Preface

Foremost, the aim of this textbook is to provide students with a theoretical and applied knowledge relating to banking and banking industry. Following the latest trends in banking and changes in customers' behavior due to rapid embodiment of advanced technology into banking products, one might conclude that now, more than ever it is essential for undergraduates to have this textbook as guidance or as a base for understanding banking and its products.

This textbook covers banking issues on microeconomic level such as distinguishing banks from other financial institutions, different types of banks, traditional and modern banking activities and so on.

The first chapter, *Introduction to Banking*, introduces the key features of banking, the history of banking and the science of banking. Banks, as a vital part of the financial system play a crucial role in the economy, by channeling funds from units in surplus to units in deficit. Further, in this chapter banks are contemplated as a financial institution and as a financial intermediary. As financial intermediaries, banks tend to minimize transactions costs and costs derived from information asymmetries. This is done by exploiting economies of scale and economies of scope and possessing of superior information. In each financial system, information is not symmetrically distributed across all agents, which implies that different agents have different information sets. The information asymmetries give rise to problems of adverse selection, moral hazard and principal-agent, which result in improper decisions and essential need for regulating and supervising of financial firms. The last topic in this chapter defines banks as depository taking institutions, explains the fractional reserve system and the manner in which the banks have a direct impact on total money supply (money creation) in the economy.

The second chapter, *Types of Banks*, focuses on the classification and description of different types of banks, starting with the central bank. A special attention in this chapter is given to the central bank; its objectives, functions and independence with the aim of understanding how the central bank influences the overall economy. Central banks have significant responsibility in keeping the financial sector stable and this responsibility comes in the form of bank regulation, licensing and bank supervision. Therefore, in this chapter also, as a separate topic, the issues of bank regulation and supervision are reviewed. At last, the focus on the central banks ends with a definition of the central bank's independence and arguments for and against it. Chapter II continues with the description and analysis of the additional different types of banks according to their functions that is, deposit or commercial banks, saving banks, specialized banks, cooperative banks, building societies, credit unions, mortgage banks, universal banks, investment banks, merchant banks, consortium banks, development banks and mono-banks.

Chapter III, *Comparative Banking Systems*, focuses on different banking systems in practice according to the stage of the national economy development. Banking systems in developed and in emerging economies are overviewed and elaborated for the purpose of practical understanding of all previously stated.

Chapter IV, *Principles of Banking*, intends to explain the principles of banking which guide the bank towards successful performance. The first part of this chapter explains the basic principles of liquidity, profitability, safety and efficiency and transparency. The second part of this chapter explains the Principles for Responsible Banking (PRB), whose intention is to guide banks towards creating sustainable future and achieving the United Nations Sustainable Development Goals (SDGs). Here, the PRB are introduced as an enlargement of the basic principles of liquidity, profitability, safety and efficiency and transparency. The PRB framework is constructed under the UNEP – FI and being

already signed by 190 banks around the world, means that signatories banks already follow these 6 principles.

Chapter V, *Modern Banking Activities*, consists of two sections, Banking Activities according to Bank's Balance Sheet and New Trends in Banking. The purpose of this division is to make a distinction between the traditional or core banking activities, products and services and the new banking activities which emerge as a result of the new trends in the banking sector, such as deregulation, globalization and implementation of advanced technology into the banking sector. Banking activities grouped according to the bank balance sheet items are activities on active side, passive side and neutral banking activities. Due to new trends in banking, the banks are subjected to transformation and start including additional non-banking financial services and products as an offer to their clients. Additionally, the banks use internet and online banking, not only as a new channel for delivery of banking services, but also and as creating more value for customers.

Chapter VI, *Overview of Bank Risks,* contains two main sections, Bank's Risks and Introduction to Risk Management. Section Bank's Risk gives attention to variety of risks that the banks face, such as credit risk, market risk, interest rate risk, foreign exchange risk, liquidity (or funding) risk, concentration risk, operational risk, country and sovereign risk, reputational risk, regulatory, solvency risk, following with their definition, explanation and measurement. The second section gives explanation about the significance of risk management in banking and the processes and participants it includes.

Chapter VII, *Islamic Banking*, contains three sections, Historical Development of Islamic Banks, Principles of Islamic Banking and Products and Services in Islamic Banking. The first section describes the history and the development of Islamic banks and their main characteristics, while the second and the third tend to explain the principles according to which Islamic banks operate and how their products are created. Islamic banks have the same purpose as conventional "western" banks, but when doing business must follow the Sharia Law.

Chapter VIII, *International Banking*, starts with the history and the development of international banking and proceeds with the factors that affect its development. The third and fourth sections in this chapter explain the alternative entry modes that foreign banks have when entering the domestic market and their role in it.

Considering the damage that banking crises may create in the economy on a national and on a global level, the ninth chapter, *Bank Failures and Bank Crisis,* defines problems or difficulties that banks may face and factors that lead towards them. Banking crises are an economic phenomenon and ask for adequate policy actions and there is not a universal recipe for successfully conducting management of the banking crisis. However, based on empirical evidence, policymakers when trying to handle banking crisis follow several steps: containment and stabilization of the banking system, restructuring programs and dealing with "bad" assets.

CHAPTER I – INTRODUCTION TO BANKING

Learning objectives:

- to be able to explain the areas of study of banking
- to understand the term financial system and its key markets and institutions
- to understand the term bank as a financial intermediary
- to understand and to be able to describe the problems of asymmetric information, adverse selection and moral hazard when conducting banking activities
- to be able to explain bank as a deposit taking institution
- to be able to define the role of banks as a "creator of money"

1. History of Banks and Banking

Banking has its roots in the earliest civilizations of humanity. It was recorded in the 18th century BC in Babylon, where temples and palaces provided loans in seeds to farmers. After the harvest, farmers paid back their loans from it. Furthermore, banking activities in Greece and the Roman Empire date from the 4th century BC, and they were more sophisticated and different than previous societies. Temples, public bodies and private entrepreneurs undertook variety of financial transactions such as: taking deposits, making loans, changing money from one currency to another and testing coins for weight and purity. Mensari or Mensulari or Numulari (*Latin - Mensarii, Mensularii, Numularii*) were the names of the public bankers in Rome, who had their banks (mensae) and offered their money to people who could guarantee them. They appeared in 352 BC and gave loans to creditors who had offered herds or lands as a security/collateral. They also acted as money changers, because many foreigners visited Rome and needed to exchange their money for Roman money. Argentari (*Latin plural Argentarii*) were true bankers or lenders who lent their money to their close relatives and trusted friends, unlike the mensari who lent public money.

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Mensari were the names of the public bankers in Rome, who had banks and offered their money to creditors who could guarantee them with herds or lands as a security/collateral.

With the collapse of the Roman Empire, trade declined and banks vanished, but only temporarily. Banking revived again in the 12th century, when the European prosperity was in need of finance. The Jews and Templars supply this need by earning high interest rates, which was called *usury*. During the 13th century bankers from North Italy, also known as Lombards, replace the role of Jews as money-lenders and they invented the double entry book-keeping. This type of accountancy, enabled bankers to avoid the usury, and this interest rate on the loan had been presented as a voluntary gift from the borrower or as a reward for the risk taken. Most popular bankers were Florentine bankers, besides bankers from Siena, Luca, Milan, Genoa, where by the early 14th century two families in Florence, Bardi and Peruzzi have become immensely wealthy by offering financial services. They were involved in collecting and transferring

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Most popular bankers in the early 14th century were Florentine Bankers, i.e. Bardi and Peruzzi.

money to great feudal powers and facilitating trade activities by providing the merchants with bills of exchange, by means of which money paid in by a debtor in one town could be paid out to a creditor presenting the bill somewhere else. Until the establishment of the first National Banks in the 17th century, there were many other important banking families or dynasties, such as the Medici dynasty, which later triumphed as dukes of Florence, and Fuggers from Augsburg in the late 15th century.

The biggest changes in the world of banking started happening in the 17th century. New banking practices provided safe and convenient means of payment and money supply was responsive to commercial needs which led to commercial and industrial growth. Wealthy merchants began to store their gold with the goldsmiths of London, who possessed private vaults and charged a fee for their service. In exchange for each deposit of precious metal, the goldsmiths issued receipts certifying the quantity and purity of the metal they have received. These receipts could not be assigned, only the original depositor could collect the stored goods, i.e. the goldsmith issued promissory notes (later evolved into banknotes) to depositors. In time, the goldsmiths started lending money on behalf of the gold depositor, i.e. they've created a new kind of "money" that was actually debt, that is, goldsmiths' debt rather than silver or gold coin, a commodity that had been regulated and controlled by the monarchy.

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With the introduction of first ATMs, the use of technology in banking increased and banks started exchanging the large clerical staffs with automated systems.

By the end of the 17th century, banking became especially important because of funding the combative European states. This led on to government regulations and the first central banks. The first central banks, which were established as a form of partnership with the state, were the Bank of Sweden, founded in 1668 and the Bank of England in 1694. The Bank of England was founded by a group of financiers who joined together to provide a loan to the government in total amount of 1.2 million pounds. In return the bank received 8% of interest on the loan and gained the right to issue notes. Modern banking practice, including fractional reserve banking and the issue of banknotes, emerged in the 17th century.

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The era of modern banking started with the Bank Charter Act of 1844, where the Act split the Bank of England (which was still legally a private bank) into two departments - a banking department and an issuing department. From then on the Bank of England could only issue notes if they were backed up by gold or government securities. Afterwards, the Bank of England gradually undertook many of the tasks now associated with a central bank; it organized the sale of government bonds when funds needed to be raised; it acted as a clearing bank for government departments and facilitated and processed their daily transactions.

After the Great Depression, which followed the Crash of 1929, many countries increased their financial regulation in order to prevent and limit further bank speculative activities. Bank runs and panics led to failing of near 9000 banks during 1930s. As part of the regulation requirement, banks were obliged to build up their capital reserves, to protect their depositors' interests, to conquer customers' trust, to strengthen their credit policy, all of which on the other hand intensified deflationary pressures.

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In 1944 followed the introduction of Breton Woods system, when two organizations were created: the International Monetary Fund (IMF) and the World Bank. These organizations encouraged the commercial banks to start lending to less developed countries. After that, the gold standard was eventually abandoned in 1971 and a number of the banks were caught out and became bankrupt due to third world country debt defaults. During these times, the use of technology in banking was increased, i.e. in the 1960s the first Automated Teller Machines (ATMs) were introduced and banks began to exchange the large clerical staffs with new automated systems. By the 1970's the first payment systems started to develop that would lead to electronic payment systems for both international and domestic payments. The still used international SWIFT payment network was established in 1973 and domestic payment systems were developed around the world by banks working together with governments.

At the beginning of the 21st century non-bank large financial institutions started entering into banking services industry. Banks started entering into variety of additional non-bank activities for increasing profits. Traditional banking activities were enlarged with modern banking activities, such as pension and insurance services, mutual, money market and hedge funds and most significant internet banking.

The history of banking and its development is tightly connected with the growth and development of the banking activities, trade, industry, technology, international markets and globalization. *Banks were and still maintain their significance as a strategic partner to every individual, legal entity and economy.* They are the key pillar for economic development of every society.

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2. The Science of Banking

The science of banking is part of the group of applied economic sciences, which provides us with the necessary information and knowledge about banking activities and other participants involved in banking activities, like households, financial and non-financial institutions. ***The aim*** *of banking as a particular scientific discipline is to describe, explain and study banking functions, micro specific aspects of banks and macroeconomic implications of their functioning by using scientific methods* (Hadzic, 2009). The science of banking focuses on several areas of study:

The aim of banking as a particular scientific discipline is to describe, explain and study banking functions, micro specific aspects of banks and macroeconomic implications of their functioning by using scientific methods.

1. Banking activities and principles and its influence on economic activities.
2. The organizational setup, role and function of banks in the overall economy.
3. Characteristics of particular banking systems and institutions in the world.
4. The monetary, foreign exchange and interest rate policies which direct banking procedures and decisions at every organizational level.
5. Risk management policy, which determines and directs bank's exposure to losses or risk and to protect the value of its assets.

The issue of science of banking emerged in the beginning of the 19th century, due to the problem of finding funds for large corporations in the industrial sector. The additional turn point for the development of banking science was when banks started acting as money producers. This implies the

need for studying the banks not only on micro level, but also on macro level, which means that banks have an influence on all economic flows, employment, standard of living, inflation etc.

To understand banking, we have to start with the two views regarding the nature of banking business. The dominant view defines banks as financial intermediaries, i.e. as institutions in the business of transferring money from subjects with surplus funds to subjects with deficit funds. On the other hand, there is an alternative view, which advances that banks finance borrowers via money creation. The differences between these two views explain the effects that banking has on the overall economic activity. Actually, in the standard view and in the most of banking books, money creation appears as a by-product of the banking business; and banks are assumed to have no control over it. The alternative view of banks is different in that banks may create money independently of the actions of the general public. In that context sense, banks are in control of the process of money creation.

There are two views regarding the nature of banking business. The dominant view defines banks as financial intermediaries, while the alternative views banks finance borrowers via money creation.

Bank is a financial intermediary that offers banking services.

Additionally, banking has to be viewed from the perspective of the individual institution - bank, banking at the aggregate level as a banking system and banking in relation to the Central Bank. The knowledge that science of banking was supposed to imply was the way in which a successful bank was managed, starting from the basic principles of banking, such as liquidity, profitability, security etc. and afterwards to observe and explain banks as monetary institutions and in terms of their impact on the economic, financial and monetary flows in the overall national economy.

Bank is a financial institution that collects deposits, makes loans and provides payment services.

The term bank has its origin from the Italian word *banco* and it means money exchange counter, on which money with different weight, quality and form were exchanged. Actually, this corresponds with the ancient intermediary activities that banks had. Bank, can be defined as a legal entity, mostly formed as a joint stock company and created for the purpose of making profit by providing banking services. From *a legal aspect* a ***bank*** *is a financial institution that collects funds in forms of deposit and lends funds in forms of loans (makes loans).* From *a functional aspect*, a bank is a financial intermediary that offers banking services. However, the general definition for a bank is that a ***bank*** *is a financial institution that collects deposits, makes loans and provides payment services.*

Bank is a financial institution that collects funds in forms of deposit and lends funds in forms of loans.

3. Financial System and Institutions

Financial system or sector *presents a set of institutions, markets, instruments and services which provide effective allocation of funds.* The financial system can be defined and as a system which allows transfer of funds between participants on financial markets, such as depositors, investors and borrowers. It is characterized with several important features. First of all, the financial sector is highly technical and employs well-educated, prepared and well-paid specialists that work constantly in an extremely competitive environment. Global opportunities, speed and the continuous need for information are also important features of the sector. The last important feature of the financial sector considers

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the role of debt creation, which assumes constant and continuous growth of the economy. The financial sector has several set of tasks:

1. Allocation of capital in a modern economy, by making sure that it goes to the most productive opportunities or in areas where its return is the highest. In this context, the financial sector has a crucial role for advancing economic growth. In other words, a well-developed financial sector favors better allocation of capital, thus improving the efficiency of final decisions and economic growth.
2. The financial sector, by using the ability to absorb risk, provides an effective risk management and allows for capital to be allocated on investments with higher returns possible.
3. An efficient performance of the previous sets of tasks at a relatively low cost.

The financial sector is significant because of its functions in the real economy, i.e. it provides intermediation between the personal sector or individuals and households and the corporate sector or firms. An efficient financial sector is an essential key ingredient for sustainable and well – functioning economy and it enhances the efficiency and productivity of the national and global economy.

The key features of the financial system are:
- highly technical; well-educated, prepared and well-paid specialists work constantly in an extremely competitive environment;
- global opportunities,
- speed and continuous need for information; and
- the role of debt creation, which assumes constant and continuous growth of the economy.

3.1. Financial Markets and Institutions

The financial sector, in general, is formed by financial markets and financial institutions. ***Financial market*** *is an organized place on which financial assets are offered and demanded and depending on that supply and demand, the price of those funds is determined*. Financial markets alleviate the flow of funds and allow financing and investing to be made by households, legal entities and government agencies. The task of the financial market is to enable allocation of financial resources, i.e. their transfer of funds from those entities that have surplus funds to those in need of them for financing the current and development activities. In this context, the financial market allows optimal allocation and use of funds, which on the other hand implies high economic growth.

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Many borrowers, such as firms and government agencies, can access funds from the financial markets by issuing different types of securities. ***Securities*** *are financial instruments and they present ownership on the issuer's future income or assets*. Securities are any financial claim or piece of property that is subject to ownership. The financial claim carries an obligation on the issuer to pay interest periodically and to repay the claim at a stated value on a determined date. We can distinguish between three different types of securities: equities or shares, which provide ownership rights to holders; debts or bonds, which essentially are loans repaid with periodic payments; and hybrids, which combine aspects of debt and equity. By issuing securities corporations and government agencies may raise funds, i.e. collect money from surplus units and thus to spend more money than they receive from normal operations.

Securities are financial instruments and they present claim on the issuer's future income or assets.

There are three types of securities: equities, debts and hybrids.

The number of the financial markets can vary depending on the classification. However, widely acknowledged in the literature is the classification of five financial markets:

1. ***Commodity market*** is a market where raw products or, in general, products in the primary economic sector are exchanged (i.e. cocoa, copper or

coffee). These raw commodities are traded on regulated commodities exchanges, in which they are bought and sold in standardized contracts. Commodity markets include physical trading and derivatives trading by using spot prices, forwards, futures, and options on futures.

We distinguish between five financial markets, as these five seem widely acknowledged in the literature: commodity market, money market, capital market, currency market, and derivative market.

2. *The money market* covers short-term supply and demand of short-term financial instruments (with original maturity off less than one year). This market allows business entities to be able to borrow short-term loans at any time and provide cash for maintenance of liquid reserves, trade and production. The returns earned on these investments are low due to their low risk and high liquidity.

3. *The capital market* exists to provide financing for long-term capital assets. Via the capital market, there is an exchange of money between those who have it and those who need it and the beneficiaries of these funds pay a certain fee to the borrowers in the form of interest (received by the bondholders), dividend (obtained by shareholders) or similar payments, such as capital gains, which correspond to the difference between the selling and purchase price of the securities. Households, often through investments in pension and mutual funds, are net investors in the capital markets. Corporations and the governments are net users of these funds. The three main capital market instruments are bonds, stocks and mortgages.

What is important to mention here is that the transactions in the primary market and the transactions in the secondary market are fundamentally different. **Primary markets** facilitate the issuance of new securities and provide funds to the initial issuer of securities (for instance the issuance of new corporate stock or new Treasury securities is a primary market transaction). **Secondary markets** facilitate the trading of existing securities, which allow for a change in the ownership of the securities; hence, these are financial markets in which securities that have been previously issued can be resold (for instance, the sale of existing corporate stock or Treasury security holdings by one investor to another is a secondary market transaction).

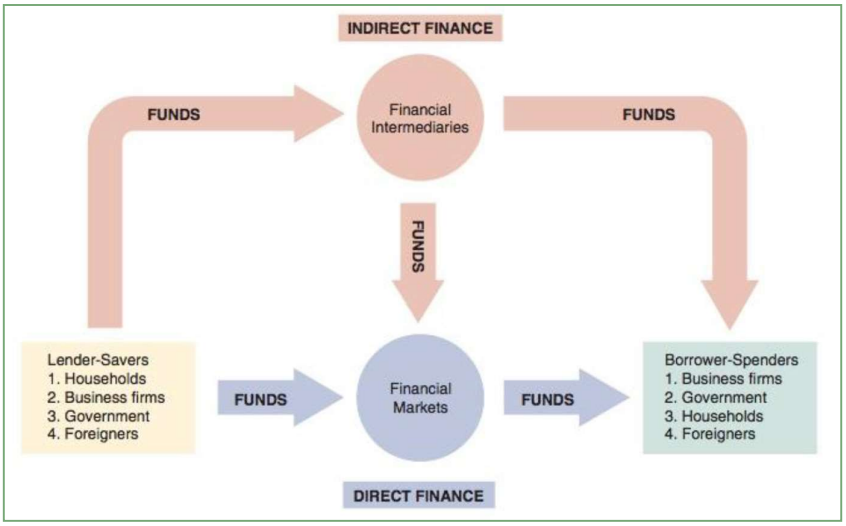
4. *Currency market or foreign exchange market* *is the financial market where money denominated in one currency is exchanged (bought and sold) with money denominated in another currency.* On the currency market, exchange rates between currencies are determined. The foreign-exchange markets underpin all other financial markets. They directly influence each country's foreign-trade patterns, determine the flow of international investment and affect domestic interest and inflation rates. They operate in every corner of the world, in every single currency. Collectively, they form the largest financial market by far (Levinson, 2006).

5. *Derivatives market.* Derivative securities are financial contracts whose values are derived from the values of underlying assets (such as debt securities or equity securities) and are extremely useful risk-reduction tools. Financial derivatives are effective tools in reducing risk because they enable financial institutions to hedge, which means to engage in a financial transaction that reduces or eliminates risk. The most important financial derivatives that are

used to reduce risk are forward contracts, financial futures, options and swaps and they can be either exchange-traded or traded over the counter (OTC).

The next step in explaining the financial system is exploring the term of financial institutions and flows of funds between participants in the financial system (see Figure 1).

Figure 1 Flows of Funds through the Financial System



Source: Mishkin, Frederick S; Eakins, Stanley G, (2012) *Financial Markets and Institutions*, 7th Edition, Pearson Education Inc., Boston, pg.16.

At the left side are lenders-savers, or those who save and are lending funds and borrowers – spenders or those who must borrow funds to finance their spending, are at the right. Usually, the main lender-savers are households. On the other hand, the most important borrower-spenders are businesses and the government. The arrows show the flow of funds and, as we can see there are two routes, direct and indirect finance. In direct finance, borrowers borrow funds directly from lenders in financial markets by selling them securities. However, funds also can move from lenders to borrowers by a second route, or through indirect finance, which involves a financial intermediary that stands between the lender-savers and the borrower-spenders and helps transfer funds from one to the other. The financial intermediary does this by borrowing funds from the lender-savers and then uses these funds to make loans to borrower-spenders. The process of indirect finance by using financial intermediaries is called financial intermediation and it is the primary route for moving funds from lenders to borrowers. Financial intermediaries are a far more important source of financing for corporations than financial markets are. Financial intermediaries play an important role in the economy because they provide liquidity services, promote risk sharing and solve information problems, thereby allowing small savers and borrowers to benefit from the existence of financial markets. Additionally, financial intermediaries help financial markets channel funds from lender-savers to people with productive investment opportunities.

In direct finance, borrowers borrow funds directly from lenders in financial markets by selling them securities.

In indirect finance, financial intermediary stands between the lender-savers and the borrower-spenders and helps for transferring funds from one to the other.

Financial institutions *are much broader term than financial intermediaries and they make financial markets work*. Without them, financial markets would not be able to move funds from people who save to people who have productive investment opportunities. Financial institutions are institutions that provide financial services for its clients or members and they can be divided according to their primary sources of funds into:

Financial institutions are much broader term than financial intermediaries and they make financial markets work.

