not be divulged for cross selling or any other purposes.

For the purpose of risk categorization, individuals (other than High Net Worth) and entities whose identities and sources of wealth can be easily identified and transactions in whose accounts by and large conform to the known profile may be categorized as low risk. Illustrative examples of low risk customers could be salaried employees whose salary structures are well defined, people belonging to lower economic strata of the society whose accounts show small balances and low turnover, Government departments & Government owned companies, regulators and statutory bodies etc. In such cases, the policy may require that only the basic requirements of verifying the identity and location of the customer are to be met. Customers that are likely to pose a higher than average risk to the bank may be categorized as medium or high risk depending on customer's background, nature and location of activity, country of origin, sources of funds and his client profile etc. Banks may apply enhanced due diligence measures based on the risk assessment, thereby requiring intensive due diligence for higher risk customers, especially those for whom the sources of funds are not clear. Examples of customers requiring higher due diligence may include (a) non-resident customers, (b) high net worth individuals, (c) trusts, charities, NGOs and organizations receiving donations, (d) companies having close family shareholding or beneficial ownership, (e) firms with 'sleeping partners', (f) politically exposed persons (PEPs) of foreign origin, (g) non-face-to-face customers, and (h) those with dubious reputation as per public information available, etc.

It is important to bear in mind that the adoption of customer acceptance policy and its implementation should not become too restrictive and must not result in denial of banking services to general public, especially to those who are financially or socially disadvantaged.

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Customer Identification Procedure (CIP)

The policy approved by the Board of the bank should clearly spell out the Customer Identification Procedure to be carried out at different stages i.e. while establishing a banking relationship; carrying out a financial transaction or when the bank has a doubt about the authenticity/veracity or the adequacy of the previously obtained customer identification data. Customer identification means identifying the customer and verifying his/ her identity by using reliable, independent source documents, data or information. Banks need to obtain sufficient information necessary to establish, to their satisfaction, the identity of each new customer, whether regular or occasional, and the purpose of the intended nature of banking relationship. Being satisfied means that the bank must be able to satisfy the competent authorities that due diligence was observed based on the risk profile of the customer in compliance with the extant guidelines in place. Such risk-based approach is considered necessary to avoid disproportionate cost to banks and a burdensome regime for the

customers. Besides risk perception, the nature of information/documents required would also depend on the type of customer (individual, corporate etc.). For customers that are natural persons, the banks should obtain sufficient identification data to verify the identity of the customer, his address/location, and also his recent photograph. For customers that are legal persons or entities, the bank should (i) verify the legal status of the legal person/ entity through proper and relevant documents (ii) verify that any person purporting to act on behalf of the legal person/entity is so authorized and identify and verify the identity of that person, (iii) understand the ownership and control structure of the customer and determine who are the natural persons who ultimately control the legal person.

Customer Due Diligence

Due Diligence is the process of evaluating a prospective business decision by getting information about the financial, legal, and other material (important) state of the other party.

Customer Due diligence relates to Policies, procedures, and processes for obtaining customer information and the value of this information in detecting, monitoring, and reporting suspicious activity. The cornerstone of a strong AML compliance program is the adoption and implementation of comprehensive CDD policies, procedures, and processes for all customers, particularly those that present a high risk for money laundering and terrorist financing.

The objective of CDD

- Enable the bank to predict with relative certainty the types of transactions in which a customer is likely to engage.
- Processes assist the bank in determining when transactions are potentially suspicious.
- The concept of CDD begins with verifying the customer's identity and assessing the risks associated with that customer.
- Processes should also include enhanced CDD for high-risk customers and ongoing due diligence of the customer base.
- Enables the bank to comply with regulatory requirements and to report suspicious activity.

CDD Helps in detecting Suspicious Transactions

Detecting and reporting unusual or suspicious transactions that potentially expose the bank to financial loss, increased expenses, or reputational risk. Avoiding criminal exposure from persons who use or attempt to use the bank's products and services for illicit purposes.

The bank should consider obtaining, both at account opening and throughout the relationship, the following information on the customer:

- Purpose of the account.
- Source of funds and wealth.
- Individuals with ownership or control over the account - Beneficial owners.
- Occupation or type of business
- Financial statements.
- Banking references.
- Domicile (where the business is organized).
- Proximity of the customer's residence, place of employment, or place of business.
- Primary trade area and whether international transactions are expected.
- Anticipated volume of currency, total sales, list of major customers and suppliers.
- Explanations for changes in account activity.