1. Depository institutions (e.g. banks, savings institutions, credit unions) use deposits from the public as primary sources of funds; and

2. Non-depository institutions (e.g. finance companies, mutual funds, securities firms, insurance companies, pension funds) which finance their investment activities from the sale of securities or insurances and from employer and employee contribution.

Financial institutions can be divided into two broad categories: depository institutions and non-depository institutions.

The logic behind the functioning of financial system is return on investment, seen as net profit over the made investment. This logic is tied to the pursuit of short time frame, which means that investors on financial markets want to gain as a higher return as possible and as close as possible to the present time. Higher returns are tied with higher risks and this explains the second concern of financial markets, how to manage risks when dealing with uncertainty.

In general, banks are the most dominant depository institution and financial intermediary. They serve investors by offering a wide variety of deposit accounts and they transfer deposited funds to deficit units by providing direct loans or purchasing debt or equity securities.

4. Banks as Financial Intermediaries

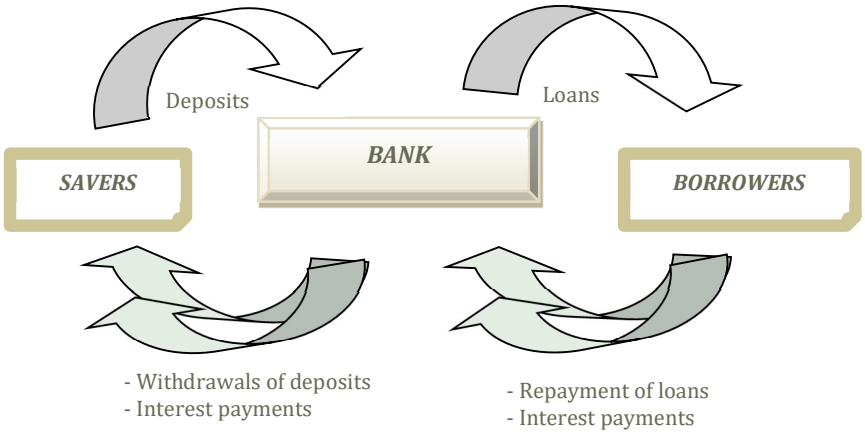
In developing countries banks have the largest share in effectively financing industrial expansion through financial intermediation. According to Schumpeter (1911) bank financial intermediation does not only entail creation of a pool of investible funds, it also involves allocating funds effectively. The core business of banking consists of collecting deposits from the public and using most of those funds to make loans to borrowers. This is done by issuing a bank liability which goes by the name of a bank deposit, which is given to the public in exchange for its deposited funds. Afterwards, banks transfer these funds to a borrower against a liability issued by this last one, which actually represents an asset for the bank and it goes by the name of a bank loan. The provision of deposit from savers and loans to borrowers normally distinguishes banks from other types of financial firms. Deposits represent liabilities for banks, as they pay out money on demand or after some notice. That is why they must be managed if the bank is to maximize profit. Likewise, they manage the assets created by lending. Thus, the core activity is to act as intermediaries between depositors and borrowers. More precisely, banks play an important role in channeling funds from savers to borrowers and that is why in this chapter we use the concepts of 'bank' and 'financial intermediary' almost as a synonyms. For the purpose of understanding how banks operate, it is necessary to understand the role of financial intermediaries in an economy. The main role of financial intermediaries and

Bank is a financial intermediary whose core activity is to provide loans to borrowers and to collect deposits from savers.

Through financial intermediation the bank issues bank liability that goes by the name bank deposit, and these deposit's funds transfers to borrowers, which present bank's assets and go by the name loans. Thus, the core activity of banks is to act as intermediaries between depositors and borrowers.

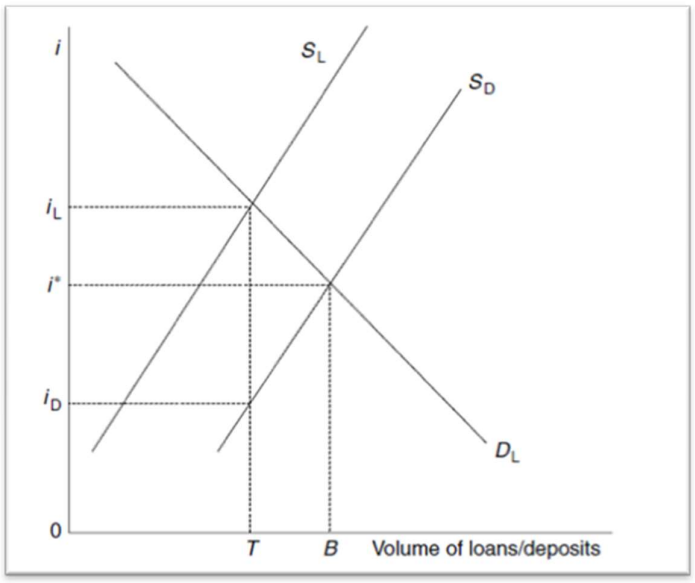
financial markets is to provide a mechanism by which funds are transferred and allocated to their most productive investments. From this point of view, ***a bank*** *is a financial intermediary whose core activity is to provide loans to borrowers and to collect deposits from savers*. In other words they act as intermediaries between borrowers and savers, as illustrated in Figure 2.

Figure 2 Banks as Financial Intermediaries



For the purpose of explaining the intermediary role of banks on Figure 3 it is shown how deposit and loan markets function.

Figure 3 Bank as Intermediary



Source: Heffernan, S. (2005), *Modern Banking*, John Wiley & Sons, West Sussex, England, pg.2

On the vertical axis of the graph the interest rate (i) is shown and on the horizontal axis the volume of provided deposits/ loans is shown. If the interest rate is exogenously given, then the bank faces upward – sloping supply curve of deposits or with the increase in the interest rate, the volume of deposit supply

increases (S_D). Also, with the increase in the interest rate the bank's supply of loans curve (S_L) will rise. D_L presents the demand for loans and falls as interest rate increases. i* is the market clearing interest rate and it represents the interest rate that would prevail in a perfectly competitive market with no intermediation costs for bringing together the lender and borrower. The volume of loans/deposits in these circumstances is shown as 0B. However, there are intermediation costs, like research, analysis, monitoring and enforcement costs, which are borne by banks when estimating the creditworthiness of borrowers. Thus, the bank pays deposit interest rate/passive interest rate i_D and charges loan interest rate/active interest rate i_L. The volume of deposits is 0T and 0T loans are supplied. The interest spread is presented as a difference between iL – iD and covers the institution's transaction costs, the cost of capital, the risk premium charged on loans, tax payments and the institution's profits.

The difference between active and passive interest rate is called interest spread.

Financial intermediaries help in minimizing transactions costs and costs derived from information asymmetries, by exploiting economies of scale and economies of scope and possessing of superior information. Transactions costs comprise the costs of searching for counterparty to a financial transaction; the costs of obtaining information about them; the costs of negotiating the contract; the costs of monitoring the borrowers; and the eventual enforcements costs should the borrower not fulfill its commitments. Unlike individual agents, where the cost of finding a potential lender or borrower is very high, a bank may be able to achieve *scale economies* in these transactions costs; that is, given the large number of savings and deposit products offered, the related transactions costs are either constant or falling. In this context, banks by increasing the volume of transactions decrease the cost per unit of transaction. Furthermore, by increasing volume of transactions banks are able to create standardized contracts and monitor customers so that they enforce these contracts. An economy of scope means that the costs of production of two complementary banking services or products are less than the combined costs of producing the two products or services independently. In other words, one bank product or service reduces the cost of producing another related bank product or service. Therefore, banks use economies of scope when offering wider variety of products or services in package, which is more cost effective than offering each bank service or product separately.

The interest spread covers bank's transaction costs, cost of capital, risk premium charged on loans, tax payments and the bank's profit.

Banks achieve economies of scale by decreasing the cost per unit of transaction by increasing the volume of savings and deposit products.

Banks achieve economies of scope when the costs of production of two complementary banking services or products are less than the combined costs of producing the two products or services independently.

In addition to transaction costs, lenders and borrowers are also faced with the problems caused by asymmetric information. In any financial system, information is not symmetrically distributed across all agents, which implies that different agents have different information sets. ***Asymmetric information***, *represents a situation where not having enough information contributes to improper decision making in conducting transactions.* Three problems are relevant with the problem of asymmetric information and these are (Casu, Girardone, & Molyneux, 2006):

1. Not everyone has the same information;
2. Everyone has less than perfect information, and
3. Some parties to a transaction have 'inside' information which is not made available to both sides of the transaction.

Asymmetric information represents a situation where not having enough information contributes to improper decision making in conducting transactions.

So, unlike the individual lender, the bank enjoys information in lending decisions, because of access to privileged information on current and potential borrowers with accounts at the bank. It is normally not possible to bundle up and sell this information, so banks use it internally to increase the size of their loan portfolio. Thus, compared to depositors trying to lend funds directly, banks can pool a portfolio of assets with less risk of default, for a given expected return. Information asymmetry or the imperfect distribution of information among parties, create problems in all stages of the lending process and it generates adverse selection and moral hazard problems, which are in fact especially important for understanding the banking crisis. Another type of information asymmetry relates to the agency costs between the principal (e.g. bank) and agent (e.g. borrower).

Information asymmetries, or the imperfect distribution of information among parties, create problems in all stages of the lending process and it generate adverse selection and moral hazard problems, which are in fact especially important for understanding the banking crisis.

Transaction costs and information asymmetries are examples of market failures; and they act as obstacles to the efficient functioning of financial markets. One solution for the market failure is the creation of organized financial markets. However, transaction costs and information asymmetries, though reduced, still remain. Another solution is the emergence of financial intermediaries. That is why in the contemporary developed economies organized financial markets and financial intermediaries co-exist.

4.1. Adverse Selection and Moral Hazard

Adverse selection *is a problem at the search/verification stage of the transaction* (ex ante) *and it is sometimes referred to as the 'lemon' problem* Akerlof, 1970). George Akerlof in his famous study entitled 'Market for Lemons' explains the consequences of asymmetric information in a situation where the buyer, and not the seller, does not know the quality of the commodity being exchanged. The direct result of asymmetric information is the ***adverse selection*** or the phenomena of negative selection, where bad borrowers get loans paying higher interest rate (which are risky investments), instead of good borrowers, who are rejected from loan approval. The banks, in chase for bigger profits, select riskier borrowers with deficit of qualitative information. This happens before transaction occurs. In this context, the borrower has better information about the investment (in terms of risk and returns of the project) than the lender. The problem of adverse selection arises when the bank, the principal, normally has less information about the probability of default on a loan than the firm or individual, the agent. Adverse selection also shows that bankers are more reluctant to supply loans at very high rates because as interest rates rise, a greater proportion of riskier borrowers apply for loans.

Adverse selection is a problem at the search/ verification stage of the transaction (ex ante) and it is sometimes referred to as the 'lemon' problem.

In banking, adverse selection arises before transaction, i.e. when borrowers get loans paying higher interest rate (which are risky investments), instead of good borrowers, who are rejected from loan approval.

The problem of ***moral hazard*** (or hidden action) *arises when the individual agent performs a task for another person, a principal.* If the principal is not able to perfectly observe the agent's behavior, the agent tends to make less effort than the principal considers desirable. In banking, moral hazard occurs after the loan has been granted or the deposit has been made (ex post) and is associated with the monitoring and enforcement stages. Moral hazard, can also be defined as the result of entering into a contract, when the incentives of the two

Moral hazard arises when the individual, agent performs a task for another person, a principal.

parties change, such that the riskiness of the contract is altered. For example, the customer deposits money in the agent, a bank. As stated before, moral hazard occurs after the transaction. The depositor may not monitor bank activities in the first place because of the deposit insurance schemes. Secondly, the larger and more diversified the portfolio of loans is, the depositor is less incentivized to monitor the bank's behavior/activities. Furthermore, if a bank (principal) is certain that the depositor (agent) cannot or shall not monitor the bank's behavior, then the nature of contract is altered and the bank may invest in more risky assets than it would in the presence of close monitoring. On the side of the bank, problem of moral hazard arises when the borrower engages in activities that are undesirable from the lender's point of view, because they make it less likely that the loan will be repaid and thus harm the interest of the lender.

In banking, moral hazard occurs after the loan has been granted or the deposit has been and is associated with the monitoring and enforcement stages.

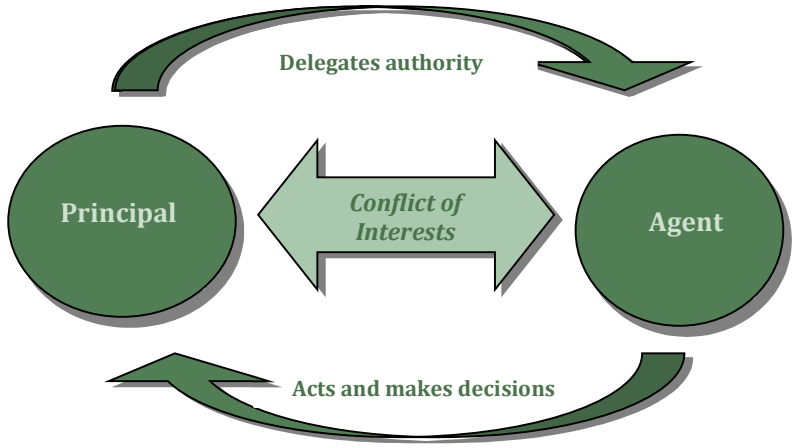
Problems of adverse selection and moral hazard initiate performing of monitoring function on the side of the banks. That is why banks fully engage in the process of in-depth credit analysis before approving loans to borrowers and regularly follow and inspect the borrowers' financial performance or project progress. On the other hand, because of these problems, financial institutions are also subject to continuous monitoring and supervision by national regulatory agencies.

4.2. Principal-Agent Problem

The principal-agent problem *was conceptualized in 1976 by American economists, Michael Jensen and William Meckling and occurs when one person or entity (agent) makes decisions that impact, or on behalf of, on another person or entity (principal).* The agency problem exists because sometimes the agent is motivated to act in his/her own best interest, rather than those of the principal. To understand this theory it is essential to clarify certain key terms and concepts. As shown in figure 4, an **agent** is employed by a **principal** to carry out a task on their behalf and delegates authority to him/her.

The principal-agent problem occurs when one person or entity (agent) makes decisions that impact, or on behalf of, on another person or entity (principal).

Figure 4 Principal – Agent Problem



In the principal-agent problem an agent is employed and delegated an authority by a principal to carry out a task on behalf of the principle.

Whenever agents behave on behalf of their own interest rather than the principal's one and have superior information and expertise than the principal, the principal – agent problem arises.

Agency refers to the relationship between the principal and their agent. Principals incur **agency costs** for monitoring agent's behavior, because they lack trust in the agent's acting in the interests of the principal. When the agent accepts to undertake a task on behalf of the principal, an agent becomes **accountable** to the principal by whom they are employed. According to this theory, whenever conflict of interest arises between contracts, then there is a principal-agent problem. In the practice of banking the following financial contracts can be concluded: shareholders (principal) and board of directors (agent); bank (principal) and its officers (agent); the bank (principal) and its borrowers (agent); and depositors (principal) and the bank (agent). Between the two parties there are conflicts of interests and asymmetric information, i.e. agents may behave on behalf of their own interest, rather than the principal's one and agents have superior information and expertise than the principal.

The principal-agent problem results in agency costs, which are viewed as a part of transaction costs, for monitoring that interest of one party are not exploited against another.

For example, a bank that is acting in the interest of the shareholders has an incentive to undertake investments that benefit the shareholders at the expense of creditors. Or, board of directors may select low-risk investments in order to protect its position and reputation. All these situations arise because of the inability of the principal to have a complete control over agent's behavior. That is why this problem generally results in agency costs, which are viewed as a part of transaction costs, for monitoring that interests by one party are not exploited against another. Additionally, monitoring is needed in many financial contracts due to the fact that the value (e.g. from long-term deposits, or return on investments) cannot be determined at point of purchase. Instead the behavior of the agent after signing the financial contract defines the definite value. The challenge is to create financial contracts or arrangements that align the interests of the principal and the agent. Yet, these agency costs of monitoring the financial relationships can be very expensive and difficult for the market to resolve and therefore, regulatory bodies and agencies monitor and propose certain recommendations for financial institutions to minimize conflicts between both parties.

Due to expensive agency costs and the difficulty for the financial market to resolve this problem, there are regulatory bodies that monitor and propose certain recommendations for financial institutions to minimize conflicts between both parties.

4.3. Relational and Transactional Banking

Relational banking is based on relational contracts and it is one way of overcoming problems that result from asymmetric information. ***Relational contracts*** *are informal agreements between the bank and the borrowers sustained by the value of future relationships* (Casu, Girardone, & Molyneux, 2006). Relational contracts have duration over an extended period of time, where the customers/borrowers rely on the bank for providing financial services. The most significant feature of the relational banking is that it improves the informational flows between the bank and the borrower and actually allows lenders to gain specific and in depth knowledge about the borrower. If the customer has a 'credit history' in particular bank, then the bank's credit analysis and screening and monitoring costs will be much lower compared with the cost associated with new customers. Additionally, borrowers will find it easier to negotiate for future loans at (relatively) lower rates of interest in the same bank, if they had good 'credit

In relational contracts banks gain specific and in depth knowledge about the borrower which results in lower costs related to credit analysis, screening and monitoring the borrower. On the side of the borrower, relational banking implies easy negotiations for future loans at lower interest rates.

history'. Nowadays, when competition between banks and other financial institutions is increasing, relationship banking can be seen as a source of competitive advantage or even as an entry barrier for new entrants in the banking sector. As a source of competitive advantage, relational contracts reduce transactional costs of banks with loyal and long term customers, individuals or legal entities. Furthermore, in particular banking systems, banks can hold shares from companies they lend to and can have members on the Board of Directors of these companies.

At the other end of the spectrum is the transactional or classical contract where many banks compete for the customer's business and the customer shops around between several banks, carefully researches the market just to find the best deal. ***Transactional contract*** *forms inflexible relationship, where parties, bank and customer stick to the terms of the contract.* In this type of contract, both parties can bargain over terms, because the customer is well informed and searches for the best offer and, on the other side bank possesses limited information about the customer. In reality, banks create and build relationship banking with particular customers or for specific products/services, while for other customers or products/services prefer transactional banking.

Transactional contract forms inflexible relationship, where parties, bank and customer stick to the terms of the contract.

Moreover, the transactional banking can transform itself or evolve into relationship banking. For example, every customer who enters into a loan agreement with a bank will sign a legally binding contract, but if the customer has a good relationship with the manager, good credit history, regular income above certain level, the bank manager will allow a certain degree of flexibility when it comes to enforcing the terms of the contract. Thus, this transactional banking or classical contract would become a relational contract.

Transactional banking can transform itself or evolve into relationship banking.

4.4. The Functions of Banks as Financial Intermediaries

As we have already discussed before, the main function of banks is to collect funds from units in surplus and lend these funds to units in deficit. However, in order to fully understand what actually banks do and how they do it we have to explain the transformation role that banks have. Depositors deposit small-size funds; they want to minimize the risk of their investment at highest rate of return, e.g. the risk of default of their borrower and the risk of dropping the value of their assets; and ask for high liquidity, i.e. they want their invested assets to be easily converted into cash and on demand. On the contrary, borrowers ask for large-size funds, for a defined period of time and at a lowest interest rate. In this context, the role of banks is to bridge the gap between the needs of borrowers and lenders, by performing the following transformation functions:

The role of banks as financial intermediaries is to bridge the gap between the needs of borrowers and lenders, by performing the functions of size transformation, maturity transformation and risk transformation.

a) Size transformation; Savers have a tendency to lend smaller amount of funds than the amounts that borrowers require from banks. By using economies of scale, banks access to a larger number of deposits than the individual borrower. Afterwards, banks repackage these small sized deposits into larger sized loans, for example mortgage or investment loans.

b) Maturity transformation; Banks' deposits (liabilities) are mainly repayable on demand, on relatively short notice or for a short period of time. Banks' borrowers demand for medium to long term loans. This indicates that banks have to be able to transform these short-term funds into medium to long term loans with 5 - 25 years of maturity. So, 'banks are borrowing short and lending long'. Here arises the problem of liquidity risk (the inability of bank to meet its liabilities), where it is said that there is a mismatch between the maturity of banks' liabilities and assets.

c) Risk transformation; Savers, when depositing funds, want to minimize the risk of safety. However, when banks are lending funds, they face credit risk, i.e. the risk that the individual borrower might not be able to repay the borrowed funds. Because of that, banks tend and are able to minimize the risk of default by diversifying their investments in different types of assets, pooling risks, detailed screening of borrowers before approving loans and their continuous monitoring until the total repayment of loan. Additionally, and most importantly banks hold capital and reserves, which serve as buffer for unexpected losses.

Banks as financial intermediaries perform additional functions, which can be described as follows:

1. They provide safekeeping, accounting, and payment mechanisms for resources. Banks keep records of payments; safe keep money on accounts; provide services of creating deposits (in a bank branch or via Internet) and allow their withdrawals or payments by using debit cards, ATMs, POS terminals, cheques or e-banking as payment mechanisms.
2. Banks are experts in collecting and processing information in order to accurately gauge the risks of various investments, to price them accordingly and considering the competition. The excessive need of banks to collect and process large amount of data and information comes from the fundamental asymmetric information problem inherent in financial markets.

Banks as financial intermediaries perform additional functions related to safekeeping, accounting and payment services and collecting and processing large amount of information.

Banks as financial intermediaries are the key player in the flows of indirect finance and from this aspect their performance and stability is a key driver for growth and development of modern and stable financial system.

5. Banks as Deposit Taking Institutions

Banks, also known as monetary financial institutions (MFIs), are deposit taking institutions (DTIs). This means that they are financial intermediaries that accept deposits from individuals and corporations and sell loans. From this point of view, banks' deposits function as money, or if there is expansion in banks' deposits, then there will be an increase in total money supply that circulates in the economy. Because of that, it is said that depository taking institutions play a major role in a country's economy as their deposits (liabilities) form a significant part of a country's money supply. For example, when customer/saver deposits money in their bank account, that money is owned by the bank and the bank gives their customer a deposit account that they can draw on. This means that their bank customer should have access to their full deposit amount upon demand, with established bank rules and procedures, but the bank takes the possession of

Banks' deposits function as money, and if there is an expansion in banks' deposits, then there will be an increase in total money supply that circulates in the economy. For instance, when customer/saver deposits money in their bank account, that money is owned by the bank (the bank issues a liability and the depositor has access to its full deposit amount) and a small percentage of the deposit as a reserve and the other portion of the money uses for issuing loans to borrowers.

the deposited money. However, the bank does not hold on to the full amount, i.e. keeps a small percentage of the deposit as a reserve (which usually ranges from 3%-10%) and the other portion of the money is used for issuing loans to borrowers. This is what is called fractional reserve system. **Fractional reserve system** *is a banking system that requires banks to hold only a portion of the money deposited with them as reserves.* These reserves are held as balances in the bank's account at the central bank or as currency in the bank and are called mandatory reserves. ***The mandatory reserve*** *or mandatory requirement allows banks to act as intermediaries between borrowers and savers by giving loans to borrowers and at the same time providing immediate liquidity to depositors who want to make withdrawals.* This mandatory reserve is determined by the national regulator. The fractional reserve system actually allows banks to earn profits by loaning part of their deposits and charging higher interest than the interest paid to depositors; and provides liquidity for depositors who withdraw their deposits on demand. Practically speaking, banks use customer deposits to make new loans, charge interest to those loans and pay interest on the deposits made by their customers/savers. In this manner, the banking system creates money out of deposits just by using a percentage of their customers' bank deposits. Furthermore, when the bank makes a loan, both the bank and the borrower count the funds as assets, doubling the original amount in an economic sense. These funds are then re-used, re-invested and re-loaned multiple times, which in turn leads to the multiplier effect and this is how fractional reserve banking "creates new money". Let us see the multiplier effect through an example.

Fractional reserve system is a banking system that requires banks to hold only a portion of the money deposited with them as reserves.

The mandatory reserve or mandatory requirement allows banks to act as intermediaries between borrowers and savers by giving loans to borrowers and at the same time providing immediate liquidity to depositors who want to make withdrawals.

In order to see how banks have direct impact on total money supply (money creation), let's imagine that an economy without banks exists. Under the assumption that the whole amount of money is 1000 denars, then the total money supply is 1000 denars. Now, let's suppose that there is only one bank in the financial system, and that there is a mandatory reserve of 10%. This means that the customer/saver will deposit these 1000 denars in a bank. The bank will have to put aside mandatory reserves in amount of 10% of their total deposits and invest 90% or 900 denars in loans. On the active side of the balance sheet, the bank will have two types of assets: reserves – 100 denars and loans – 900 denars. On the passive side, the bank will have 1000 denars as liabilities (deposit). Now, the total supply of money in the economy, which is equal to the sum of cash and demand deposits, is 1900 denars. However, the money creation does not end here. Look at the table 1, where we have hypothetically supposed a banking system with 5 banks and mandatory reserve of 10%. Considering that most banking systems operate with more than one bank, we can assume that if bank A gets a 1000 denars increase in its deposit, 10% will be kept as reserves and the remaining 900 denars will be lent out. Let us suppose that such an amount is lent to an individual who deposits it in bank B. In turn, bank B will hold 10% in cash (90 denars) and invest the rest, which finds its way to bank C. At each stage the growth in deposits is exactly 90 per cent of what it was at the previous stage.

The sum of additional deposits created in a banking system with *n* banks, can be presented as a geometric series:

$1.000+(1.000x0,9)+(1.000x0,9^2)+(1.000 \times 0,9^3)+(1.000x0,9^4) + (1.000*0,9^5) + \ldots + (1.000*0,9^n)$, or $1.000/ (1-0.9) = 10.000$

Table 1 The Banking System under 10% mandatory reserve

	Δ Deposits	Δ Loans	Δ Reserves
Bank A	1.000	900	100
Bank B	900	810	90
Bank C	810	729	81
Bank D	729	656,1	72,9
Bank E	656,1	590,49	65,61
…..	…….	……	…..
Total	10.000	10.000	1.000

This means, that with the injection of 1.000 denars as deposits in the banking system, the process will end (achieve equilibrium) when an additional 10.000 denars of deposits will be created.

If the mandatory reserve is calculated as a reserve to deposit ratio, the credit multiplier is calculated as a reciprocal of the mandatory reserve ratio or as a deposit to reserve ratio:

Credit multiplier = 1/R

where: R is mandatory reserve

So, the additional sum of deposit created in the banking system, can also be calculated as follows:

Credit multiplier: 1/ 10% = 10

Sum of additional deposits created: 1.000*10 = 10.000 Denars

The credit multiplier calculated as a reciprocal of the mandatory reserve, actually explains the negative correlation between the mandatory reserve and the amount of money that banks create. That is, the higher the mandatory reserve, the lower the amount of deposits that can be borrowed (or invested as loans) and the lower the credit multiplier.

The credit multiplier in theory explained above gives us the logic behind 'banks are money producers'. That is, it only makes a number of assumptions that do not always necessarily hold in the real world. It assumes that people deposit all of their money and banks lend out all of the money they can (they hold no excess reserves). It also assumes that people instantaneously spend all of their loans. In reality, not all of these are true, meaning that the observed credit multiplier rarely conforms to the theoretical money multiplier.

Furthermore, because of the monetary function of banks' deposits, banks are subject to a tighter regulation and direct supervision from regulatory agencies than non-deposit taking institutions. The main distinguishing feature between the depositary and non-depositary taking institution is the nature of the

Due to the fact that banks have direct impact over total money supply, they are subject to tighter regulation and direct supervision from regulatory agencies than non-deposit taking institutions.

The main distinguishing feature between the depositary and non-depositary taking institution is the nature of the financial contract between the financial intermediary and the saver.

financial contract between the financial intermediary and the saver. Banks are discretionary deposit institutions, because savers are free to decide the frequency and amount of their transactions. On the contrary, non-depositary taking institutions have contractual financial agreements, where the flow of funds in and out of financial intermediary are fixed and beforehand determined (for example, monthly or annually contribution to pension funds or insurance provider).

Conclusions:

This chapter introduces the key features of banking, the history of banking and the science of banking. Banks, as a vital part of the financial system play crucial role in the economy, by channeling funds from units in surplus to units in deficit. Banks, as financial intermediaries intercept the different needs of borrowers and lenders and transform or repackage the small-size, low-risk and highly liquid deposits into loans which are of larger size, higher risk and more illiquid. We discussed the concepts of transaction costs, economies of scale and economies of scope. The existence of information asymmetries in financial markets was also introduced. The information asymmetries give rise to problems of adverse selection, moral hazard and principal-agent, which result in improper decisions and essential need for regulating and supervising of financial firms. The last topic in this chapter defines banks as depository taking institutions, explains the fractional reserve system and the manner in which banks have direct impact on total money supply (money creation) in the economy.

Revision questions and problems:

1. Please draw a graphic timeline of the history of banking.
2. Please do your personal online research about the history of banks and banking.
3. What is the aim of banking as a particular scientific discipline?
4. Which are the areas of study the science of banking?
5. To understand banking, one must be able to describe the nature of banking business. Which are the two views on the banking business nature?
6. Please define financial system and explain its key features.
7. What is financial market and what is its task?
8. How can borrowers access funds from financial markets?
9. What are securities and which are the types of securities?
10. What is the difference between the money market and the capital market?
11. Please explain the types of financial markets.
12. Which are the routes for flow of funds through the financial system?
13. Please explain the flow of funds by indirect finance and the role of financial intermediary.
14. Is the term financial intermediary a synonym for financial institution?

15. Which are the types of financial institutions according to their primary sources of funds?
16. What does transaction costs comprise of?
17. How do banks achieve scale economies and economies of scope? Please give an example.
18. What does asymmetric information mean and what does it generate?
19. What is adverse selection? Please provide an example of adverse selection.
20. What is moral hazard? Please provide an example of moral hazard.
21. What is principal-agent problem?
22. What are agency costs and how can they be minimized?
23. What is the difference between relationship and transactional banking?
24. Which are the transforming functions of banks?
25. What is fractional reserve system?
26. What is mandatory reserve and who defines it?
27. What is credit multiplier and please explain the role of banks in creating the money supply in the economy?
28. If you want to increase the money supply in the economy, will you increase or decrease the mandatory reserve?
29. Why are banks subject to tighter regulation and supervision rather than the non-deposit taking institutions?
30. Which is the main distinguishing feature between deposit and non-deposit taking institutions?

CHAPTER II – TYPES OF BANKS

Learning objectives:

- to be able to make classifications of various types of banks
- to understand the differences and similarities between various types of banks
- to be able to understand and define central banks
- to describe and define the main functions of central banks
- to describe and define central bank's objectives and functions
- to understand bank regulation types and process
- to discuss the arguments for and against an independent central bank
- to be able to define commercial banks and their role in any economy
- to understand the primary functions of commercial banks
- to be able to define specialized banks and comprehend their features
- to be able to define savings banks and understand their transformation
- to be able to define cooperative banks and understand their business model
- to define credit unions and describe their main goal and services
- to define building societies and describe their services
- to understand mortgage and to be able to explain mortgage bank
- to understand the main difference between investment and commercial banks
- to describe main areas of investment bank's activities
- to define universal banks and describe their set of activities
- to understand what distinguishes universal banks from commercial and investment banks
- to be able to describe merchant bank
- to be able to describe consortium bank
- to understand development bank and make a distinction between its forms
- to understand mono-banking system and the manner in it which functions

1. Classification of Banks

The differences between various national economies, their history of economic development, systems and financial markets initiate establishing of very heterogeneous types of banks which provide different types of banking and non-banking services to different market segments. Therefore, many authors and practitioners offer variety of bank classifications based on different criteria such

as ownership, domicile, nature of banking activities, function of banks etc. However, by observing their key features, one can note that their main function is to redirect flows of funds from surplus units to deficit units.

On the basis of ownership, the banks are classified into two categories: public sector banks and private sector banks.

On the basis of ownership the banks are classified into two categories:

1. **Public sector banks**, *which are owned and controlled by a government unit, such as state, municipality or city*.

2. **Private sector banks** *are banks where greater parts of the equity are owned by private shareholders, corporations or individuals*.

According to the nature of their banking activities, banks can be divided into several types like issuing, deposit, mortgage and savings houses. However, this classification is too narrow and it omits various types of other banks.

On the basis of domicile, banks can be divided into foreign and domestic banks.

On the basis of domicile, banks can be divided into foreign and domestic banks. A **foreign bank** *is a bank with head office outside the country in which it is located.* A **domestic bank** *is a bank which is registered and incorporated within the country.*

Based on their function banks can be categorized into: issuing or central banks, deposit or commercial banks, saving banks, specialized banks, cooperative banks, building societies, credit unions, mortgage banks, universal banks, investment banks, merchant banks, consortium banks, development banks and mono-banks.

Today, banks in chase for greater earnings continuously change their offering of non core banking activities. Many of them have specialized in particular banking activities and others became universal banks. They offer wide range of services, beside their core services. So, according to the function banks can be categorized into: issuing or central banks, deposit or commercial banks, saving banks, specialized banks, cooperative banks, building societies, credit unions, mortgage banks, universal banks, investment banks, merchant banks, consortium banks, development banks and mono-banks.

1.1. Central Bank – Definition, Objectives and Functions

The central bank is a financial institution responsible for overseeing the monetary system for a nation, or a group of nations.

Central banks' roles and functions in separate economies/nations have evolved differently depending on various circumstances. Certain central banks evolved from large commercial banks to banks which have monopoly rights for issuing banknotes. Others started as special purpose government banks to control the issuance of banknotes and some were established as funding channels for governments. There is a global diversity of functions and objectives assigned to central banks, but many authors agree that central banks primarily are the agencies that conduct monetary policy and provide the means of settlement. ***The central bank*** *is a financial institution responsible for overseeing the monetary system for a nation, or a group of nations.* It also has other important financial stability functions, but these functions are especially vital during financial disturbances.

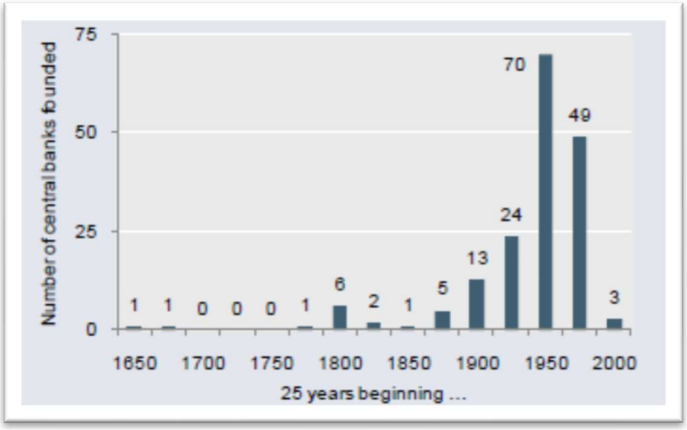
Central banks can be organized as:
- a system of central banks, where one bank is the main coordinator,
- supranational central bank, which is organized according the economic integration of certain area,
- national central bank responsible for designing and implementing monetary policy for the national economy.

The first central bank was established in Sweden in 1668. The Central Bank of England (Bank of England) was founded in 1694. It was not nationalized (became a state) until 1947. In the U.S.A. the central bank is called The Federal Reserve System (FED) and was established in 1913. In 1999, the European Central Bank (ECB) became operational. This institution is in fact the central bank of the EU and today it unites the central banks of nineteen EU member states that have replaced their national currencies with the euro: France, Germany, Italy, Spain, Portugal, Belgium, the Netherlands, Luxembourg, Austria,

Finland, Ireland, Slovenia, Slovakia, Cyprus, Greece, Malta, Latvia, Lithuania and Estonia. These four examples of central banks, point out the differences between central banks in different countries, regions and unions. For instance, FED presents a system of central banks, where one bank is the main coordinator of all operations and activities. ECB is a supranational central bank, which is organized in the case of monetary union of several countries. This type of union reflects the high level of economic integration of certain area. Countries, members of ECB, forgo their monetary sovereignty, have one currency (euro-€), coordinate credit-monetary and exchange policy, form foreign exchange reserves and central bank. The central banks of Sweden and England present the most common model of organization, where the monetary authority is concentrated in one legal entity.

The majority of central banks, in fact, were created in the 20th century (see Figure 5) specifically as central banks, i.e. public policy agencies for central banking functions.

Figure 5 Founding dates of central banks



Source: Central bank websites; 2008 Morgan Stanley Directory; BIS (2008b)

Central Banks are commonly governed by the Board of Directors and the Governor of Central Bank. The Board of Directors usually consists of internal and external members. Internal members of the Board of Directors are the governor and vice-governors and external members are prominent and authoritative figures from the economic life of the country, with a specific fund of knowledge in the field of finance and banking. The Board of Directors decides on the objectives of monetary policy and its implementation, on the measures and instruments of monetary policy and in that context decides on the withdrawal or circulation of money, the rules and standards of supervision of commercial banks and savings houses, etc. The Governor of Central Bank is a person with great authority in the country and with extensive knowledge in the field of monetary sphere. He/she represents the central bank to the public and manages the bank in accordance with existing legal regulations. The governor is accountable for his/her work to the legislature and is assisted by vice governors (usually two - three) who are also appointed by the legislature on the proposal of the governor.

Central banks are typically governed by Board of Directors and Governor.
The Board of Directors usually consists of internal and external members.
The Governor of Central Bank is a person with great authority in the country and with extensive knowledge in the field of monetary sphere.

In recent years central bank's power and influence have increased. Since the financial crisis, central banks around the world have taken on more direct responsibilities for financial supervision and regulation and pushed monetary policy to new limits in order to stimulate the global economy.

Central Bank's Objectives

As central banks evolved new functions were acquired and accompanying change in underlying objectives was stated. From empirical evidence one could infer that the objective underlying all functions of central bank was "for the economic interests of the nation, consistent with government economic policy". Given the fact that the earliest functions of central banks were issuing banknotes and acting as bankers to government, their primary objective was to restore *monetary stability* and the credibility of banknotes after periods of over issuance and collapses of convertibility. For example, the Austrian National Bank, the National Bank of Denmark, the Bank of France, the Bank of Italy, the Bank of Portugal and the Bank of Spain were adjusting interest rates so that they can preserve stability and maintain the fraction of notes and still to remain sufficiently liquid for servicing all obligations. In a period of time, these banks became bankers to the banking system. They would occasionally lend to other banks for covering temporary shortfalls in liquidity and here follows the natural interest of these banks for the health and performance of other banks. Actually, these two functions, *lender of last resort* and *informal banking supervision*, were driven by commercial self-interest of the dominant banks, rather than by public good objective.

Empirically, the central bank's objective that underlines all of its functions is – acquiring economic interests of the nation, which are consistent with the governmental economic policy.

Until the early 20th century, central banks were all established as profit-making entities. However, due to many reasons, such as conflict between public policy objectives and financial interests, most of the 19th century central banks withdrew from or had been excluded from commercial business. Central banks were responsible for managing the monetary order and nationalization of the central banks followed in many countries where it was not already owned by the state.

Historically, central bank's primary objective was to restore monetary stability and the credibility of banknotes. This was regarded as a public good objective.
However, central banks were also driven by commercial self interest, i.e. acquiring financial profit.

The breakdown of the gold standard challenged countries to maintain internal and external values of their national currencies via their central banks. How that choice is exercised, is at the core of the modern central bank. By changing the attitudes towards the role of governments in regulating and guiding economic activity the *oversight and regulation function* became formalized. In Europe, especially after the Second World War, central banks such as the Austrian National Bank, Bank Deutscher Länder (the forerunner of the Deutsche Bundesbank), the Bank of Italy and the Netherlands Bank were given formal responsibility to oversee banks (through required balance sheet ratios and other directives). Changing attitudes towards the role of government and of direct intervention also led to the acquisition of an *economic development function*. Both directly and via the banking system, many central banks began to subsidize the financing of economic sectors that were targeted by governments seeking more rapid industrialization. Often, preferential treatment involved the direct

Central bank's objectives evolved around its functions:
- issuing banknotes and acting as bankers to the government
- lender of last resort to other banks
- informal banking supervision, i.e. interest for the health and performance of other banks.

provision of banking services – especially capital and trade financing – to enterprises in targeted sectors and in particular, state-owned enterprises.

All of these above-mentioned functions relate to public interest objectives and from today's perspective this general public interest objective is open to wide interpretation and gives very little guidance on what is in the interest of the nation. Recently much more attention has been given to identifying specific objectives rather than to central bank's functions. Central bank's objectives can be divided into three groups:

Central bank's specific objectives may be divided into three groups:
1. Monetary policy objectives;
2. Financial stability objectives;
3. Payment system objectives.

1. Monetary policy objectives. The primary goal of central banks is more than clarified and is concerned with price stability. First and foremost, central banks in any country foster economic growth by maintaining price stability. At first glance, this is a quite general formulation of the primary central bank's goal, but still, it has specific content. For example, price stability assumes low rate of inflation and low inflation rate presents an important assumption for sustainable economic growth and development. Additionally, price stability is one of the preconditions for maintaining the stability of the domestic currency. However, the primary goal of the central bank as a long-term goal can only be achieved by setting short term operational targets, which are complemented by intermediate targets. Operational targets are necessary for achieving particular level of interest rates, commercial banks' reserves or exchange rates. Intermediate targets refer to certain level of long-term interest rates or broad money growth. When choosing the intermediate targets policy makers take into account the stability of money demand and the controllability of the monetary aggregate. The chosen target should also be a good indicator of the effect of the monetary policy decision on the price stability target. Broad aggregates normally show higher stability and display better indicator properties than narrow aggregates. In contrast, in the short term, narrow aggregates are easier to control via official interest rates than broad aggregates. For achieving these monetary targets, central banks have several instruments at their disposal which will be discussed later in this chapter.

Central bank's primary and long-term goal is maintaining price stability.
In order to achieve this central bank sets out intermediate and short-term operational targets.

Operational targets are directed towards achieving particular level of interest rates, commercial banks' reserves or exchange rates.

Intermediate targets refer to certain level of long-term interest rates or broad money growth.

2. Financial stability objectives. The great majority of central banks operate under the presumption that they have a policy responsibility for financial stability. According to the research conducted by BIS (Bank for International Settlements) in 2009 out of 146 central bank laws, less than one fifth have an explicit objective for financial stability per se – i.e. an objective that overarches or extends beyond objectives for functions that contribute to financial stability. For example, in Thailand, the Bank of Thailand's objectives are to carry out such tasks as pertain to central banking in order to maintain monetary stability, financial institution stability and payment systems stability, which covers a substantial range of financial stability considerations, if not their entirety; in Zambia, the central bank shall formulate and implement monetary and bank supervisory policies that will ensure the maintenance of price and financial systems stability. However, in several other cases in which an objective is set down for the wider financial stability function, the central bank is being charged with promoting a safe, stable or sound financial system.

Central banks are responsible for financial stability and oversight of the financial system. Such functions include: bank regulation (and/or licensing) and bank supervision, deposit insurance, the provision of safety nets through emergency liquidity assistance, provision of honest broker services and involvement in the payment system in general.

The central bank must promote safe, stable or sound financial system.

3. Payment system objectives. An objective relating to the payment system oversight function is found frequently in central bank's law. However, the statements of objective are usually very general and typically they can be met as in, ensuring of efficient and sound payment systems, supervising the clearing and payment system, fostering of proper functioning of payment systems.

Payment system objectives are typically defined as: ensuring of efficient and sound payment systems, supervising the clearing and payment system, fostering of proper functioning of payment systems.

Central Bank's Functions

The central bank performs many important functions, which have strong implications for the overall economy: it determines and implements monetary policy, regulates the general liquidity of banks, regulates liquidity towards abroad, determines and implements the exchange rate policy, and manages the country's foreign exchange reserves, etc.

By the end of the 20th century the monetary policy function clearly dominated the public perception of central banking activities, notwithstanding the continuation of numerous other functions of great significance to the effectiveness of financial systems and monetary exchange. Especially in the advanced economies, direct regulatory instruments were mostly dropped in favor of market-based instruments as financial systems developed and matured. Banking system oversight and regulation had evolved substantially. Regulation of access to the intermediation market was scaled back, especially in advanced economies. However, the oversight component prompted the development of the formal supervision and inspection of banks. More recently, in some countries, the supervision function has been shifted from the central bank to other agencies in favor of a more generalized financial stability objective for the central bank. According to the BIS Survey taken from 2008 by nearly 50 central banks are responsible for:

Empirically, central banks functions are related to ensuring monetary and financial stability, regulating and supervising, conducting policy operations, provision of infrastructure for the financial system, serving the government and other public good functions.

1. Monetary stability. Decision making about and implementing of monetary policy are the defining characteristics of the central bank. Whichever institution undertakes these functions is, in essence, the central bank. Central banks report (BIS, 2008) high degree of involvement in objective setting for monetary policy – though not complete autonomy. Complete or an almost complete autonomy is reported for the decision-making and implementation stages of the monetary policy function. In these cases, the government sets the specific target or participates in that process and the central bank has instrument autonomy with respect to monetary policy, but not full goal autonomy.

The defining characteristics of central bank, as in term of its primary function, is decision-making about and implementing of monetary policy.

2. Financial stability & regulatory functions. Some form of responsibility for financial stability is now widely regarded as an essential characteristic of central banking. In the BIS survey 2008 (BIS (2008b)), 90% of central banks considered that they had full or shared responsibility for financial stability policy and oversight of the financial system. Such functions include bank regulation (and/or licensing) and bank supervision, deposit insurance, the provision of safety nets through emergency liquidity assistance, provision of honest broker services and involvement in the payment system in general. There is, however, a growing tendency for the central bank to have significant responsibility for the development of prudential policy with respect to the financial system as a whole

– though that responsibility is usually shared with other government agencies – as well as for oversight of the whole system. Effective payment system combined with maintenance of price stability contributes to building a stable financial system. Payment systems provide a crucial piece of infrastructure in modern economies.