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Customer Risk Categorization

Under this approach, the bank should obtain information at account opening sufficient to develop an understanding of **normal** and **expected** activity for the customer's occupation or business operations. This understanding may be based on account type or customer classification.

This information should allow the bank to differentiate between lower-risk customers and higher-risk customers at account opening. Banks should monitor their lower-risk customers through regular suspicious activity monitoring and customer due diligence processes. If there is indication of a potential change in the customer's risk profile (e.g., expected account activity, change in employment or business operations), management should reassess the customer risk rating.

Examples of low risk customers

- Salaried persons
- People belonging to lower economic strata
- Govt. departments
- Govt. owned companies

Examples of high-risk customers

- Non-resident customers
- High net worth individuals
- Trusts/charities / NGOs / Organizations receiving donations
- Companies having close family shareholding or beneficial ownership
- Firms with sleeping partners
- PEPs of foreign origin
- Non face-to-face customers
- Those with dubious reputation as per available public information

Monitoring of Transactions

On-going monitoring is an essential element of effective KYC procedures. Banks can effectively control and reduce their risk only if they have an understanding of the normal and reasonable activity of the customer so that they have the means of identifying transactions that fall outside the regular pattern of activity. However, the extent of monitoring will depend on the risk sensitivity of the account. Banks should pay special attention to all complex, unusually large transactions and all unusual patterns, which have no apparent economic or visible lawful purpose. The bank may prescribe threshold limits for a particular category of accounts and pay particular attention to the transactions, which exceed these limits. Transactions that involve large amounts of cash inconsistent with the normal and expected activity of the customer should particularly attract the attention of the bank. Very high account turnover inconsistent with the size of the balance maintained may indicate that funds are being 'washed' through the account. High-risk accounts have to be subjected to intensified monitoring. Every bank should set key indicators for such accounts, taking note of the background of the customer, such as the country of origin, sources of funds, the type of transactions involved and other risk factors. Banks should put in place a system of periodical review of risk categorization of accounts and the need for applying enhanced due diligence measures.

7.3 International Conventions and Treaties to fight AML/CFT

The international effort to fight crime began with the recognition that drug trafficking—and associated money laundering—were truly international problems and could be addressed

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effectively only on a multinational basis. The United Nations (UN) was the first international organization to take significant action in this area. The UN is important because of its ability to establish international law. The UN's effort was later expanded to include many other serious crimes—specifically terrorism and the financing of terrorism.

The Financial Action Task Force - FATF, the international standard setter for AML/CFT, took into account the international conventions dealing with AML/CFT, as it set about developing international standards for national regimes to fight these crimes.

The FATF is an international task force that functions as an inter-governmental policy-making body with a specific purpose to establish international standards, and develop and promote policies, both at the national and international levels, to combat money laundering and terrorist financing.

The FATF has four core functions:

1. Setting standards
2. Ensuring their implementation in its member countries
3. Studying the techniques and typologies of money laundering and terrorist financing
4. Conducting outreach activities that aim to spread the standards globally

The first product of the FATF was the first edition of the Forty Recommendations in 1990, which provided the first comprehensive international anti money-laundering framework. Throughout its history, the standard-setting function continued to be very important. The Forty Recommendations were revised twice, first in 1996 and then most comprehensively in 2003. In addition, in2001 the FATF mandate was expanded to cover terrorist financing and the FATF issued the Eight Special Recommendations dealing with the subject. In2004, the FATF added the ninth Special Recommendation on cash couriers.

The FATF Recommendations include the minimum measures that countries should have in place within their criminal justice and regulatory systems, the preventive measures that financial institutions and some non-financial businesses and professions should adopt, and the measures for international cooperation.