Central banks have three instruments available to oversee the system. First, specific laws and regulations governing the operation of systemically important payment systems are used in a number of cases. Second, the central bank can own and operate payment systems itself, ensuring particular outcomes in terms of balance between robustness, operational efficiency, cost and (coupled with fee structures) profitability. This approach is common, but it is occasionally controversial – especially with respect to state-owned enterprise competition with private sector operators. Third, and most common, is the attempt to influence the design and operation of privately owned and operated payment systems.

Central banks have three instruments available to oversee the payment system:
- specific laws and regulations governing the operation of systemically important payment systems
- own payment systems,
- influence over the design and operation of privately owned and operated payment systems.

3. Policy operation functions. The most important function of any central bank is to undertake monetary policy operations. Typically, these operations aim to administer the amount of money (money supply) in the economy and differ according to the monetary policy objectives they intend to achieve. Central banks use direct and indirect instruments for achieving long term price stability. However, central banks cannot use monetary policy instruments directly to affect long term and intermediate targets, but they can use them to affect operating targets, such as reserve money and short-term interest rates, which influence movements in intermediate variables and price stability on the long run. In the past, central banks exercised direct controls in the area of liquidity management by setting limits either to the quantity of deposits and credits (e.g., ceilings on the growth of bank deposits and loans), or to their prices (by setting maximum bank lending or deposit rates). Today, as a result of the significant financial liberalization process aimed at achieving an efficient allocation of financial resources in the economy, there has been a movement away from direct monetary controls towards indirect ones (Gray et al., 2002). These indirect instruments influence the behavior of banks by affecting initially the central banks' own balance sheet. In particular the central bank will control the price or volume of the supply of its own liabilities (reserve money) that in turn may affect interest rates more widely and the quantity of money and credit in the whole banking system. The indirect instruments used by central banks in monetary operations are generally classified into the following:

In the past, central banks exercised direct instruments in the area of liquidity management by setting limits either to the quantity of deposits and credits or to their prices.
Today, central banks use indirect instruments such as: Open market operations, discount windows and reserve requirements.

Central banks use monetary policy instruments to affect operating targets, which influence changes in the intermediate and long run targets.

Central banks use direct and indirect instruments for achieving long term price stability.

- *Open market operations (OMOs);* Open market operations are a group of indirect market based monetary instruments through which the Central Bank sells and purchases debt securities. Debt securities are mainly represented by Treasury securities (i.e. government debt) that central banks use in open market operations. Open market operations are the most frequently used and most important indirect instrument by which central banks control/influence the amount of money in developed economy. There are differences between different countries regarding the features of these operations, but the main idea or principle is the same: the central bank

The main idea or principle behind OMO is for the central bank to influence the level of liquidity within the financial system, which will also affect the level and structure of interest rates.

influences the level of liquidity within the financial system and will also affect the level and structure of interest rates. If the central bank sells debt securities the money supply decreases (if all other things are being equal), and this leads to increase in short term interest rates. If the central bank purchases (buys-back) debt securities this leads to injection of money into the economy and the short term interest rates increase. The features of open market operations which have the greatest influence on short-term interest rates are as follows: they are initiated by the monetary authorities who have complete control over the volume of transactions; open market operations are flexible and precise – they can be used for major or minor changes to the amount of liquidity in the system; they can easily be reversed; and open market operations can be undertaken quickly.

In practice, if the central bank sells debt securities the money supply decreases (if all other things are being equal), and this leads to increase in short term interest rates. If the central bank purchases (buys-back) debt securities this leads to injection of money into the economy and the short term interest rates increase.

- *Discount windows* (also known as "standing facilities"); The second most important monetary policy instrument of central bank is the so-called "discount window" or "standing facilities" which allows eligible banking institutions to borrow money from the central bank to meet short-term liquidity needs. This indirect instrument controls the supply of money in the economy by changing the discount rate, which is the interest rate that monetary authorities use to lend money to the banking system. The logic behind this instrument is as follows: If the central bank increases the discount rate, it will be more expensive for banks to borrow money from central bank, so they will reduce or restrain the borrowing and will cause decline in the money supply. If vice versa, it will be cheaper for banks to borrow money, which will lead to increase in the total amount of money supply. By manipulating the discount rate, the central banks have influence over the short term interest rates in the market. Direct lending to banks can also occur through the central bank's lender of last resort (LOLR) function. By acting as a *lender-of-last-resort* the central bank provides liquidity support directly to individual financial institutions if they cannot obtain finance from other sources. Therefore it can help to prevent financial panics. The Central Bank provides reserves to a bank (or banks) experiencing serious financial problems due to either a sudden withdrawal of funds by depositors or to a situation where the bank has embarked on highly risky operations and thus cannot find liquidity anywhere else (i.e., no other institutions will lend to a bank considered near collapse). However, central banks operate under different frameworks in conducting the LOLR activities. These differences can reflect various country-specific factors such as public policy objectives, historical experience or other elements. It is clear that the central bank will extend credit to an illiquid bank to prevent its failure only in exceptional situations and in doing so it also carries out a 'macro' function by preventing potential financial panics. However, the central bank cannot guarantee the solvency of every banking institution in a country. This is because it would encourage bankers to undertake undue risk and operate imprudently, especially if banks knew that they would always be bailed out (by taxpayers' money) were they to become insolvent. In other words, the

Discount windows as indirect instrument controls the supply of money in the economy by changing the discount rate, which is the interest rate that monetary authorities use to lend money to the banking system.

In practice, if the central bank increases the discount rate, it will be more expensive for banks to borrow money from central bank, so they will reduce or restrain the borrowing and will cause decline in the money supply. If vice versa, it will be cheaper for banks to borrow money, which will lead to increase in the total amount of money supply.

The function of LOLR central banks performs in order to provide liquidity directly to separate bank if it cannot obtain finance from other sources and only in exceptional situations. However, LOLR function could induce or increase moral hazard in banks' behavior, if banks knew that they would always be bailed out (by taxpayers' money).

security of the LOLR function could induce or increase moral hazard in banks' behavior.

- *Reserve requirements.* Reserve requirements were first used for micro-prudential regulation purposes. Initially, they were ensuring that banks held a certain proportion of liquid assets as a buffer. If a bank falls to its minimum desired level of reserve assets it will have to turn away requests for loans or has to seek to acquire additional reserve assets from which to expand its lending. The result in either case will generally be a rise in interest rates that will serve to reduce the demand for loans. By changing the fractions of deposits that banks are obliged to keep as reserves, the central bank has control over the credit growth and over the total money supply in the system. The higher is the reserve requirement ratio, the lower is the amount of deposits (funds) that banks can use for lending money. Vice versa, the lower the reserve ratio required by the monetary authorities, the higher the amount of funds available to the banks for alternative investments. An important drawback worth mentioning is that the call for greater reserves can cause liquidity problems for banks that do not have surplus reserves. This indirect instrument cannot be used on regular basis, because it can cause problems for the liquidity management of banks. In general, by increasing the reserve requirement banks lower their lending potential and profit, because central banks do not pay interest on these reserves. The main advantage of this instrument is that it affects all banks equally in the national banking system (the banking system liquidity) and it can have strong influence on the total money supply. The design of the reserve requirement differs from one country to another and many countries set reserve requirements ratios at close to zero. The differentiation of reserve requirement can be according to maturity of the liabilities (i.e. the country may impose higher reserve requirement on demand deposits than on savings or term deposits); type of liability (i.e. countries may also differentiate reserve requirements depending on the nature of the liabilities, differentiating between core or non-core liabilities[1] and imposing a higher requirement on bonds or on liabilities to non-banks than on deposits); currency denomination of liabilities, i.e. central banks may impose higher reserve requirement on FX liabilities than those in domestic currency; residency of the counterpart, i.e. central banks may impose higher reserve requirement on liabilities to non-residents than liabilities to residents.

The reserve requirement or mandatory reserve, is related to the fractions of deposits that banks are obliged to keep as reserves and with this instrument, the central bank has control over the credit growth and over the total money supply in the system.

In practice, the higher is the reserve requirement ratio, the lower is the amount of deposits (funds) that banks can use for lending money. Vice versa, the lower the reserve ratio required by the monetary authorities, the higher the amount of funds available to the banks for alternative investments.

The differentiation of the reserve requirement may be according to the maturity of liabilities, type of liability and currency denomination of liabilities.

4. Provision of infrastructure for the financial system. The provision of infrastructure for the financial system is a dominating function of central banking. Some aspects of it are more prevalent than others among central banks, but the core activities of the function are common to all: the issuance of currency and the management of its circulation; the provision of banking services to commercial banks and the government; and the provision of a system for the exchange of central bank money in settlement of transactions.

Central banks provide infrastructure for the financial system by issuing currency and management of its circulation; providing banking services to commercial banks and government; and providing a system for the exchange of central bank money in settlement of transactions.

[1] Core liabilities are usually defined as traditional retail deposits. Non-core liabilities are other funding sources.

5. Services to the government. Almost all central banks act as the government's banker. They provide cash management and account management services to government and agencies of the state. As the government's bank and being close to financial markets, central banks have often acted as the government's debt management agent – a role that sometimes includes the provision of registry services. Indeed, during the 20th century, central banks had a strong policy interest in government debt management, because monetary policy was conducted in part through variations in the government debt programme. Thus, more recently, many countries have set up specialized debt (and sometimes asset) management offices, either attached to the ministry of finance or as independent agencies. Relatively few central banks now act as the government's debt (or asset) manager.

Central banks act as government's banker, i.e. they provide cash management, account management services to government and agencies of the state and act as government's debt management agent.

6. Other public good functions. Most central banks have at some time been active within the financial sector promoting **institutional and market development**, especially with respect to money and debt markets. A frequently cited reason for central banks in emerging markets to play a development role is the availability of skilled personnel within a well-organized public agency. **Economic development** functions beyond the financial sector comprise quasi-fiscal activities generally unrelated to the purpose of central banking. Included in this category are lending subsidies, preferential discounting, differentiated credit targets and ceilings, loan guarantees and extension of sub-prime loans, rescue operations not needed for system stability, equity stakes in private or public commercial operations unrelated to the central bank's purpose, multiple exchange rates, selective import deposit requirements and exchange rate insurance or guarantees. Quasi-fiscal activities can also include a diffuse set of policy interventions somewhat related to the central bank's policy goals, but which involve exceptional risks, or costs, to the taxpayer. Such policy interventions, which may be promoted or endorsed by the government, include subsidized lending to particular sectors, exchange rate interventions in pursuit of competitive advantage, bank rescues, unfunded deposit insurance payouts and large-scale purchases of very low yielding assets in the face of deflationary pressures.

Other public good functions of central banks are: promotion of institutional and market development; economic development; consumer protection and advising the government on economic policy matters.

About 50% of central banks (60% in emerging market economies) play some role in **consumer protection.** Given that most retail financial transactions are covered by some type of consumer protection laws, many central banks have chosen to avoid direct involvement in the design and application of such laws. However, some central banks consider that consumer behaviour is sufficiently important for the functioning and stability of the financial system to warrant some involvement.

About one half of central banks in industrialised countries and a somewhat higher proportion in emerging market countries, report a responsibility to **advise the government on economic policy matters** beyond those inherent in the central bank's own functions. In some cases, the obligation is formal in that the central bank governor has an ex officio role as a government economic adviser. The compatibility of this advisory role with other central banking

functions depends in part on the time commitment involved and the nature off any inherent conflicts.

Bank Regulation and Supervision

In 2018, Sabine Lautenschläger, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, at the 9th Annual Round Table in Brussels spoke about banking regulation and supervision and why does it matter. According to her: *"The financial crisis in 2008 showed what can happen when banks are not safe and sound. So the goal is to make banks safe and sound and avoid future crises. To that end, we have revamped regulation, and we have strengthened supervision. It's indeed vital to work on both fronts. Without supervisors, rules would have little effect; without rules, supervisors would have no job – or at least no firm basis for doing their job. You can't have one without the other: regulation and supervision need to be aligned."*

Bank regulation presents a set of specific rules of behavior, restrictions and guidelines that bank and other depository institutions have to abide by.

The main intention of bank regulation is to maintain the solvency of banks by avoiding undertaking excessive risk.

As already discussed before, central banks have significant responsibility in keeping the financial sector stable and this responsibility comes in the form of the functions that they conduct, such as bank regulation, licensing and bank supervision, deposit insurance, the provision of safety nets through emergency liquidity assistance, provision of honest broker services, and involvement in the payment system. In this sense, ***bank regulation*** *presents a set of specific rules of behavior, restrictions and guidelines that bank and other depository institutions have to abide by.* This regulatory environment can be established or set through national legislations or stipulated by relevant regulatory agencies. The main intention of bank regulation is to maintain the solvency of banks by avoiding undertaking excessive risk. Central banks by exercising different types of instruments for preventing banks' insolvencies, indirectly design specific conditions for market transparency and strengthening the consumers' confidence in the banking sector. Bank regulation can be seen from the aspect of types of bank regulation and from the aspect of how it is conducted. According to Casu et all (2006) there are three types of bank regulations:

There are three types of bank regulations:
1. Systematic regulation or government safety net.
2. Prudential regulation or monitoring and supervision of financial institutions, with particular attention paid to asset quality and capital adequacy.
3. Conduct of business regulation or description describes fair business practices, obligation for information disclosure, competence, honesty and integrity of financial institutions and their employees.

1) Systemic regulation. Systematic regulation refers to public policy regulation concerned with the safety and soundness of the financial system. It is designed to minimize the risk of bank runs and it is also called government safety net. More precisely the systematic regulation comprises of creating deposit insurance funds (usually as a separate entity from the central bank) and performing the LOLR function by the central bank.

2) Prudential regulation. Prudential regulation relates to the monitoring and supervision of financial institutions, with particular attention paid to asset quality and capital adequacy. The main goal of prudential regulations is to protect consumers because they are not in a position to judge the safety and soundness of financial institutions due to imperfect consumer information and agency problems associated with the nature of the intermediation business. Prudential regulations include minimum capital requirements, liquidity or loan portfolio diversification standards, limitations on a bank's investment portfolio or lines of

business and other restrictions intended to limit the type of risks which banks may undertake.

3) Conduct of business regulation. Conduct of business regulation presents a type of regulation that focuses on how banks and other financial institutions conduct their financial services. This kind of regulation describes fair business practices, obligation for information disclosure, competence, honesty and integrity of financial institutions and their employees.

Bank regulation might also be described as a very complex process which consists of: licensing and supervision.

Licensing, as a first component of the process, it is specific for the country where the bank is located. It sets specific requirements for starting a new bank and once they are fulfilled the central bank provides license holders the right to own and operate a bank. The national regulator, i.e. most commonly the central bank, supervises licensed banks whether they comply with the established requirements and takes certain actions (defined by legislative) as a response to certain breaches of the requirements, gives directions, imposes penalties and ultimately revokes the banks' licenses.

Licensing sets specific requirements for starting a new bank and once they are fulfilled the central bank provides license holders the right to own and operate a bank.

Supervision involves on-site and off-site inspection of the bank's records, operations and processes or evaluation of the reports submitted by the bank. Supervision is an extension of the license-granting process and consists of continuous monitoring, inspecting and examining financial institutions' activities by a government regulatory body (usually the central bank or another independent governmental agency). Supervision ensures that the functioning of the bank/financial institution complies with the regulatory guidelines and monitors for possible deviations from regulatory standards.

Supervision involves on-site and off-site inspection of the bank's records, operations and processes or evaluation of the reports submitted by the bank.

Today, the financial sector and banking institutions in particular are by far the most heavily regulated and supervised. Some authors state that a number of financial crises around the world have brought large number of bank failures, due to the failure of regulation. Others, advocates of the so-called free banking, state that the financial sector would work better without regulation, supervision and central banking, i.e. that banks have greater incentives to prevent failures than other firms. However, because of the nature of the financial services, the public confidence that banks rely on, the political controversy that can be attached to bank failures and interconnectedness of banks, banks must operate in a strictly defined regulatory environment.

Independence of Central Banks

Central banks have long played a more important role in policy-making than their legal mandates might imply. In recent years their power and influence have become even greater, especially after the financial crisis. Central banks around the world have taken on more direct responsibilities for financial supervision and regulation and pushed monetary policy to new limits in order to stimulate the global economy. Political barriers have limited legislative responses to financial crisis forcing regulatory institutions to improve

The central bank independence can be defined as independence from political influence and pressures in the conduct of its functions, in particular in conducting the monetary policy.

macroeconomic conditions during downturn. As a result, central banking institutions today possess broader policy-making authority and discretion than they possessed a decade ago.

Today, theoretical studies suggest that central bank independence is important and especially significant because it helps in producing better monetary policy. For example, an extensive body of literature predicts that the more independent a central bank, the lower the inflation rate in an economy. The independence of the central bank is important for the establishment of efficient functioning of the banking system in a country, which also influences the rational behavior of business entities in the real sector. The autonomy of central banks is measured by the degree of freedom in deciding on monetary and foreign exchange credit policy. Dependent central banks have a low degree of freedom and often implement government policy and are under the direct jurisdiction of the relevant ministries. Independent central banks are only relatively independent because it is a matter of coordinating development and economic policy measures. In general, independent central banks are those that are legally within the competence of parliament, not those that are under the jurisdiction of the Ministry of Finance.

The independence of the central bank is a precondition for its efficiency and it can be defined as *independence of the central bank from the state bodies*, which is reflected through the prism of economic (in the choice of monetary instruments) and political independence (in determining the monetary aggregates). The political independence of a central bank depends on a number of factors, such as the procedures and manner of appointing governor and members of the board of governors, the duration of the mandate for which they are appointed, the ease of setting monetary objectives without government interference, whether there is a legal clause to maintain the price stability of the central bank and resolution of conflicts between the central bank and the government, etc. On the other hand, economic independence is defined as the ability of the central bank to control the amount of loans and borrowings to the government, as well as the central bank's freedom to set the interest rate on those loans. Economic independence also depends on the ability of the central bank to decide on monetary policy instruments. According to Issing (2006) the independence of central banks presents the freedom of central banks in choosing the objectives of monetary policy (functional independence) and conducting monetary policy (institutional independence), whereas they maintain the autonomy over their budget and in determining the length of bank managers' mandate and terms of their elections. In short, t*he central bank independence* can be defined as independence from political influence and pressures in the conduct of its functions, in particular in conducting the monetary policy.

The independence of the central bank is a precondition for its efficiency and it can be defined as *independence of the central bank from the state bodies*, which is reflected through the prism of economic and political independence.

The central bank independence can be reflected and ensured by:

1. The legal framework, which provides strict stipulations that the central bank must not receive and implement any instructions from the government or state officials, for example, such an obligation is provided for the European Central Bank and such an obligation is stated in the Law on The National Bank of the Republic of North Macedonia;

2. The election of the governor of the central bank and the members of the council, which is conducted by the parliament, not by the executive power (government);
3. The mandate of the governor and council members is longer than the mandate of the government - usually seven years.

From this point of view, two important components constitute the essence of central bank independence versus government, i.e. the central bank performs all its functions independently and does not receive any instructions in this regard, neither from the government nor from other government officials and there are no subordinate relations of the central bank with the government, which is ensured by the manner of election of the governor and members of the central bank council and the duration of their mandates. However, this independent position does not imply a lack of coordination between the central bank and government. On the contrary, coordination is necessary, as monetary and fiscal policies are the two key macroeconomic policies with the help of which the macroeconomic movements are actively influenced. The government, i.e. the Ministry of Finance, is responsible for determining and implementing fiscal policy and the central bank for determining and implementing monetary policy. Both policies must be coordinated and mutually supportive and complementary. In that sense, the cooperation of the relation Minister of Finance and Governor of the Central Bank is also highly imperative.

As already mentioned above, monetary policy has long been used by the government, but in recent years there has been a trend of giving the monetary policy to independent central banks. So, why is this trend happening? What are the arguments for independent central bank to carry out the nation's monetary policy and control its money supply? The main idea is that central banks will be more independent of political considerations and they will be willing to keep inflation low even if there are political costs for raising interest rates. What does this mean? When governments were responsible for monetary policy (setting interest rates) there was a political business cycle, which meant that the incumbent government had tendency to influence the economic cycle to coincide with elections. In short term before an election, interest rates were reduced and the total amount of money in the economy would have increased causing economic growth and reduced unemployment. This picture of a strong economy makes it easier for the governing party to gain re-election. However, in the long term, this policy can cause inflationary pressures and once the elections were won the government would have increased interest rates to reduce inflation. If it caused a recession, there would still be time for the economy to recover before the next election. On the other hand, central banks are mandated with maintaining low inflation and steady GDP growth. An additional argument for independent central banks is that an independent Central Bank may have more credibility and if people have more confidence in the Central Bank, this helps to reduce inflationary expectations, which makes it easier for the inflation to be kept low.

Although, those supporting central bank independence are in a clear majority, today the voices against it are growing louder. Economics Professor

The central bank's independence is constituted by two components: the central bank performs all its functions independently and does not receive any instructions in this regard, neither from the government nor from other government officials and there are no subordinate relations of the central bank with the government, which is ensured by the manner of election of the governor and members of the central bank council and the duration of their mandates.

The arguments for Central bank's independence are:
- political business cycle, which means that the incumbent government has tendency to influence the economic cycle to coincide with elections.
- independent Central Bank may have more credibility and if people have more confidence in the Central Bank, this helps to reduce inflationary expectations, which makes inflation easier to keep low.

Arguments against Central bank's independence are:
- central bankers are unelected, i.e. the government is the one that through democratic process is elected;
- the lack of political oversight over the monetary control is undemocratic and monetary policy should complement fiscal policy;
- monetary and fiscal policies should work together and when each is controlled separately they might pull in opposite directions; and
-central bank's independence reduces the flexibility of monetary policy in the event of adverse aggregate shocks.

Andrew Mountford of Royal Holloway, University of London, has argued that "the control of the amount of credit in the economy and the control of the banking sector more generally is intrinsically political. … The idea that control of this sector should be removed from government and thus ultimately from accountability to those that the system is supposed to work for (the general public) is economically ludicrous … and politically terrifying." The arguments against central bank independence are based on the notion that central bankers are unelected, i.e. that the government is the one elected through a democratic process. The lack of political oversight over the monetary control is undemocratic and monetary policy should complement fiscal policy. Monetary and fiscal policies should work together and when each is controlled separately they might pull in opposite directions; and there may be evidence that monetary policy needs political intervention to ensure it helps all members of society, not just a few. These arguments, stated by Milton Friedman, are supported by Christine and David Romer, who consider central bank independence unnecessary and counterproductive, as it reduces the flexibility of monetary policy in the event of adverse aggregate shocks (Romer & Romer, 1996).

1.2. Commercial Banks

In the beginning deposit banks (now commercial banks) were offering only deposit taking and later on they started giving loans to commerce (this is where their name commercial comes from). Commercial banks are the major financial intermediary in any economy. They are the main providers of credit to households and corporate sector and operate the payments mechanism in most countries. Usually, commercial banks are established as joint stock companies and they deal with retail customers and small, medium size and large enterprises. They have well diversified deposit base, i.e. their main source of financing are deposits, from households and legal entities, which can be demand deposits or time deposits. They offer a wide range of financial services from consumer non purpose loans for households to loans for legal entities for investment purpose, like construction of residential building or building for commercial purpose etc. The latest trend for commercial banks is that they offer non-banking services to customers, i.e. nowadays they engage in investment banking, insurance and other financial services.

Commercial banks are the major financial intermediary in any economy. They are the main providers of credit to households and corporate sector and operate the payments mechanism in most countries.

Most common features of commercial banks are:
- they deal with retail customers and small, medium size and large enterprises;
- their main source of financing are deposits, from households and legal entities;
- they offer wide range of banking activities, such as deposit collecting, loan and payments providing;
- according to their latest trend, commercial banks offer additional non-banking services.

The primary functions of commercial banks are:

- Accepting various types of deposits from the public (households and legal entities), in form of current accounts (checking accounts), demand deposits, time deposit or recurring deposits. These deposits are returned on customer demand or after a certain time period according to agreed upon terms of the deposit contract.
- Providing loans and advances in various forms, such as an overdraft facility, cash credit, bill discounting, short term and long-term loans, loans to households and legal entities against proper security etc.
- Money creation on the basis of loan sanctioning and payment intermediary. When loan sanctioning commercial banks use deposits,

The primary functions of commercial banks are:
1. Acceptance of various types of deposits;
2. Provision of loans in various forms;
3. Money creation.

they collect to make loans. Afterwards these loans are converted into derivative deposits on the basis of check circulation and transfer settlement. In this manner the derivative funds (funds on current accounts on borrower) are increased for several times from the original deposits.

However, besides their core banking services, deposit collecting and lending, commercial banks provide additional services connected to payment services and financial services. These services may be categorized such as:

- Issuing, collecting and clearing bank cheques;
- Processing payments and money transfers;
- Providing customers with different methods of payments such as debit cards, credit cards;
- Dealing in foreign exchange transactions;
- Internet banking;
- Purchasing and sale of securities;
- Acting as trustee, attorney, correspondent and executor;
- Providing safe deposit boxes and etc.

Commercial banks as a main provider of financial services to the general public and businesses ensure economic and social stability and sustainable growth of the economy. And in this context, credit creation is their most significant function. In other words, while approving a loan to a customer, they do not provide cash to the borrower, but open a deposit account (current account) from which the borrower can withdraw. In this manner, commercial banks while sanctioning a loan, they automatically create deposits.

1.3. Specialized Banks

Specialized banks *are banks that concentrate their banking activities mainly on limited and specialized economic and/or social activities according to the resolutions of their establishment.* For example, they may be specialized in financing a specific industrial activity, agricultural sector, constructions of real estate, rural development, export-import and etc. For better understanding of specialized banks we can list their several features which characterize them:

Specialized banks are banks that concentrate their banking activities mainly on limited and specialized economic and/or social activities according to the resolutions of their establishment.

- Their main source of financing is their capital (own equity, profit, retained earnings) and issued bonds;
- They offer specialized financial services to a narrower segment of customers;
- Their focus of activities is towards development of specific sectors in economy or society;
- Majority of specialized banks are state owned;
- They implement state policies;
- They are active participants in creating advanced development policies of specific sectors.

Unlike commercial banks, which deal with households and all size enterprises from any sector or industry, specialized banks focus their banking activities in particular economic sector, which requires additional finance for its development.

The main function of specialized banks is to finance specific economic units that are in deficit in particular area. Due to the fact that bank loans are essential for

economy development, specialized banks have active contribution in the development of particular economic subsectors.

1.4. Savings Banks

Savings banks appeared in Europe in the 18th century with the aim of collecting deposits from all levels in the population regardless of its income. The main purpose behind savings banks was to encourage all level income people to have access to deposit products and hence access to banking services (checking accounts). By definition, *a **savings bank** is a financial institution that accepts savings deposits and pays interest on those deposits.* At first, savings banks were established by governments or by socially committed groups or organizations such as credit unions. However, traditionally, savings banks have mutual ownership, i.e. they are owned by their members or shareholders who are their depositors. The structure of savings banks and their legislation has evolved into savings and loans institutions. Their original function of providing only deposit products and using deposit funds in purchasing government and corporate debt has enlarged into collecting deposits and lending loans. Regarding the legislation, savings banks may be also established by legal entities and individuals as joint stock or a limited liability company.

Important to note here is that savings banks are for - profit financial institution with their focus on retail banking, i.e. payments, savings products, loans and insurances for individuals or small and medium-sized enterprises. In the United States savings banks are called Savings and Loans Association (S&Ls or thrifts) and they are specialized in residential mortgages.

Savings bank is a financial institution that accepts savings deposits and pays interest on those deposits.

Savings banks are characterized with:
- mutual ownership,
- focus on retail banking and
- "for profit" financial institution.

The structure of savings banks and their legislation has been transformed, i.e. nowadays they collect deposits and lend loans and maybe established also as a joint stock or limited liability company.

1.5. Cooperative Banks

Cooperative banks were introduced in Europe during the 19th century and today they are the key actors in the European society. Cooperative banks' customers may become their members/owners with relatively small investments and as a result have a direct participation in the business, i.e. in its governance, strategy and risk management processes. By definition, ***cooperative banks** are banks owned by their customers and follow the cooperative principle of one person, one vote.* Their business model rises from their members and their long-term relationship of trust, opposed to the profit maximization approach of the commercial banks. Cooperative banks are regulated under both banking and cooperative law. Branches of co-operative banks have their own boards of directors and manage their own operations, but their most strategic decisions require approval from a central office. They provide banking services such as savings and loans to members and also to non-members and some participate in the wholesale markets for bonds, money and even equities.

Cooperative banks can be traded on public stock markets, with the result that they can be partly owned by non-members. These cooperative banks have diluted member control by these outside stakes and they may be regarded as

Cooperative banks are banks owned by their customers and follow the cooperative principle of one person, one vote.

Several features that characterize cooperative banks are:
- their customers may become their owners/members with small investments,
- they have mutual ownership and follow the principle one person-one vote,
- their business model rises from their members and their long-term relationship of trust,
- branches of co-operative banks have their own boards of directors and manage their own operations,
- they provide banking services to members and also to non-members.

semi-cooperative banks. Due to this dilution in member control some cooperative banks are criticized. The principle behind cooperative bank is one member, one vote and its interpretation requires that members must control both the governance systems and capital of their cooperatives. Therefore, when the cooperative bank raises capital on public stock markets it creates a second class of shareholders who competes with the members for control. This may result in that the members may lose control and the bank ceases to be a cooperative.

Cooperative banks are very much similar to savings banks, relating to their mutual ownership and the offering of banking services to retail and small business sector. However, unlike savings banks, cooperative banks focus on trust and collaboration with their members, not on profit.

1.6. Credit Unions

Same as cooperative banks, **credit unions** *differ from banks and other financial institutions in that those who have accounts in the credit union are its members and owners and they elect their board of directors in a one-person-one-vote system regardless of their amount invested*. The credit union is controlled by its members and operates on the principle of people helping people, rather than maximization of profit. Members of credit unions usually share a common bond, such as locality, employer, religion or profession and credit unions are usually funded entirely by member deposits, and avoid outside borrowing.

Credit unions are characterized with several features such as:
- they have mutual ownership and follow the principle one person – one vote,
- they are funded entirely by member deposits and avoid outside borrowing,
- their main goal is not for profit, but for providing services for the benefit of its members,
- they act as local banks and provide retail banking services.

The main goal of credit union is not for profit, but for providing services for the benefit of its members. This does not mean that credit unions should not be profitable, but instead on relying on donations, they as a financial institution must make small profit in order to maintain its existence.

Credit unions differ from banks and other financial institutions in that those who have accounts in the credit union are its members and owners, and they elect their board of directors in a one-person-one-vote system regardless of their amount invested.

Credit unions are almost exclusively local and provide retail and commercial loans at reasonable rates (usually at lower than market interest rates), time deposits (usually at higher than market interest rates), credit cards and guaranties to its members. Because of their feature as a local "bank" and their reliance on members' deposits to stay in business, they have a reputation for excellent customer service. Since they are not for profit, all the profits made by these financial services are given back to the credit union's depositors as dividends.

Credit Unions are mutual institution, as building societies, but unlike them they may offer much more banking services. However, unlike cooperative bank branches, branches of credit unions usually retain strategic decision-making at a local level, though they share back-office functions, such as access to the global payments system.

1.7. Building Societies

Building societies as an institution was introduced in the late 18th century in Birmingham, which was a town with undergoing rapid economic and

physical expansion, where many highly skilled and prosperous owners were ready to invest in property. The first building society to be established was Ketley's Building Society, founded by Richard Ketley in 1775. In this society members were requested to pay monthly subscription to a central pool of funds which was later used to finance the building of houses for members, which in turn acted as collateral to attract further funding to the society, enabling further construction. Nowadays, the purpose of a building society remains and is to provide home mortgages to members. In general, ***building societies*** *is another type of financial institution owned by its members as a mutual organization.* These banks are very similar to savings and cooperative banks as they have mutual ownership and focus primarily on retail deposit-taking and mortgage lending. Mutual savings banks, cooperative banks, credit unions and building societies are cooperative banking institutions (they are owned by their members, with each member having one vote in electing the board of directors) and the distinguishing feature with commercial banks is that they are 'mutual institutions', i.e. owned by, and working for their customers/members. However, unlike credit unions and cooperative banks, building societies were the first who introduced the common bond of association among members.

Building societies is another type of financial institution owned by its members as a mutual organization.

Building societies are characterized with several features such as:
- they have mutual ownership and follow the principle one person – one vote
- their purpose was and remains to be provision of home mortgages to members,
- members may share and common bond of association.

According to the Building Societies Association (2005) *"customers who have a savings account or a mortgage, are members and have certain rights to vote and receive information, as well as to attend and speak at meetings in financial institution. Each member has one vote, regardless of how much money they have invested or borrowed or how many accounts they may have. Each building society has a board of directors that directs the affairs of the society and who are responsible for setting its strategy."*

Besides offering retail banking services, such as current accounts, credit cards and personal loans, the purpose of a building society is to provide home mortgages to members. This type of bank is typical for United Kingdom, Ireland, Australia and South Africa.

1.8. Mortgage Bank

Mortgage bank *is a bank specialized in originating (sale) or servicing of mortgage loans or both.* For the purpose of understanding mortgage bank, let us explain the term mortgage. Mortgage, by definition is a debt instrument in relation with real estate property. In other words, the borrower is obligated to pay back the loan over a defined period of time (usually in monthly installments with addition in interest payments) which he/she uses for purchasing a real estate property. This real estate property is pledged as collateral in favor of the bank. After paying back the loan, the borrower becomes the owner of the property. This way, the borrower purchases real estate properties without having to pay upfront the large purchase sum.

Mortgage bank is a bank specialized in originating (sale) or servicing of mortgage loans, or both.

Mortgage is a debt instrument, wherein the borrower is obligated to pay back the loan over a defined period of time which he/she uses for purchasing a real estate property.

What is specific about mortgage banks and what distinguishes them is that they use their own capital for loans to borrowers and they either collect payments with certain rate of interest according to the installment plan or sell the mortgage loans in the secondary market. Investors, such as large institutions

and corporations, purchase or invest in such loans. This sale is done because of the funds received for their lines of loans, which enables mortgage banks to continue with operating and lending. Therefore, their primary sources of funds are fees from loan origination/sale and loan servicing.

Mortgage banks are characterized with several features such as:
- they are specialized in originating/sale and servicing of mortgage loans,
- they use their own capital, not deposits for loans
-their sources of funds are fees from loan origination/sale and loan servicing.

1.9. Investment Banks

Investment banking emerged in the U.S.A. in the 19th century when the American economy was growing so fast that commercial banks could not serve the expansion of railroads construction, mining companies and the heavy industry. Investment banks served as a bridge between demand and supply of cash funds or a bridge between people who had capital and wanted to invest in particular projects and people who needed financing for their projects. In these early days, investment banks' main clients were government entities, who issued government bonds when they needed financing and sold these bonds to investors. Because of their lack of expertise in selling those bonds, in pricing them, in negotiation of adequate terms and because of lack of protection of individual investor (without having a significant bargaining power) they used the services of middlemen or investment bankers.

The establishment of investment banks emerged with the expansion of railroads construction, mining companies and the heavy industry in the USA during the 19th century. Their main clients were government entities who needed financing of capital state projects.
Investment banks acted as a bridge between financier and investors, i.e. bought financial securities from government entities and sold these securities to an upfront known group of investors.

The main group of activities of investment bankers was comprised of buying financial securities like bonds and stocks from an issuer and reselling these securities to a group of investors or now known as security underwriting. We can conclude that investment banking services emerged because they were needed by both investors and financiers.

Based on the history development of investment banks, the main difference between commercial banking and investment banking is that the former refers to deposit and lending business, while the latter relates to securities underwriting and other security-related business. Investment banking is the banking activity not classifiable as commercial banking. Within banking, whatever is not commercial can be roughly defined as investment banking. By definition ***investment banks*** *relate generally to large-scale or wholesale financing activities and they typically do not deal with retail customers, apart from private banking services offered to HNWI (High Net Worth Individuals).*

Investment banks relate generally to large-scale or wholesale financing activities and they typically do not deal with retail customers, apart from private banking services offered to HNWI.

Their scope of activities is rather heterogeneous and can be classified into three main areas:

1. Core or traditional investment banking, which consists of assisting firms raising capital on financial markets and assisting firms in transactions such as mergers, acquisitions, debt restructuring, etc. These underwriting and advisory services are the "core" investment banking activities. With underwriting services an investment bank helps firms to raise funds by issuing securities in the financial markets.

2. Trading and brokerage, which consists of purchasing and selling securities by using the bank's money (proprietary trading) or on behalf of clients (brokerage).

3. Asset management, which in general consists of managing investors' money. It can be broken down into two main categories: (a) traditional asset

Features that are characteristic for investment banks are:
- their scope of activities is underwriting services, advisory, trading and brokerage and asset management,
- their liabilities are mainly constructed by securities and short term wholesale financing.
- they do not deal with retail customers, apart from HNWI.

management (i.e., open end mutual funds) and (b) alternative asset management, which includes real estate funds, hedge funds, private equity funds and any other vehicle investing in alternative asset classes.

While conducting traditional investment banking activities, which in general comprise different set of activities for funds rising, investment banks perform three functions, that is:

- **Advisory function.** Investment bankers perform this function after detailed assessment of the financial condition and financial need of their clients. It consists of proposing different financial alternatives, such as securities issuance, bank loans, conducting mergers or acquisitions.
- **Administrative function.** After choosing the financial alternative, the financial strategy has to be put into action. Investment bank starts performing the administrative function. The administrative function includes a set of activities related to issuing securities, such as: finding investors/appropriate legal entity for fusions, clearing up tax and regulatory issues, mediating between their clients and potential investors, assisting in completing the legal documents necessary for reporting to the Securities and Exchange Commission and many more.
- **Operative function.** Investment bank's operative function comprises of underwriting and distribution of securities. When the investment bank underwrites the issue of securities it is said that the bank guarantees fixed price to the issuer (investment bank's client) in exchange for its securities, regardless of the actual demand. Afterwards, the investment bank allocates these securities to final investors. However, the investment bank can also just put its best effort to sell the shares, with no underwriting.

Notably mentioning is that investment banks do not hold retail deposits and their liabilities are mainly securities and short-term wholesale financing.

1.10. Universal Banks

Financial intermediaries that undertake a wide range of financial services, such as commercial and investment banking, insurance, pensions and so on, are referred to as universal banks. The concept of universal banks is most relevant and most clearly presented in the banking systems in the U.S.A and the United Kingdom where there was a strong distinction between investment and commercial bank. After the disposal of the regulatory barrier in the U.S.A. and the UK very few of the historically established names remained pure investment banks and many more became universal banks.

For example, after the Great Depression in 1929 in the U.S.A, the Glass Steagall Act was introduced, which prohibited commercial banks engagement in investment banking services. Commercial banks were accused of being too speculative in the pre-Depression era in part because they were diverting funds to speculative operations. In other words, commercial banks became greedy, taking on huge risks in the hopes of even bigger rewards. Unsound loans were issued to companies in which the bank had invested and clients would be

encouraged to invest in those same stocks. The Glass-Steagall act aimed to prevent three major issues, which also represented a significant source of conflict of interest:

1. Buying of risky securities with government insured deposits;
2. Granting financing to troubled companies owned by a bank; and
3. Selling financial securities to naive bank clients

Banks were given a year to decide on whether they would specialize in commercial or in investment banking. Only 10% of commercial banks' total income could stem from securities; however, an exception allowed commercial banks to underwrite government-issued bonds. However, sixty-six years later the Glass-Steagall Act was repealed and the Gramm-Leach-Bliley Act was signed, allowing banks to sell commercial and investment banking services under the same roof. This led to mergers and to the formation of global financing conglomerates giants like HSBC, JPMorgan Chase, Bank of America and Deutsche Bank, i.e. universal banks.

Universal banks have the following main features that distinguish them from investment and commercial banks:
- they offer banking and non-banking financial services,
- they serve large market segment comprised of households, small, medium sized and large companies, governments and government bodies and other financial institutions,
- they use benefits from economies of scale in information technology and reap operational and financial synergies.

By definition, ***universal banks*** *are banks that include all aspects of financial service activity, i.e. they offer additional non-banking financial services such as securities operations, insurance, pensions, leasing and so on, under one legal entity.* Financial services normally include banking and non-banking services such as: intermediation and liquidity via deposits and loans; a byproduct is the payments system; brokerage and proprietary trading of financial instruments (e.g., bond, equity, currency) and associated derivatives; corporate advisory services, including mergers and acquisitions, investment management and insurance.

Universal banks are banks that include all aspects of financial service activity, i.e. they offer additional non-banking financial services such as securities operations, insurance, pensions, leasing, under one legal entity.

Typically, the universal banking combines retail, wholesale and investment banking services. This implies that universal banks serve very large market segment comprised of households, small, medium sized and large companies, governments and government bodies and other financial institutions. Retail banking serves households, small and medium-size businesses. It is focused on collecting deposits as a primary source of financing, offering loans and mortgages and provision of payment system using different forms of payments such as credit, debit cards, checks etc. Wholesale banking serves large non-financial and government institutions and their services are related to borrowing and lending money on a very large scale. Investment banks offer their services (as discussed above) to major investors, HNWI (high net worth individuals) and companies. By simultaneously combining all of these services universal banks benefit from economies of scale in information technology and reap operational and financial synergies.

Universal banks can be described as financial intermediaries that undertake a wide range of financial services, such as commercial and investment banking, insurance, pensions.

1.11. Merchant Banks

Historically, merchant banks evolved from merchants who traded in commodities in the medieval era. Their purpose was to finance or facilitate the production and trade of facilities and hence, merchant banks deal with commercial loans and investment funds. By definition, ***merchant banks*** *offer similar financial services as investment banks, but typically to a smaller size firms*.

Merchant banks offer similar financial services as investment banks, but typically to a smaller size firms.

Merchant banks provide mezzanine financing, bridge financing, equity financing and various corporate credit products for small scale firms.

Small-scale firms are usually unable to raise funds through initial public offering or are unattractive for commercial banks (which offer them loans with higher rates), so they can provide mezzanine financing, bridge financing, equity financing and various corporate credit products from merchant banks. Additionally, merchant banks may issue and sell securities on behalf of corporations through private placements to refined investors who require less regulatory disclosure.

In the UK merchant banks are the same as investment banks. In the U.S.A., the term additionally has taken on a more narrow meaning and refers to a financial institution providing capital to companies in the form of share ownership instead of loans and advisory to small-scale firms in which they invest.

1.12. Consortium Banks

Consortium banks appeared in the early 1960's in Europe for the purpose of enabling smaller banks to participate in international banking activities. When projects are too large for one bank to finance its realization, then many banks group or in other words, create consortium bank to carry out that project. It can be defined as *a bank that is owned by a strategic alliance of other banks.* In these circumstances strategic alliance is an agreement between two or more banks to pursue a set of agreed upon objectives needed while remaining independent organizations. It means that the group of banks has decided to share resources to undertake a specific, a mutually beneficial project. Consortium bank can also be formed and for project purposes regarding granting particular credit lines from developed countries. Since the consortium banks do not have status of a legal entity, all member banks sign a legal contract which governs the actions of the consortium and delegates responsibilities among its members. All members have equal ownership shares and no one member has a controlling interest. After the consortium bank meets its objective, it typically dissolves.

Consortium bank is a bank that is owned by a strategic alliance of a group of banks.

1.13. Development Banks

Development banks can be also found and as development financial institutions and typically they are established and owned by governments or charitable institutions, which provide funds for projects that would otherwise not be able to get funds from commercial banks. ***Development banks*** *grant loans for specific national or regional projects to private or public bodies or may operate in conjunction with other financial institutions*. They may appear as a multilateral development bank, national development banks or bilateral development banks. ***Multilateral development bank (MDB)*** *is created by a group of countries and provides financing and professional advice to enhance development.* Multilateral bank has many members, including developed donor countries and developing borrower countries. It finances projects through long-term loans at market rates or very-long-term loans below market rates and grants. Examples of MDBs are: World Bank, European Investment Bank (EIB), Islamic Development Bank

Development banks grant loans for specific national or regional projects to private or public bodies or may operate in conjunction with other financial institutions.

Multilateral development bank (MDB) is created by a group of countries and provides financing and professional advice to enhance development.

(IsDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD) and many more.

Historically, national development banks have been an important instrument of governments to promote economic growth by providing credit and a wide range of advisory and capacity building programs to households, small and medium enterprises and even large private corporations, whose financial needs are not sufficiently served by commercial banks or local capital markets. ***National development banks*** *are typically responsible for long term financing of national economy development.* Governments often use national development banks to form part of their development aid or economic development initiatives. Although the efforts of the majority of national development banks are directed towards the industrial sector, some are also concerned with agriculture.

National development banks are typically responsible for long term financing of national economy development.

As opposed to multilateral, ***bilateral development bank*** *is a financial institution set up by one individual country to finance development projects in a developing country.*

Bilateral development bank is a financial institution set up by one individual country to finance development projects in a developing country.

1.14. Mono-Banks

If there is only one bank in a country, we say that there is a mono-banking system in that country. All banking functions are merged into this bank, i.e. central bank which unites the functions of an issuing bank and the commercial banks in a single institution. However, this banking system was backed up by a bank organization which comprised several banks, like investment, foreign trade, agricultural and savings banks. The mono-banking system was characteristic for Eastern European countries with central planning economies. There weren't any financial markets and the organization of banks was the only one who acted as an intermediary between the central bank and the economy. This mono-banking system worked as follows. Individual were saving deposits in savings banks, but not by their free choice. Thereafter, these deposit funds were transferred to central bank's accounts, and the central bank via organization of banks granted loans to economic units according to governmental plans for investments and production. The central bank acted as central bank and commercial bank at the same time, i.e. it issued money, collected deposits, lent short-term and long-term loans to households, corporations, and conducted domestic and international payment operations. This mono-banking system is typical for underdeveloped and small countries, and it has been characteristic of transition countries. Nowadays, it appears more as an exception in modern banking.

Mono-bank is a bank in which all banking functions are merged into it, i.e. the functions of an issuing bank and of a commercial bank.