The Forty Recommendations require countries to implement a basic set of measures:

- **Criminalization:** to criminalize money laundering and terrorist financing. While initially the focus was on drug proceeds, the definition of money laundering offenses has now expanded to include at least all serious offenses.
- **Provisional measures and confiscation:** to put in place measures to identify, trace, freeze, or seize, and, finally, to confiscate the illegal proceeds and funds of terrorists and of those who finance terrorism and terrorist organizations.
- **Customer due diligence:** to impose duties on financial institutions and some non-financial businesses and professions to know their customers and to abolish the use of anonymous accounts. Obligations of additional care when dealing with persons holding a public function and in relation to cross-border correspondent banking also need to be put in place.
- **Record keeping:** to impose obligations on financial institutions and some nonfinancial businesses and professions to keep records on all the transactions that they conduct.
- **Suspicious transactions reporting:** to impose an obligation on financial institutions and some non-financial businesses and professions to report if they suspect that funds are the proceeds of criminal activity, or are related to terrorist financing, without alerting the clients.
- **Internal controls:** to ensure that financial institutions and some non-financial businesses and professions adopt internal mechanisms that allow them to comply with the regulatory requirements.

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- **Implementation:** to create regulatory and supervisory agencies that are capable of implementing the international standard set by the Recommendations and to give them sufficient powers.
- **International cooperation:** to put in place a system that allows it to cooperate with other countries on all issues related to money laundering and fi nuancing of terrorism, including formal and informal exchange of financial and law enforcement information, preservation and confiscation of assets, and extradition.

Four other types of organizations combat money laundering and terrorist financing by setting standards, developing technical understanding, facilitating international cooperation, and implementing the international standard:

- International organizations and bodies with wider mandates that have adopted initiatives in fighting money laundering and terrorist financing. These include the UN, the World Bank, the IMF, and the Basel Committee on Banking Supervision.
- Financial Action Task Force (FATF)-Style Regional Bodies FSRBs, which are task forces with regional jurisdiction that are modelled on the FATF in mandate, functions, and methods of operation.
- Regional organizations with wider mandates that have adopted initiatives against money laundering and terrorist financing. For example, the Organization of American States, the Council of Europe, and the Asian Development Bank (ADB).
- Groups of special players in the fight against money laundering and terrorist financing. For example, the Egmont Group, which is a network of financial intelligence units (FIUs).

In Conclusion

It is the duty of every citizen of the world to combat inhuman acts of crime. Those working in client on boarding have an even greater responsibility, as they are the gatekeepers of the financial institution.

All it takes is one bank; all it takes is one person who lets his/ her guard drop. Once the financial system is penetrated criminal elements will quickly open accounts across banks and transact undetected.

The fact that such a penetration can happen due to human error or oversight; intentions notwithstanding casts an obligation to be alert even post-onboarding.

Finally, the harm caused to an institution's reputation is incalculable should it be found that a criminal element has opened and maintained an account with it. The global media is all too quick to splash the name across the print, electronic and digital media.

It is the duty of every person associated with the financial institution to protect the reputation of their place of work, as their own.

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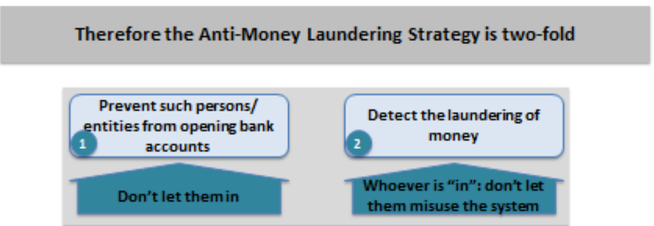

Key Learnings:

At the end of this chapter one should be conversant with the following fundamental concepts related to the anti money laundering efforts of banks.

- There are multiple illegal businesses like human trafficking, drugs dealing and arms dealing, which generate huge monies for those who operate such businesses.
- People who hold ill-gotten wealth are always trying to use the banking system to provide legality to such illegal money. This process is called money laundering.
- Money laundering involves 3 key stages – Placement, Layering & Integration.
- Know Your Customer or KYC is a key tool to fight money laundering.
- KYC involves having clarity on who is being on-boarded as a client, monitoring what kind of transactions are put through in customer accounts and importantly reporting suspicious transactions to the authorities concerned.
- Most countries have enacted formal laws to prevent and fight money laundering.

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7.4 Test Your Understanding

1. Which of the following is not a stage in money laundering?
    a. Placement
    b. Layering
    c. Integration
    d. Subjugation

2. FATF is a U.S. national body created to fight money laundering.
    a. True
    b. False

3. KYC stands for Know Your Customer.
    a. True
    b. False

4. In which of these stages of money laundering is money moved from one account to another to hide its source.
    a. Placement
    b. Layering
    c. Integration
    d. Subjugation

5. Suspicious Activity Reporting is mandatory for all banks.
    a. True
    b. False

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