Conclusions:

In this chapter, a major purpose is to classify and describe the different types of banks, starting with the central bank. All modern capitalist economies have a central bank and by analyzing its objectives, functions and independence we will be able to understand how the central bank influences the overall economy. Central banks' objectives have evolved around their functions contemplating with economic interests of the nations and fiscal policies. Modern

central banks are responsible for introducing or maintaining: monetary and financial stability, regulatory framework, monetary policy operations and infrastructure of financial system, government services, and other services related to public good. When conducting monetary policy operations, central banks tend to use indirect instruments such as open market operations; the discount window; and reserve requirements. In this chapter also, we have reviewed the issue of bank regulation, regarding the types and process of bank regulation and supervision as part of this process. Today there is a trend towards increased independence of central banks from political pressure. However, central bank's independence cannot be seen in terms of setting monetary goals (because they are obvious and must be consistent with the fiscal policy), but in the manner of how these monetary goals are achieved, i.e. by independently and without political pressures when choosing set of instruments.

This chapter continues with the description and analysis of the additional different types of banks according to their functions. Deposit or commercial banks, saving banks, specialized banks, cooperative banks, building societies, credit unions, mortgage banks, universal banks, investment banks, merchant banks, consortium banks, development banks and mono-banks are briefly defined and described for the purpose of their better understanding and acknowledging. Commercial banks are the major financial intermediary in any economy and their main primary functions are deposits collecting from households and legal entity, loan granting in various forms to different entities and creation of money. Unlike commercial banks, which offer their banking and additional financial services to the public, specialized banks offer limited and specialized financial services to a narrower market segment according to the resolutions of their establishment. Savings banks, cooperative banks, credit unions and building societies are all mutual institutions and operate on cooperative basis. Investment banks, unlike commercial banks focus their activities on underwriting services, advisory, trading and brokerage and asset management. Universal banks offer a wider variety of financial banking and non-banking services compared to commercial and investment banks. Merchant banks offer financial services similar to those of investment banks, but typically to a smaller size firms. Consortium banks are strategic alliances of a group of banks and they do not have a status of a legal entity, i.e. the relation which bonds the group of banks is defined in an agreement. Development banks can appear in the form of multilateral, bilateral and national development bank and their main purpose is funding projects for an economy development on a national or a regional level. This chapter concludes with mono-banks which are characteristic for eastern European economies planning economies.

Revision questions and problems:

1. According to which criteria can banks be classified?
2. What is central bank?
3. How can central banks be organized?
4. Who typically governs central banks?

5. Please describe the Governor's role of central bank.
6. Please describe public interest objectives of the central bank.
7. What are central bank's specific objectives?
8. What is central bank's primary and long term goal and how it is achieved?
9. Please describe operational and intermediate targets.
10. Please explain objectives related to financial stability.
11. Please explain objectives related to payment systems.
12. What are the central bank's functions?
13. Please explain central bank's function related to monetary stability.
14. Please explain central bank's function related to financial stability and regulatory functions.
15. Which are the indirect instruments that central banks use to influence banks' behaviour?
16. Please explain the function LOLR of the central bank.
17. What is the main advantage of the reserve requirement?
18. How do Central banks provide infrastructure for the financial system?
19. Which are the other public good functions of central bank?
20. What is bank regulation?
21. Please explain the three types of bank regulation.
22. Please explain licensing as part of the process of bank regulation.
23. Please explain supervision as part of the process of bank regulation.
24. How can the independence of central bank be defined?
25. Which are the arguments for and against central bank's independence?
26. What are the primary functions of commercial banks?
27. Please define specialized banks and list their several features.
28. Please explain the differences between commercial and specialized banks.
29. Which is the main purpose for the appearance of savings banks?
30. What is savings bank and how does it transform through the history?
31. What are cooperative banks and please list several of their features that characterize them.
32. Please explain the similarities and differences between cooperative banks and savings banks.
33. What are credit unions and which are their features?
34. What are building societies and which are their features?
35. What is mortgage and what is mortgage bank?
36. Please construct a table of features for each of the explained types of banks.
37. What is the main difference between commercial banks and investment banks?
38. What are investment banks? Please describe their scope of activities.
39. What are universal banks and which are their main features that distinguish them from investment and commercial banks?
40. Please describe merchant banks.
41. Please describe consortium bank.

42. Which are the forms of development banks and please explain each one of them?
43. What are mono-banks?
44. Which countries are typical for the existence of mono-banking system?

CHAPTER III – COMPARATIVE BANKING SYSTEMS

Learning objectives:

- to understand the term banking system and to be able to describe the development of banking systems
- to understand banking systems in developed countries
- to understand banking systems in emerging and transition economies
- to be able to describe various types of banks in different banking systems
- to be able to point out certain differences and similarities between different banking systems
- to understand the operating of central banks in practice
- to be able to point out certain differences and similarities between different national central banks

1. Models of Contemporary Banking Systems

Considering banking as a network of institutions and laws that provide a variety of financial services, the ***banking system*** *can be defined as a network of different types of banks (commercial banks, investment banks, saving houses etc.), that accept deposits from the general public, legal entities and provide payment and other financial services for customers, approve loan facilities for customers and invest in corporate and government securities.* It can be concluded that the banking system is part of a wider financial system and implies great influence over the financial stability and economy development of a country. Because of this significant role, banking system is strictly regulated by monetary authorities, i.e. central banks.

Banking system can be defined as a network of different types of banks (commercial banks, investment banks, saving houses etc.), that accept deposits from the general public, legal entities and provide payment and other financial services for customers, approve loan facilities for customers and invest in corporate and government securities.

Historically speaking and by establishing a timeline in the development of banking one can distinguish among five phases of banking, which correspond with different organizational and institutional structure of banking systems:

- *Traditional banking*, which started in the 12th century with the Medici family, and it is built around the bank branch as a primary unit for providing banking services. Traditional banking is characteristic for emerging countries and countries in transition.
- *Industrial banking* (1960-1990), whose characteristics are still present in the banking systems of the most developed countries. In this time period two models of banking systems arose: the Anglo-Saxon and the continental European model. In the Anglo-Saxon model there is a strict distinction between investment and commercial banking, where their major banking activities are comprised of retail and corporate banking. This model of banking system is associated with legal restrictions in terms of opportunities to expand activities outside the home country, and restrictions on performing activities characteristic of other non-banking financial institutions. The limitations related to the strict distinction between banking and non-banking financial activities are

Timeline in development of banking:
- Traditional banking, which started in the 12th century with the Medici family;
- Industrial banking (1960-1990);
- International banking and self service banking (1990-2007);
- Banking when and where you needed (2007-2017);
- Embedded banking (2017- …).

overcome by setting up banking holding companies. The Continental European model is characterized by the existence of universal banks and savings houses. Due to the characteristics of this model, i.e. there is no strict distinction between investment and commercial banks, universal banks could compete with the dynamic development of non-banking institutions that have taken an increasingly dominant market share.

- *International banking and self service banking* (1990-2007). During the last decade of the 20th century, many novelties in banking were introduced, such as: international standards for bank operating, deregulation and IT in banking. Banks started focusing on types of products and services offered to customers instead of building adequate organizational structures. Therefore, banks in the Anglo-Saxon banking system started appropriating characteristics of the continental European model. The emergence of self-service banking, was associated with the introduction of the ATM machines and it was accelerated with the wide adoption of commercial Internet. This period is defined as an attempt of banks in developed countries to provide customers' access outside of bank working hours.
- *Banking when and where you needed* (2007-2017), presents a period in which banking is redefined by the emergence of the smart phone in 2007 and accelerated with a shift to mobile payments, P2P and challenger banks.
- *Embedded, ubiquitous banking* (2017- …). According to King (2018) and his book *Banking Everywhere Never at a Bank*, the emergence of major non-bank competitors (fintech companies), totally reshapes and redefines banking sector and financial system. And banks should make drastic changes in their organizational structure, human resources, distribution channels etc. The new banking system delivers in real-time through the technology layer. It is dominated by real-time, contextual experiences, frictionless engagement and a smart, AI-based advice layer.

> *"If you are a bank and want to survive this transition over the next 10 years or so, you can only do so by redefining your organisation, rebuilding your core delivery capability, evolving your team, restructuring around a completely new organisation chart and by changing faster than you would have imagined possible. If you are a bank today you are potentially Kodak, Borders, Nokia, Motorola, Tower Records, Blockbuster, JC Penneys and Sears, Digital Equipment Corporation, Polaroid, Compaq, Borland and their ilk."* – Brett King (2018)

Today, one may see banks with banking systems from the first three phases. Furthermore, there are banks that operate under the traditional banking system, i.e. banks that continuously try to attract and engage customers in the old fashioned way via physical presence; or banks that have electronic banking, but not mobile banking app. Many banks still do not provide the opportunity of account opening on a mobile, or creating a deposit, which still can be justified by legal demands. The move towards the contemporary and future model of banking systems requires more than just introducing mobile app for banking. Banking and non-banking financial institutions cannot continue operating if they do not follow the significant shifts in customer behavior.

Even though in general banking systems have significantly transformed over the years and this process is still continuing, they still differ on national level or sub-national level according to the characteristics and stage of national economy development. According to these criteria, one can differ between

banking systems in developed countries and banking systems in emerging and transition economies.

2. Banking Systems in Developed Countries

2.1. Banking System in the USA

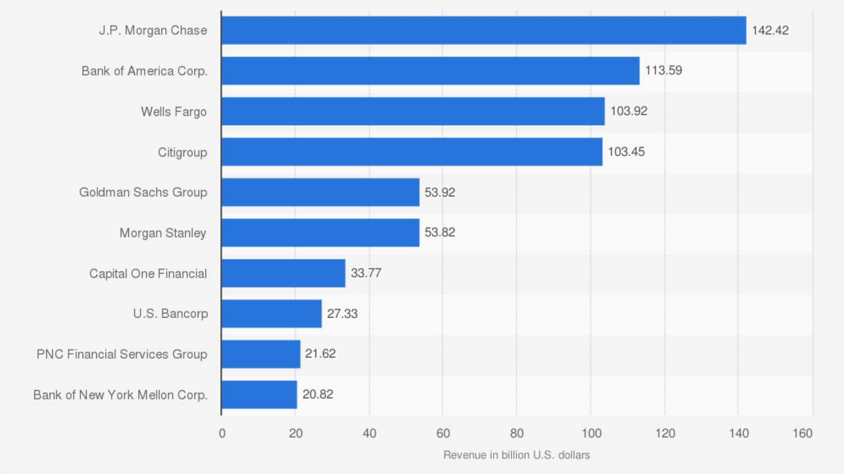
The USA has the most developed financial system. Federal Reserve System – FED was established in 1913 as a central bank with attributes of complex central bank. As such FED is constituted of 12 Federal Reserve banks and is responsible for formulating and implementing of monetary policy. FED's capital is formed by the capital of member banks. The structure of the banking system is comprised of several financial institutions which offer variety of banking and other financial services. In the American banking system, there are the following financial intermediaries: commercial banks, saving institutions, credit unions and investment banks.

In the American banking system, there are the following financial intermediaries: commercial banks, saving institutions, credit unions and investment banks.

Commercial Banks in the USA are major financial intermediaries in the economy. For decades banks have been merging, partnering, and expanding — so much so that the top four banks now account for 50% of all US banking assets (Business Insider, 2019). By definition they offer credit loans to households and legal entities/firms and provide payment services and their main liabilities are deposits of different size, currency and maturity. Typically, they are joint stock companies and can be publicly listed in the stock exchange or privately owned. The main sources of revenues of commercial banks are interest rates on loans, which are higher than the interest paid to deposit holders. Actually, the difference in rates is called net interest income and is one of the indicators of bank performance. On Figure 6 leading commercial banks in the USA are shown by the criteria of revenues.

Commercial banks in USA offer credit loans to households and legal entities/firms and provide payment services and their main liabilities are deposits of different size, currency and maturity.

Figure 6 Leading commercial banks in the U.S. 2019, by revenue



Source: Fortune, Statista May, 2020

Saving institutions. Unlike commercial banks, savings institutions traditionally have mutual ownership. They are owned by their 'members' or 'shareholders', who are the depositors or borrowers. The main type of savings institutions in the United States are the so-called Savings and Loans Association (S&Ls) (or thrifts), which traditionally and mainly are financed by household deposits and lent retail mortgages. These institutions have expertise in helping households for mortgage loan providing and that is their strategic competitive advantage. Today, their business is more diversified because they offer a wider range of corporate loan, credit card and other facilities. Data from the Federal Deposit Insurance Corporation (FDIC) reveals that there were 752 federally insured saving institutions in December 2017, compared to the more than 4.500 in 1980. The total number of thrifts has shrunk over time.

Savings institutions in the United States are the so-called Savings and Loans Association (S&Ls) (or thrifts), which traditionally and mainly are financed by household deposits and lent retail mortgages.

Credit Unions. Credit unions are another type of mutual deposit institution that are present in the US financial system and have grown in importance over the last decade. They offer variety of products to assist members with their financial needs and during the pandemic COVID 19 they offered payment relief and other form of financial support. As of November, 2019 in the USA there are 5.442 credit unions, they serve upwards of 100 million people and hold up to $1,5 trillion in assets. These are not for profit financial institutions and are member owned. Their membership is related to being part of a specific community, and member deposits are used to offer loans to other members. Typically staff is part time employed and is usually regulated differently than the staff in the banks. Most credit unions are small, but the ten biggest credit unions in America, rival traditional banks in size (see Table 2).

Credit unions are similar to S&Ls, but they are not for profit financial institutions and member deposits are used to offer loans to other members. Typically, staff is part time employed.

Table 2 Biggest Credit Unions in USA

Rank	Name	Locations	Assets
1	Navy Federal Credit Union	Branches in 30 states and 11 countries	$111,986,000,000
2	State Employees' Credit Union	Branches in North Carolina	$41,376,686,562
3	Pentagon Federal Credit Union	Branches in 11 states, three countries and two U.S. territories	$24,774,360,962
4	Boeing Employees Credit Union	Branches in Washington State and South Carolina	$22,178,675,266
5	Schools First Federal Credit Union	Branches throughout California	$16,761,721,612
6	First Technology Federal Credit Union	Branches or shared branches in nine states and Puerto Rico	$13,110,528,514
7	Golden 1 Credit Union	Branches in California	$12,993,881,497
8	Alliant Credit Union	ATMs across the United States	$12,244,742,402
9	America First Credit Union	Branches throughout Utah and parts of Nevada	$11,712,643,978
10	Suncoast Credit Union	Branches in and around Tampa, Florida	$10,534,613,558

Source: Forbes, 2020

Investment Banks. An investment bank is not a typical bank, i.e. it is not a financial intermediary that takes in deposits and then lends them out. Investment bank underwrites the initial sale of stocks, bonds and commercial paper, acts as a deal maker in the mergers and acquisitions area, as intermediary in the buying and selling of companies, as private broker to the very wealthy or as advisor during corporate restructuring. Some well-known investment banks are Morgan

Stanley, Bank of America, Merrill Lynch, Credit Suisse and Goldman Sachs. One feature of investment banks that distinguishes them from stockbrokers and dealers is that they usually earn their income from fees from underwriting charged to clients rather than from commissions on stock trades.

Federal Reserve System

President Woodrow Wilson signed the Federal Reserve Act in 1913, by which the Federal Reserve (FED) was founded for the purpose of providing the nation with "*a safer, more flexible and more stable monetary and financial system*". FED is considered as an independent central banking system of the United States of America, because:

- its decisions do not have to be ratified by the president or government,
- it does not receive funding from Congress, and
- the terms of the members of the Board of Governors span multiple presidential and congressional terms.

- FED is decentralized and independent central banking system;
- FED is responsible for providing sound banking system and healthy economy;

However, the Federal Reserve must work within the framework of the overall objectives of economic and financial policy established by the government. FED is subject to oversight by the Congress, which can change its responsibilities by a statute. Therefore, the Federal Reserve can be more accurately described as 'independent within the government'[2].

The FED performs five key functions in order to provide stable and healthy US economy and financial system:[3]

- conducts the nation's monetary policy to promote maximum employment, stable prices and moderate long-term interest rates in the U.S. economy;
- promotes 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.

The initial motivation for creating the Federal Reserve System was to address banking panics, particularly the severe panic in 1907, which resulted in

[2] Who Owns the Federal Reserve?. Board of Governors of the Federal Reserve System. Retrieved December 1, 2015.
[3] Board of Governors of the Federal Reserve System (U.S.). (2016). *The Federal Reserve System: Purposes and functions*. Washington, D.C: The Board.

bank runs. Other purposes are stated in the Federal Reserve Act, such as "to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes". Today, the Federal Reserve System has responsibilities in addition to fostering a sound banking system and a healthy economy.

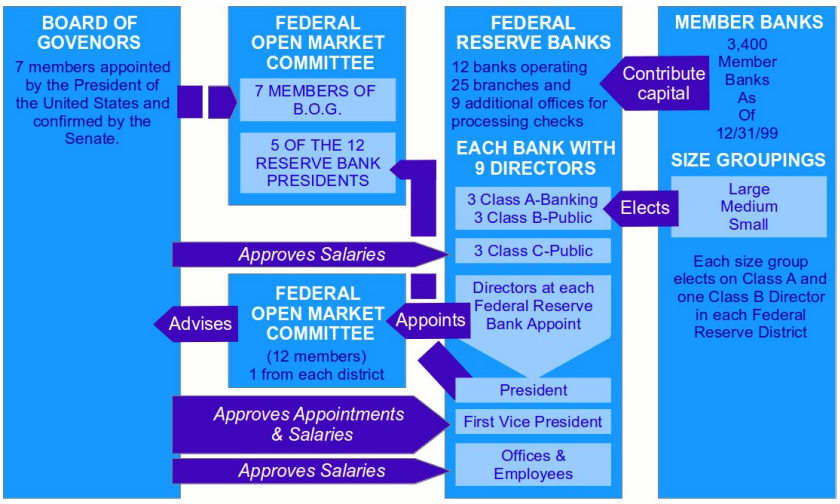
Structure of the Federal Reserve System

The Federal Reserve Act created the Federal Reserve System and it specifies how it is organized and what are the conditions for presidents' or board members' elections. What is especially significant to know about FED, is that FED is constituted of three key entities, which serve the public interests: Federal Reserve Board of Governors, 12 Federal Reserve Banks and Federal Open Market Committee (FOMC) (see Figure 7).

FED is constituted of three key entities: Federal Reserve Board of Governors, 12 Federal Reserve Banks and Federal Open Market Committee (FOMC),

The Federal Reserve Board of Governors is an agency of the federal government that reports to and is directly accountable to Congress, provides general guidance for the System and oversees the 12 Reserve Banks.

Figure 7 Three key entities of Federal Reserve System



Source: Board of Governors of the Federal Reserve System (U.S.). (2016). *The Federal Reserve System: Purposes and Functions*. Washington, D.C: The Board, pg.3

The president of the USA nominates members of the Board of Governors and nominates one member to be Chair and one to be Vice Chair. The US Senate confirms Board members and Chair or Vice Chair. The Board of Governors has 7 members with 14 years' mandate and cannot be reappointed in order to avoid political interference, while the Chair and Vice Chair of the Board serve only four-year terms. The Chair and Vice Chair may be reappointed to additional four-year terms. The Board of Governors guides all aspects of the operation of the Federal Reserve System and its five key functions. The primary responsibility of the Board members is the formulation of monetary policy. The seven Board members constitute a majority of the 12-member FOMC, the group that makes the key

The Federal Reserve Board of Governors:
- reports to and is directly accountable to Congress,
- provides general guidance for the System;
- oversees the 12 Reserve Banks;
- acts as counseling body to the President and the Congress;
- acts as regulator and supervisor of banks members of the system, bank holding companies and international banking institutions,
- sets margin requirements in order to prevent excess use of credit for purchasing or carrying securities, and
- plays a key role in assuring the smooth functioning and continued development of the nation's payments system.

decisions affecting the cost and availability of money and credit in the economy. The board sets reserve requirements and shares the responsibility with the Reserve Banks for discount rate policy. Additionally, the board of Governors:

- acts as a counseling body to the President and the United States Congress,
- has regulatory and supervisory responsibilities over banks that are members of the system, bank holding companies and international banking institutions,
- sets margin requirements in order to prevent excess use of credit for purchasing or carrying securities, and
- plays a key role in assuring the smooth functioning and continued development of the nation's payments system.

The decentralized system of FED is seen through the establishment of separate **Federal Reserve Banks** for each of the 12 districts, geographically divided according to prevailing trade regions that existed in 1913 and related economic considerations. The 12 Federal Reserve Districts which have a Federal Reserve Bank are: Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St Louis, Minneapolis, Kansas City, Dallas and San Francisco. Each of the 12 Reserve Banks is intended to operate independently from the other Reserve Banks and has a nine-member board of directors, who are classified in 3 types A, B and C. In class A there are three directors selected by the banks, members of the FED (bankers)[4], in class B there are three directors selected by the banks, members of the FED, but from different industry, such as commerce, agriculture, heavy industry; in class C, three directors appointed by the Board of Governors and their main goal is protecting the public interest (respected citizens in the state). Class A and B directors are elected by the Federal Reserve member banks, while class C directors are elected by the Board of Governors. Reserve Bank presidents (chief executive officer of the Reserve Bank) serve a five year term and may be reappointed. They are nominated by Class B and C directors and approved by the Board of Governors.

Federal Reserve Banks:
- are 12 for each of the 12 districts, geographically divided according to prevailing trade regions;
- operate independently from each other and each one has a nine-member board of directors;
- each Reserve Bank acts as a bank for banks, i.e. it offers services to banks, S&Ls, credit unions.

The Reserve Banks carry out Federal Reserve core functions by:

- supervising and examining state member banks (state-chartered banks that have chosen to become members of the Federal Reserve System), bank and thrift holding companies, and nonbank financial institutions that have been designated as systemically important under authority delegated to them by the Board;
- lending to depository institutions to ensure liquidity in the financial system;
- providing key financial services that undergird the nation's payment system, including distributing the nation's currency and coin to depository institutions, clearing checks, operating the Fed Wire and automated clearinghouse (ACH) systems, and serving as a bank for the U.S. Treasury; and

[4] Member banks are divided into three categories: large, medium, and small. Each category elects one of the three classes A board members.

- examining certain financial institutions to ensure and enforce compliance with federal consumer protection and fair lending laws, while also promoting local community development.
- providing the Federal Reserve System with a wealth of information on conditions in virtually every part of the nation (about the businesses and the needs of their local communities), i.e. information that is vital to formulating a national monetary policy.

Each Reserve Bank acts as a bank for banks, i.e. it offers services to banks, savings and loans institutions, credit unions. These services are similar to those that ordinary banks provide for their individual and business customers: the equivalent of checking accounts; loans; coin and currency; safekeeping services; and payment services (such as the processing of checks and the making of recurring and nonrecurring small- and large-dollar payments) that help banks, and ultimately their customers, buy and sell goods, services and securities.

Commercial banks are members of the Federal Reserve System and hold stock in their District's Reserve Bank. The amount of stock a member bank must own is equal to 3% of its combined capital and surplus. However, holding stock in a Federal Reserve Bank is not like owning stock in a publicly traded company. These stocks cannot be sold or traded, and member banks do not control the Federal Reserve Bank as a result of owning this stock. From the profits of the Regional Bank of which it is a member, a member bank receives a dividend equal to 6% of its purchased stock.[5] The remainder of the regional Federal Reserve Banks' profits is given over to the United States Treasury Department. For example, in 2015, the Federal Reserve Banks made a profit of $100.2 billion and distributed $2.5 billion in dividends to member banks as well as returning $97.7 billion to the U.S. Treasury.[6]

The Federal Open Market Committee (FOMC) is the body of the Federal Reserve System that sets national monetary policy. It consists of 12 voting members—the 7 members of the Board of Governors; the president of the Federal Reserve Bank of New York (permanent member); and 4 of the remaining 11 Reserve Bank presidents, who serve one-year terms on a rotating basis. The FOMC oversees and sets policy on open market operations, the principal tool of national monetary policy. These operations affect the federal funds rate, which in turn affect the amount of Federal Reserve balances available to depository institutions, and thereby influencing overall monetary and credit conditions. The FOMC also directs operations undertaken by the Federal Reserve in foreign exchange markets. The FOMC must reach consensus on all decisions. The FOMC generally meets eight times a year in telephone consultations and other meetings are held when needed.

The Federal Open Market Committee (FOMC):
- consists of 12 voting members and consensus must be reached on all decisions;
- sets national monetary policy;
- oversees and sets policy on open market operations;
- directs operations undertaken by the Federal Reserve in foreign exchange markets.

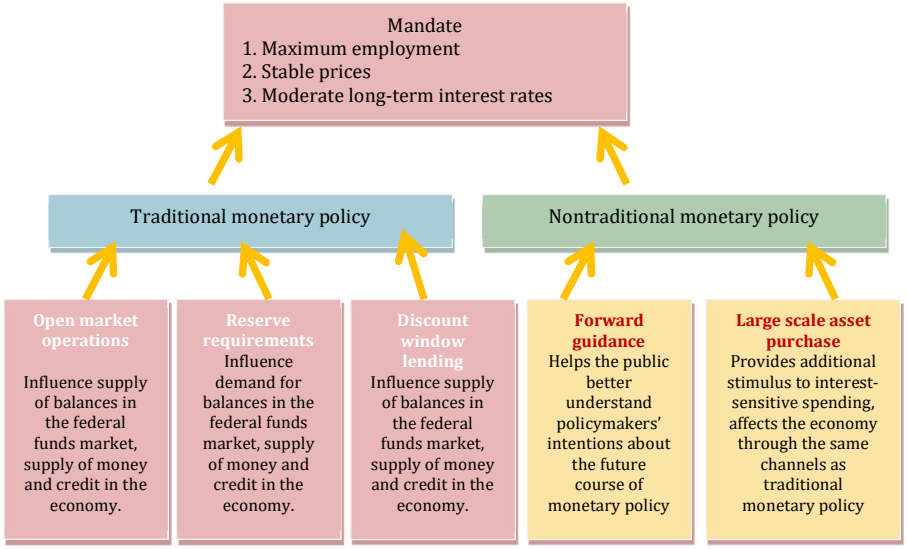
[5] "FAQ – Who owns the Federal Reserve?". Federal Reserve website. Retrieved April. 2020.
[6] Press Release – Federal Reserve Board announces Reserve Bank income and expense data and transfers to the Treasury for 2015". *Board of Governors of the Federal Reserve System*. January 11, 2016. Retrieved April. 2020.

Monetary Policy

In the Federal Reserve Act it is stated that the Board of Governors and the FOMC should conduct monetary policy "so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." These three goals are considered as main preconditions for well-functioning economy for both, consumers and businesses. FOMC policymakers set monetary policy, which is consistent with achieving the Federal Reserve's statutory mandate of maximum employment, stable prices, and moderate long-term interest rates. Monetary policy affects the U.S. economy primarily through its influence on the availability and cost of money and credit in the economy. As conditions in the economy change, the FOMC adjusts monetary policy accordingly, typically by raising or lowering its target for the federal funds rate, i.e. the interest rate for overnight borrowing between banks. Lowering the target rate represents an "easing" of monetary policy, while increasing the target rate is a "tightening" of policy. To carry out monetary policy, the Federal Reserve employs two groups of traditional monetary policy tools and nontraditional monetary policy tools (Figure 8).

Federal Reserve's goals are:
- maximum employment,
- stable prices, and
- moderate long-term interest rates.

Figure 8 Federal Reserve's Statutory Mandate



Source: Board of Governors (2016), *The Federal Reserve System: Purposes & Functions*, Federal Reserve System Publication, 10th Edition, Washington D.C.

1. Open Market Operations. Open market operations consist of purchases or sales—temporary or permanent—of U.S. government and agency securities in the open market. Over the years, the Federal Reserve has relied upon open market operations to manage conditions in the federal funds market and to keep the federal funds rate at the target level set by the FOMC. The Open Market Desk (the Desk) at the Federal Reserve Bank of New York conducts open market operations by buying or selling securities issued or guaranteed by the U.S. Treasury or U.S. government agencies. For example, when the FOMC sets monetary policy that requires adding liquidity to the banking system to increase

Open market operations consist of purchases or sales—temporary or permanent—of U.S. government and agency securities in the open market.

economic activity, it instructs the Federal Reserve Bank of New York's (FRBNY) Open Market Desk to purchase U.S. Treasury securities in the open market. This operation directly affects the volume of reserves in the banking system and thus the level of the federal funds rate. In turn, the federal funds rate affects monetary and financial conditions, which ultimately influence employment, the overall level of prices and long term interest rates.

2. Reserve requirements present the percentage of deposits that depository institutions must hold as reserves in the form of vault cash or deposits with Federal Reserve Banks. The percentage of reserves is determined by the Board of Governors (within ranges specified by the Federal Reserve Act). Since late 2008, the Federal Reserve has paid interest on banks' required reserve balances and excess balances. The payment of interest on balances maintained to satisfy reserve balance requirements is intended to eliminate or reduce the implicit tax that reserve requirements impose on depository institutions. The interest rate paid on excess balances gives the Federal Reserve an additional tool for the conduct of monetary policy. By raising or lowering the interest rate paid on excess reserves (the IOER rate), the Federal Reserve can change the attractiveness of holding excess balances and thus affect the federal funds rate and other short-term market interest rates.

Reserve requirements present the percentage of deposits that depository institutions must hold as reserves in the form of vault cash or deposits with Federal Reserve Banks.

3. Discount Window Lending as monetary policy tool addresses pressures in the federal funds market by providing credit to all depository institutions. Initially, the Federal Reserve lent by "discounting" short-term commercial loans owned by banks. Actually, the Federal Reserve was making loans by purchasing the commercial loans from depository institutions for less than their face value (the difference between purchase price and the face value presents the discount) representing the interest the Federal Reserve would have received on its loan. Originally, these loans were made at a special lending window at each of the Reserve Banks called the discount window. For that reason, over time, Federal Reserve lending to depository institutions became known as "discount window lending." Today, loans by the Federal Reserve are made in the form of advances, i.e. loans backed by collateral pledged by the borrower, rather than as discounts, but the term "discount window" is still used to refer to the facilities through which the Federal Reserve lends to depository institutions. Depository institutions have access to three types of discount window lending—primary credit, secondary credit and seasonal credit. **Primary credit** is available to sound depository institutions on a very short-term basis, typically overnight, but at times for longer periods. Secondary credit may be available to depository institutions that are eligible to borrow from the discount window, but that do not meet the criteria for primary credit. **Secondary credit** is typically overnight credit and the financial condition of secondary credit borrowers is generally less sound than the financial condition of primary credit borrowers. The rate on secondary credit has typically been 50 basis points above the primary credit rate, in order to compensate for the greater risk of credit loss, although the spread can vary as circumstances warrant. Seasonal credit is designed to help small depository institutions manage significant seasonal swings in their loans and deposits. **Seasonal credit** is available to depository institutions that can

Discount window lending is lending by Federal Reserve to depository institutions in the form of advances, i.e. loans backed by collateral pledged by the borrower.

Depository institutions have access to three types of discount window lending: primary credit, secondary credit and seasonal credit.

Primary credit is available to sound depository institutions on a very short-term basis, typically overnight, but at times for longer periods.

If depository institutions are not eligible for primary credit, secondary credit is available to them.
Secondary credit is typically overnight credit and the financial condition of secondary credit borrowers is generally less sound than the financial condition of primary credit borrowers.

demonstrate a clear pattern of recurring swings in funding needs throughout the year (for example DTI in agricultural or tourist areas). Since early 2003, interest rates for discount window loans have been set above the target for the federal funds rate. As a result, depository institutions have generally borrowed from the discount window in significant volume only when overall market conditions have tightened enough to push the federal funds rate above the discount rate.

Seasonal credit is available only to depository institutions that can demonstrate clear pattern of seasonal swings in funding.

The non-traditional monetary policy tools, forward guidance and large scale asset programs aim at influencing expectations about the future course of monetary policy. With forward guidance FOMC can influence financial conditions by communicating how it intends to adjust policy in the future. During the financial crisis, when the federal funds rate was effectively at its lower bound, this form of communication has been an important signal to the public of the FOMC's policy intentions.

The non-traditional monetary policy tools, forward guidance and large-scale asset programs aim at influencing expectations about the future course of monetary policy.

Large-scale asset programs or Quantitative Easing (QE) presents unconventional monetary policy tool where, the central bank buys government bonds or other financial assets from commercial banks and other financial institutions in order to inject money into the economy and to expand economic activity. This tool can also be used as last resort for stimulating the economy. If a recession or depression continues even when the central bank has lowered interest rates to nearly zero by conducting expansive monetary policy (the central bank can no longer lower interest rates, a situation known as the liquidity trap), then the central bank may implement quantitative easing by buying financial assets without reference to interest rates. A central bank enacts quantitative easing by purchasing, regardless of interest rates, a predetermined quantity of bonds or other financial assets on financial markets from private financial institutions.[7] This action increases the excess reserves that banks hold. The goal of this policy is to ease financial conditions, increase market liquidity and facilitate an expansion of private bank lending.

Large-scale asset programs or Quantitative Easing (QE) are unconventional monetary policy tool, where central bank buys government bonds or other financial assets from commercial banks and other financial institutions in order to inject money into the economy and to expand economic activity.
The goal of this policy is to ease financial conditions, increase market liquidity, and facilitate an expansion of private bank lending.

According to the International Monetary Fund, the US Federal Reserve System, and various other economists, large-scale asset purchase programs undertaken following the global financial crisis of 2007–08 mitigated some of the economic problems after the crisis. It has also been used by several major central banks (Federal Reserve, European Central Bank and Bank of England) in response to the COVID-19 pandemic.

Banking Supervision in the USA

Banking supervision in the United States is very diverse and fragmented. Unlike most countries that have one bank regulator, the USA at the federal level, has three regulatory and supervisory bodies:

The USA at the federal level, has three regulatory and supervisory bodies.

- Comptroller of the Currency (OCC);
- Federal Reserve System (Federal Reserve) and
- Federal Deposit Insurance Corporation (FDIC).

[7] Bullard, James (January 2010). *"Quantitative Easing — Uncharted Waters for Monetary Policy"*. Federal Reserve Bank of St. Louis. Retrieved 26 July 2011.

The Office of the Comptroller of the Currency (OCC) charters, regulates and supervises all national banks, federal savings associations and federal branches and agencies of foreign banks. The OCC is an independent bureau of the Department of the Treasury, set up in 1863 to regulate all banks chartered by the Federal Reserve government. The OCC conducts on-site reviews of national banks and provides on-going supervision of bank operations. This agency is responsible for:

- issuing banking rules and regulations and providing legal interpretations and guidance on banks' corporate decisions that govern their practices.
- visiting and examining the banks it oversees.
- evaluating applications for new bank charters or branches; for other proposed changes in the corporate structure of banks or their activities; and from foreign banks that wish to operate in the United States under an OCC charter.
- imposing corrective measures, when necessary, on OCC-governed banks that do not comply with laws and regulations or that otherwise engage in unsafe or unsound practices. The agency can remove officers and directors, negotiate agreements to change banking practices and issue cease and desist orders.
- protecting consumers by making sure banks give fair access and equal treatment to customers and comply with consumer banking laws.

By mid 2020, the OCC was responsible for regulating more than 1000 banks in the United States.

OCC:
- issues rules and regulations and guidance for banks' decisions and activities;
- conducts on-site supervisions
- evaluates all applications for opening new banks or bank branches; for changes in banks' corporate structures and from foreign banks that wish to operate in the USA;
- imposes corrective measures, removes officers and directors, negotiates agreements to change banking practices and issues cease and desist orders;
- protects consumers.

Federal Reserve System is also responsible for regulating and supervising various types of banks. When overseeing the institutions under its authority, the Federal Reserve takes microprudential and macroprudential approach. Its primarily supervision objective is to promote their safe and sound functioning, as well as their compliance with all applicable laws and regulations that govern their activities. The microprudential approach seeks to ensure the safety and soundness of individual institutions and involves in-depth examinations and inspections of the structure, operations and compliance of individual entities regulated by the Federal Reserve. On the other hand, the macroprudential approach focuses on the soundness and resilience of the financial system as a whole and addresses how the actions of one institution, or set of institutions, can impact other institutions and the U.S. economic and financial system overall. These two approaches to supervision are complementary.

Federal Reserve System is responsible for regulating and supervising various types of banks.

The supervisory process entails both on-site examinations and inspections and off-site scrutiny and monitoring.

The evaluation and inspection on micro level includes an assessment of an organization's risk-management systems, financial condition and compliance with applicable laws and regulations. The supervisory process entails both on-site examinations and inspections and off-site scrutiny and monitoring. After the examination, each state member bank receives a composite rating, which reflects the Federal Reserve's assessment and rating of the bank's capital adequacy, asset quality, management, earnings, liquidity and sensitivity to market risk (CAMELS). Ratings range from "1" to "5," with "1" being the best. The CAMELS supervisory

After the examination, each state member bank receives a composite rating, which reflects the Federal Reserve's assessment and rating of the bank's capital adequacy, asset quality, management, earnings, liquidity and sensitivity to market risk (CAMELS).

rating system for banks and other depository institutions is a tool for classifying banks' overall condition and it is applied to every bank and credit union in the U.S.

The Federal Deposit Insurance Corporation (FDIC) is the main federal regulator of banks that are chartered by the states that do not join the Federal Reserve System. In addition, the FDIC is the back-up supervisor for the remaining insured banks and savings associations. FDIC was created in 1933 as a response to the thousands of bank failures that happened during 1920's and 1930's. It is an independent agency created by the U.S. Congress to maintain stability and public confidence in the nation's financial system. The FDIC insures deposits; examines and supervises financial institutions for safety, soundness, and consumer protection; makes large and complex financial institutions resolvable; and manages receiverships. As an independent agency it is funded by premiums paid by banks and saving associations for deposit insurance coverage and from earnings on investments in the US Treasury securities. The FDIC directly supervises and examines more than 5,000 banks and savings associations for operational safety and soundness.

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2.2. Banking in the European Union

During the 1980's European financial and banking sectors were mainly domestically focused with relatively high levels of controls where regulatory agencies maintained protected banking environment from foreign influences and owners of major banks. However, during the 1990's and at the beginning of the new millennium European banking markets have experienced significant market changes. Globalization of financial markets, deregulation, financial innovations and progressed technology has implied increased competitiveness in European banking sectors. For the purpose of assisting banks in this changing environment, financial authorities across the European Union had become more than aware of the importance of financial deregulation and creating a single market. The European Union (45th Report, 2003) clarifies the meaning of a single market in financial services for providers and consumers, which "*means that a financial services provider authorised to provide financial services in one Member State is able to offer the same services throughout the EU competing on an equal basis within a regulatory framework that is consistent across the Union. On the other side, the consumer would have access to a wider range of more competitively priced products and would be able to shop with confidence and safety in the market place.*" The major obstacle for creating this market was that countries-members still had their own national currencies and monetary policy. As part of the EU's on-going single market program, the introduction of a single currency was viewed as a central element in the harmonization process. The further step was the introduction of Economic and Monetary Union (EMU) in 1999, which actually presented the third stage in creating monetary union set out in the Maastricht Treaty on European Union. EMU involves the coordination of economic and fiscal policies, a common monetary policy, and a common currency, the euro in member states.

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The major obstacle for creating this market was that countries-members still had their own national currencies and monetary policy.

The harmonization process of regulative in EU members aimed at removing barriers for the creation of single European financial marketplace, followed by deregulation, technology advancement and increased competition induced industry concentration. The number of banks has fallen substantially (by national or cross-border M&As) which led to having dominant positions owned by several banks.

Banking in Germany

The German financial system is often described as bank-based, where the key source of firms financing are bank loans. The banking system of Germany is dominated by universal banks engaging in various banking and non-banking activities. Depending on their legal form, universal banks are further classified into commercial, savings, mutual cooperative and other banks.

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Commercial banks represent the largest segment by assets, accounting for 40% of total assets in the banking system. An important feature of the commercial banks is that they compete keenly not only with banks in other sectors of the industry, but also among themselves. They play a key role for the German export economy, i.e. they are involved in 88% of German exports (European Banking Federation, 2019).

Savings banks are banks which are owned by the federal, state or local municipalities, whereas mutual cooperative and commercial banks are privately owned. As of September, 2019, there are 385 savings banks in Germany. They are organized as public-law corporations with local governments as their guarantors/owners. Their business is limited to the area controlled by their local government owners. Other than this regional focus, their business does not differ in any way from that of the private commercial banks. As a result of the so-called regional principle, savings banks do not compete with one another.

Cooperative banks are owned by their members, who are usually their depositors and borrowers as well. By definition and legal framework, cooperative banks have a mandate to support their members, who represent about half of their customers. However, cooperative banks also provide banking services to the general public. Like the savings banks, cooperative banks have a regional focus and are subject to the regional principle. Today, the cooperative sector consists of 875 cooperative banks and one central cooperative bank (DZ Bank AG).

The central bank, the Bundesbank, was founded in 1875, but gained a monopoly on issuing notes in 1924. The organization of the Bundesbank was changed several times, i.e. until 1948 it was unique, and then it was organized as a system of central banks, and from 1957 it is unique again. It was privately owned until 1945 when it was nationalized. Due to the length of the mandate of governor and vice governor, tradition and proper definition of the role of the central bank, it has been autonomous for decades in deciding and conducting monetary policy. Following its accession to the European Monetary Union and the establishment of the European Central Bank (ECB), the central bank

transferred its powers to the supranational body, the ECB, including conducting monetary policy and issuing money.

Banking in France

The banking sector is one of France's six main economic assets, according to the OECD (EBF, 2019). As of January 2019, the French banking industry numbered 340 banks. According to the Financial Stability Board, four French banks are among the eight Euro area Global Systemically Important Banks (G-SIBs). The central bank of France is the Banque de France, founded in 1800 and headquartered in Paris. It got the monopoly for issuing money in 1848 and it was nationalized in 1945. Organized as a single unit, its missions, defined by its statuses, are to drive the French monetary strategy, ensure financial stability, and provide services to households, small and medium businesses enterprises. Also, France is in the Eurozone, thus, it uses the Euro as the national currency.

The French banking system is comprised of all types of banks, starting from national high street banks, local financial institutions, international banks, internet banks and finally, mobile banks. More precise, one can differentiate between several types of banks:
- credit institutions,
- state-owned banks,
- mutual or co-operative banks and investment banks.

The French banking system is comprised of all types of banks, starting from national high street banks, local financial institutions, international banks, internet banks and finally, mobile banks. More precise, one can differentiate among several types of banks: credit institutions, state-owned banks, mutual or co-operative banks and investment banks.

Credit institutions, in addition to providing banking services, can also provide investment services, and in this case, these institutions are referred as universal banks. However, certain financial activities considered too risky cannot be carried out by credit institutions, including "universal banks", and must therefore be carried out through a separate and dedicated subsidiary. In other words, along with the core banking and modern banking activities, credit institutions may take participations in companies and carry out non-banking activities of limited importance in relation to all the usual activities of the institution and must not prevent, restrict or distort competition in the market. The annual amount of the income resulting from these activities must not exceed 10% of the net banking income.

State-owned banks, while performing banking activities, may also serve a general interest and economic development purposes. The main state-owned banks are:

- Caisse des Dépôts et Consignations. Under the Monetary and Financial Code, the Caisse des Dépôts is a public group serving a general interest and economic development purposes. The Caisse des Dépôts plays a major role on the French banking scene.
- Trésor public. This is entrusted with a range of responsibilities with regard to public finances, including the collection of various voluntary and mandatory deposits (such as taxes) and the execution of the state budget, together with regulation prerogatives with regard to banking and financial issues.
- Banque de France, central bank.

Mutual or co-operative banks, perform universal, commercial and retail banking activities. The main ones are BNP Paribas, Crédit Agricole, Société Générale and Natixis.

Investment banks include banks that specialize in the issuance and placement of securities (either debt or equity securities), capital market transactions, mergers and acquisitions. No specific license other than a credit institution license and/or an investment services license is required for conducting investment banking services or private banking services.

The lead bank supervisor in France is **the Prudential and Resolution Control Authority (ACPR)**. ACPR is an independent administrative authority without legal personality, operating under the auspices of the French central bank (Banque de France). Its stated purposes include supervision and control, preservation of the stability of the financial system and protection of clients, insured participants and beneficiaries who are subject to its control.

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In 2018, there were 266 banks operating in France. Physical banking is still preferred over the expanding digital banking (37 bank branches per 100000 citizens). According to Global Finance Magazine (2018), there are 10 French banks that position in the top 50 safest banks in Europe. For example, Caisse Des Depots et Consignations is ranked 10th in the aforementioned list. During 2018, the French banking sector employed 362.800 people. France has a stable and organized banking system. The banks are reliable and efficient, as it is expected from one of the leaders of the European Union.

Banking in Italy

The banking sector is among the primary strong points of the Italian economy. Ten years from the Global Financial crisis and much has changed: credit risk is decreasing, capitalization is rising, restructuring and consolidation are going on, and profitability is recovering. The health of Italian banks is also reflected in the fundamental role they continue to play in favor of households and firms. Lending to the private sector has been expanding since the end of 2016. Latest figures, as of April 2019, show that total loans to households and non-financial firms continue to grow, increasing by around 0.9% on an annual basis (EBF, 2019). Loans to households continued to increase at a robust pace, with an annual growth rate close to 2.6%, driven by loans for house purchase due to the favorable conditions in the real estate market, which is supported by the improvement in the Italian consumer confidence index, low interest rates and lower house prices.

The Italian banking industry consists of universal and co-operative banks (BCCs and BPs). While BCCs are characterized as local banks and must carry out banking activity for their members, BPs are more business-orientated.

BI is both the Italian central bank and the lead supervisory authority entitled, together with the Ministry of Economy and Finance (MEF) and the Interministerial Committee for Credit and Saving (CICR),

The Italian banking industry consists of universal and co-operative banks (BCCs and BPs). Except for co-operative banks, which are subject to a specific regulation, Italian legislation does not currently provide for different types of banks such as retail, investment and private banks, as in other jurisdictions. While BCCs are still characterized as local banks and must carry out banking activity for their members, BPs seem to have lost their original connection to the local geographic area where they were established and are

more business-orientated, in part due to their greater autonomy to dispose of profits compared to BCCs.

The Bank of Italy (BI) was founded in 1893 by merging of 6 banks. It is organized as a single institution and its ownership is structured of credit institutions, social funds and insurance companies. BI is both the Italian central bank and the lead supervisory authority entitled, together with the Ministry of Economy and Finance (MEF) and the Interministerial Committee for Credit and Saving (CICR), to ensure the sound and prudent management of banks and financial intermediaries, the overall stability, competitiveness and efficiency of the financial system and compliance with applicable rules. These supervisory authorities exercise the powers granted under EU rules.

European Central Bank

The European Central Bank (ECB) is part of a larger system that is the European System of Central Banks (ESCB). ECB is the central bank for the euro and administers monetary policy within the Eurozone, which comprises 19 member states of the European Union (Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Portugal, Slovakia, Slovenia, Spain). It is one of the largest monetary areas in the world, one of the world's most important central banks and serves as one of the seven institutions of the European Union. The ECB or Eurosystem was consciously modeled on the FED, so it is not surprising that their structures are similar. Each nation is like a Federal Reserve district headed by its national central bank (NCB). At its headquarters in Frankfurt sits the ECB's Executive Board, the structural equivalent of the Fed's Board of Governors, and the Governing Council, which like the Fed's FOMC makes monetary policy decisions. The ECB is more decentralized than the FED, however, because the NCBs control their own budgets and conduct their own open market operations. Also unlike the FED, the ECB does not regulate financial institutions, a task left to each individual country's government. The two central banks, of course, also differ in many matters of detail.

ECB:
- is the central bank for the euro and administers monetary policy within the Eurozone, which comprises 19 member states of the European Union;
- is part of a larger system that is the European System of Central Banks (ESCB);
- is one of the largest monetary areas in the world;
- is one of the world's most important central banks;
- serves as one of the seven institutions of the European Union;
- consciously modeled on the FED, but is more decentralized.

The origin of the ECB can be traced back to the recent history of the Economic and Monetary Union. In 1994 the EMI (European Monetary Institute) was created as part of the second stage of the development of European Monetary Union, and was supposed to be the precursor to the ECB. European Monetary Institute was responsible for strengthening the cooperation and coordination of the monetary policies of the central banks members of the EMI. It was also involved in activities for establishing the European System of Central Banks and therefore in conducting single monetary policy and introduction to new currency. On 25 May 1998 the governments of the then 11 participating Member States appointed the president, the vice-president and the four other members of the Executive Board of the ECB. Their appointment took effect from 1 June 1998 and marked the establishment of the ECB. The ECB and the NCBs of all EU Member States, regardless of whether they have adopted the Euro or not, constitute the European System of Central Banks or ESCB. The Eurosystem instead comprises

the ECB and the NCBs of those countries that have adopted the Euro. The term Eurosystem was chosen by the governing council of the ECB to describe the arrangements by which the ESCB carries out its tasks within the Eurozone. As long as there are EU Member States that have not yet adopted the Euro, this distinction between the Eurosystem and the ESCB will need to be made. The National Central Banks of the new EU countries are now members of the general counsel of the EC, but they will not join the main decision-making body – the governing council – until they adopt the Euro.

The primary objective of the ECB is to maintain price stability within the Eurozone. Its basic tasks are to set and implement the monetary policy for the Eurozone, to conduct foreign exchange operations, to take care of the foreign reserves of the European System of Central Banks and operation of the financial market infrastructure. The ECB has the exclusive right to authorize the issuance of euro banknotes. Member states can issue euro coins, but the amount must be authorized by the ECB beforehand. The ECB, also, carries out specific tasks in the areas of banking supervision, statistics, macroprudential policy and financial stability as well as international and European cooperation.

There are four decision making bodies of the ECB responsible for executing its functions: the executive board, the governing council, the general council and the supervisory board.

The **executive board** consists of the president of the ECB, the vice-president and four other members, appointed by the heads of state or government of the Eurozone countries. The main responsibilities of the executive council are:

- to prepare Governing Council meetings;
- to implement monetary policy for the Eurozone in accordance with the guidelines specified and decisions taken by the Governing Council. In so doing, it gives the necessary instructions to the euro area NCBs;
- to manage the day-to-day business of the ECB;
- to exercise certain powers delegated to it by the Governing Council, and these include some of a regulatory nature.

The governing council is the main decision body of the ECB and consists of the six members of the executive board plus the governors of all the NCBs from the 19 Eurozone countries. The council's main responsibilities are:

- to adopt the guidelines and take the decisions necessary to ensure the performance of the tasks entrusted to the ECB and the Eurosystem;
- to formulate monetary policy for the euro area. This includes decisions relating to monetary objectives, key interest rates, the supply of reserves in the Eurosystem, and the establishment of guidelines for the implementation of those decisions.
- in the context of the ECB's new responsibilities related to banking supervision, to adopt decisions relating to the general framework under which supervisory decisions are taken, and to adopt the complete draft decisions proposed by the Supervisory Board under the non-objection procedure.

The primary objective of the ECB is to maintain price stability within the Eurozone.

ECB tasks are:
- setting and implementing monetary policy for the Eurozone;
- conducting foreign exchange operations;
- taking care of the foreign reserves of ESCB and operation of the financial market infrastructure;
- authorizing the issuance of euro banknotes;
- specific in the area of macroprudential policy and financial stability as well as international and European cooperation.

There are four decision making bodies of the ECB responsible for executing its functions: the executive board, the governing council, the general council and the supervisory board.

For example, the governing Council of the ECB sets three key interest rates: the interest rate on the main refinancing operations, the rate on the deposit facility and the rate on the marginal lending facility. The rate on the deposit facility and the rate on the marginal lending facility define a corridor for the overnight interest rate at which banks lend to each other. The deposit facility rate acts as the floor of this corridor and the marginal lending facility acts as the ceiling.

The general council is a body dealing with transitional issues of euro adoption, for example, fixing the exchange rates of currencies being replaced by the euro (continuing the tasks of the former EMI). It will continue to exist until all EU member states adopt the euro, at which point it will be dissolved. It is composed of the President and vice-president together with the governors of all of the EU's national central banks. The role of the general council is to contribute to the ECB's advisory and co-ordination work and to help prepare for the future enlargement of the Euroone. **The supervisory board** meets every three weeks to discuss, plan and carry out the ECB's supervisory tasks. It proposes draft decisions to the Governing Council under the non-objection procedure. It is composed of Chair (appointed for a non-renewable term of five years), Vice-Chair (chosen from among the members of the ECB's Executive Board) four ECB representatives and representatives of national supervisors.

Monetary Policy

As already mentioned before, the primary objective of the Eurosystem is to maintain the price stability. By conducting successful monetary policy, which contributes positively to high economic growth, employment and price stability in Europe, ECB uses a set of monetary instruments:

Open market operations (OMOs). OMOs can be classified into four main types: main refinancing operations (MROs), longer term refinancing options (LTROs), fine tuning operations and structural operations. MROs consist of one-week liquidity-providing operations in euro. MROs serve to steer short-term interest rates, to manage the liquidity situation and to signal the monetary policy stance in the euro area, while LTROs provide additional, longer-term refinancing to the financial sector. Longer-term refinancing operations are liquidity-providing reverse transactions which have a maturity up to three months. MROs and LROs are conducted in a regular basis according to the indicative calendar, publicly announced on the web page of ECB. The Eurosystem may also conduct non-regular longer-term operations, with a maturity of more than three months and such operations can be with maturities of up to 48 months (the longest being the targeted longer-term refinancing operations, or TLTROs). Fine-tuning operations can be executed on an ad hoc basis to manage the liquidity situation in the market and to steer interest rates. In particular, they are aimed at smoothing the effects on interest rates caused by unexpected liquidity fluctuations. Fine-tuning operations are primarily executed as reverse transactions, but may also take the form of foreign exchange swaps or the collection of fixed-term deposits. Structural operations can be carried out by the Eurosystem through reverse transactions, outright transactions and the issuance of debt certificates. These operations are executed whenever the ECB wishes to adjust the structural

By conducting successful monetary policy, ECB uses a set of monetary instruments:
1. Open market operations (OMOs);
2. Standing facilities;
3. Minimum reserve requirements for credit institutions.

OMOs can be classified into four main types:
1. MROs consist of one-week liquidity-providing operations in euro. MROs serve to steer short-term interest rates, to manage the liquidity situation and to signal the monetary policy stance in the euro area.
2. LTROs are liquidity-providing reverse transactions which have a maturity up to three months and provide additional, longer-term refinancing to the financial sector.
3. Fine-tuning operations intend to manage the liquidity situation in the market and to steer interest rates. They are aimed at smoothing the effects on interest rates caused by unexpected liquidity fluctuations.
4. Structural operations are executed whenever the ECB wishes to adjust the structural position of the Eurosystem vis-à-vis the financial sector.

position of the Eurosystem vis-à-vis the financial sector (on a regular or non-regular basis).

Standing facilities. The Eurosystem offers credit institutions two standing facilities: marginal lending facility in order to obtain overnight liquidity from the central bank, against the presentation of sufficient eligible assets and deposit facility in order to make overnight deposits with the central bank.

Minimum reserve requirements for credit institutions. The ECB requires credit institutions established in the euro area to hold deposits on accounts with their national central bank. These are called "minimum" or "required" reserves.

In order to achieve its primary objectives, the ECB has adopted a specific strategy. The ECB has defined price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. This strategy includes analytical framework for risk assessment of price stability and it is based in two pillars of economic and monetary analysis. These two pillars form the basis for the Governing Council's to make final decision on the type of monetary policy which would be undertaken.

Independence of European Central Bank

ECB is the most independent central bank in the world and its independence is based on four key principles:
1. Functional and legal independence;
2. Personal independence;
3. Financial independence;
4. Political independence.

The founding model of the ECB, as advocated by the German government, is explained in an article published in 1983 by two economists, Robert Barro and David Gordon[8]. According to them, the best way to combat the inflationary bias is for central banks to be credible. This credibility would be valid if the central banks were independent, so that decisions are not "contaminated" by politics. For economists, central banks should then have only one objective: to maintain a low inflation rate. ECB is independent from the Parliaments and Governments of the member states of the EU, and in order to prevent political influence from its decisions is responsible to the European Parliament. The European Central Bank is often considered as the "most independent central bank in the world". In practice, the ECB's independence is based on four key principles:

1. Functional and legal independence relates to the fact that the ECB has all required competences to achieve its price stability and owns legal personality independently from other EU institutions.

2. Personal independence is seen through the mandate of ECB board members, which is purposefully very long (8 years) and Governors of national central banks have a minimum renewable term of office of five years, and immunity that board members have from judicial proceedings.

3. Financial independence. The ECB is the only body within the EU whose statute guarantees budgetary independence through its own resources and income. The ECB uses its own profits generated by its monetary policy operations and cannot be technically insolvent. The ECB's financial independence reinforces its political independence. ECB has its own budget and capital, i.e. as of 01.02.2020 ECB capital is about €11 billion, which is held by the national central

[8] Barro, R., Gordon, D. (1983). "Rules, Discretion and Reputation in a Model of Monetary Policy". Cambridge, MA

banks of the member states as shareholders. The NCBs' shares in this capital are calculated using a capital key which reflects the respective member's share in the total population and gross domestic product of the EU. The ECB adjusts the shares every five years and whenever a new country joins the EU. The EU's eight non-euro area NCBs are required to contribute to the operational costs incurred by the ECB in relation to their participation in the European System of Central Banks by paying up a small percentage of their share in the ECB's subscribed capital. The ECB does not require external financing and symmetrically is prohibited from direct financing to public institutions.

4. Political independence. The Community institutions and bodies and the governments of the member states may not seek to influence the members of the decision-making bodies of the ECB or of the NCBs in the performance of their tasks. Symmetrically, EU institutions and national governments are bound by the treaties to respect the ECB's independence.

In general terms, this means that the Eurosystem tasks and policies can be discussed, designed, decided and implemented in full autonomy, without pressure or need for instructions from any external body.

European Banking Supervision

The recent global financial crisis has shown that problems in the financial sector can be easily spread in a monetary union. The lack of coordination between regulatory bodies and insufficient banking supervision impaired the trust in the European Banking Sector. As a response to the financial crisis, the EU Council and the European Parliament entrusted the ECB with supervisory tasks. The ECB acquired these tasks in addition to its monetary policy function. European banking supervision aims to contribute to the safety and soundness of banks and other depository institutions and the stability of the financial system by ensuring that banking supervision across the Eurozone is of a high standard and is consistently applied to all banks. The role of the ECB in banking supervision is to establish a common approach to day-to-day supervision, to take harmonized supervisory actions and corrective measures and to ensure consistent application of regulations and supervisory policies. Actually, the ECB in cooperation with the national supervisors is responsible for ensuring European banking supervision is effective and consistent.

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ECB in cooperation with the national supervisors is responsible for ensuring European banking supervision is effective and consistent.

In practice, ECB directly supervises significant and less significant banks (upon a decision, not regularly) from all euro countries. EU countries that have not yet adopted the euro as their currency have a choice to participate. When conducting the supervision, ECB:

- conducts supervisory reviews, on-site inspections and investigations
- grants or withdraws banking licenses
- assesses banks' acquisition and disposal of qualifying holdings
- ensures compliance with EU prudential rules
- sets higher capital requirements ("buffers") in order to counter any financial risks

The ECB carries out its supervisory tasks within the Single Supervisory Mechanism (SSM), which also refers to the system of banking supervision in Europe. It comprises the ECB and the national supervisory authorities of the participating countries. Its main objectives are: ensuring safety and soundness of the European banking system, increasing financial integration and stability and ensuring consistent supervision.

To prevent conflicts of interest between the ECB's monetary policy and supervisory tasks, the ECB has to ensure a separation so that each function is exercised in accordance with its applicable objectives. The ECB has an independent Supervisory Board, which proposes draft supervisory decisions to the Governing Council. The Governing Council may adopt or object to the proposed decisions but cannot in principle modify them. Moreover, the Governing Council's deliberations on supervisory matters are kept strictly apart from those on other ECB functions, with separate agendas and meetings.

3. Banking Systems in Emerging and Transition Economies

According to IMF, an emerging market economy is the economy of a developing nation that is becoming more engaged with global markets as it grows. Emerging market economies are countries that are transitioning from the "developing" phase to the "developed" phase, i.e. these countries (such as Brazil, Russia, India, China, South Africa) are transitioning from a low income, less developed, often pre-industrial economy (particularly agro-industrial one) towards a modern, industrial economy with a higher standard of living. On the other hand, there are the "transition economies" and this term is used to describe former communist countries that have been transforming their planned economies to market economies. For the purpose of this discussion, transition countries are considered emerging economies.

Emerging market economies are countries that are transitioning from the "developing" phase to the "developed" phase. These countries are transitioning from a low income, less developed, often pre-industrial economy (particularly agro industrial) towards a modern, industrial economy with a higher standard of living.

Transition economies are former communist countries that have been transforming their planned economies to market economies.

Emerging economies were characterized by a small number of large, state-owned credit institutions and high level of government control with restrictions on borrowing and lending rates and on domestic and foreign entry. For various reasons related to political influence, insufficient knowledge and expertise for banking and inefficiency, banks in transition economies were burdened with large volumes of non-performing loans (NPL). Instead of being financial intermediary and producing effective flow of funds, banks were a creator of crisis. For example, banks in Poland, Slovakia and Slovenia had the highest ratio of NPLs with an average of 28,3 per cent in 2003; on the other hand the Baltic Countries reported the lowest share on NPLs, with an average of only 3 per cent. In most of these emerging economies, a few large credit institutions existed, either family owned or state owned.

Banking systems in emerging economies were characterized with:
- small number of large, state-owned credit institutions;
- high level of government control with restrictions on borrowing and lending rates;
- high level of control on domestic and foreign entry;
- banks were burdened with large volumes of non-performing loans;
- banks were a creator of crisis.

Due to the changes in global financial markets, information technology and macroeconomic pressures, because of severe banking crisis, national regulators in emerging economies started with restructuring and improving the banking system during the 1990's. The restructuring comprised:

- financial deregulation for increasing economic efficiency, competition and innovation in the market;
- privatization of government-owned banks;
- market driven consolidation via mergers and acquisitions;
- increased knowledge and expertise within the bank personnel, so that they can be prepared for the new challenges of banking, increasing profitability and effective risk management;
- designing new banking legal framework, new accounting standards and principles and strengthening banking supervision;
- application of Basel Principles;
- constructing system of deposit safety and insurance in case of averse event - bank bankruptcy;

Financial deregulation was a precondition for improving banking performance in the relatively new changing market environment. It consists of liberalization of financial markets in order to allow financial institutions to compete more freely. The financial deregulation assumes using measures such as: removal of ceilings on deposit rates, removal of the prohibition of interest payments on current accounts, opening up to foreign competition, opening up to competition from non-bank financial intermediaries, removal of branch restrictions and credit ceilings. Commercial banks started offering non-traditional financial services such as insurance, securities business, pensions etc.

The financial deregulation assumes using measures such as: removal of ceilings on deposit rates, removal of the prohibition of interest payments on current accounts, opening up to foreign competition, opening up to competition from non-bank financial intermediaries, removal of branch restrictions and credit ceilings.

During the 1990's there was a widely held perception that the presence of state ownership in the banking sector could hinder financial development. Government-owned banks suffered from poor management skills and were forced to lend to the other under-performing, government-owned enterprises. Due to this, transition economies mark a number of bankruptcies of government-owned banks in the banking crises of the 1980's and the 1990's, which imposed vulnerable and weak banking sectors. As a response, the government of many emerging economies introduced reforms that led, among other things, to the gradual privatization of the banking sector. The privatization program was undertaken in the majority of transition economies, which included restructuring the banks to make them attractive potential acquisitions. Government-owned entities hold large share of non-performing loans, and the process of privatization, beside structural and managerial reforms (for example the introduction of efficient credit scoring systems and the improved corporate performance) also included removal of bad loans from their balance sheets.

Due to poor management and lending to under-performing, government-owned enterprises, state owned banks marked a number of bankruptcies during the 1980's and the 1990's,

As a result of the privatization process foreign ownership of banks occurred in the form of mergers and acquisitions (M&A). This market-driven consolidation is witnessed not only in emerging economies, but also in the United States and other industrialized countries. M&As are established through the purchase of existing enterprises, in these case banks. Typically, cross-border activity is a major feature of M&A in emerging markets. For example, during the mid-1990's to the early–mid-2000 over 50% of M&As in Latin America and Central and Eastern Europe was cross-border.

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changed the banking sector, by transferring fresh foreign capital, expertise, know – how and introduced financial innovations. All this led to creating a business environment where operational efficiency and technology implementation played key roles in shaping banks' strategies. The main arguments in support of foreign bank ownership are that foreign banks can bring capital, technical skills, and product innovation (in particular to emerging countries), enhancing competition and increased efficiency of the banking sector. On the other hand, the commonly mentioned criticism of foreign-owned banks is that they can destabilize the local banking sector by transmitting external shocks and threatening the survival of local banks by increasing competition. Today foreign-owned banks play a dominant role in many banking systems across the world and on average, foreign-owned banks account for 43% of total banking assets across all countries (Cull, Soledad, & Verrier, 2017).

The design and implementation of new banking legal framework was a challenging and significant activity for the whole process of banking system restructuring. It presented creating new foundation for effective financial system which would contribute to economy growth. The new banking regulative was directed towards creating independent national monetary authority and redesign of banking laws and regulative which would allow banks to compete freely and to act on the principles of profitability, safety and transparency. If looking at the side of the deregulation process, one would perceive the increased riskiness of banking. Banks rapidly adapted their portfolios and strategies to the new environment and their financial activities increasingly took place outside the traditional bank regulatory framework. Therefore, re-regulation was required, i.e. new restrictions and controls in response to market participants' efforts to circumvent existing regulations. In this context, even strongly market-oriented systems needed to strengthen supervision.

The design of new banking legal framework was directed towards creating independent national monetary authority and redesign of banking laws and regulative which would allow banks to compete freely and to act on the principles of profitability, safety and transparency.

Basel Committee on Banking Supervision as the primary global standard setter for the prudential regulation of banks provides a forum for regular cooperation on banking supervisory matters. The process of banking restructuring in emerging economies was not profound without the appropriate application of Basel Capital Agreement. The purpose of Basel Accords was to strengthen the stability of the banking sector, to improve the bank risk management, to establish transparency and market discipline and to reconcile working activities of banks with the current conditions on international financial markets.

The process of banking restructuring in emerging economies was not profound without the appropriate application of Basel Capital Agreement.

For the purpose of bringing back the confidence in the banking sector, the main issue in emerging countries is the safety of deposits. Therefore, emerging countries construct a system or national/state agency for deposit insurance up to certain amount in case of adverse event - bank bankruptcy.

Emerging countries construct a system or national/state agency for deposit insurance up to certain amount in case of adverse event - bank bankruptcy; for the purpose of bringing back the confidence in the banking sector.

During the restructuring process there are three key guiding principles:

- Strengthening the transparency and the role of international accounting standards, due to increasing confidence in the banking sector and reinforcing the position on international financial market;
- Application of international banking standards, such Basel Accords;

- Strengthening of the financial system, i.e. strengthening the banking system and financial markets is a precondition for economy growth and development.

The process of restructuring in emerging economies is still evident and it is especially significant for building a stable financial system.

3.1. Banking System in the Republic of North Macedonia

The banking system is the most important part of the overall financial system in the Republic of North Macedonia (RNM). As any other country in transition, RNM had to fulfill the task of restructuring and privatization of banking sector as a precondition for real sector development and the restructuring of commercial banks as a precondition for restructuring of real sector. This was a long term expensive process which carried many difficulties. Today, Macedonian banking sector is regulated according to the European standards and it is characterized by a continuous trend of increase in net profit of banks, increase in demand for loans as of the corporate sector as well as the household sector, high interest margin and liberalized approach for foreign investors. Macedonia's monetary independence was carried out in accordance with the adoption of legal acts in the field of monetary policy and foreign exchange policy on April 26, 1992. With that act, the new foundations of the banking system of Macedonia were laid. However, the restructuring of the Macedonian banking system began in 1995, following the write-off of old foreign currency savings, receivables and liabilities in relation to foreign loans and rehabilitation of the largest Macedonian bank - Stopanska Banka – Skopje.

Today, Macedonian banking sector is regulated according to the European standards and it is characterized by a continuous trend of increase in net profit of banks, increase in demand for loans as of the corporate sector as well as the household sector, high interest margin and liberalized approach for foreign investors.

With the constitution of the Central Bank in 1992 and the denar as a single Central payment unit, conditions for developing new relations in the banking system were created, based on the following principles (Trpeski, 2009):

- construction of new and comprehensive legislation;
- equal conditions for founding a bank, regardless of the status of the founder, its origin and the type of ownership;
- adapting banks to the conditions of the market economy;
- security and protection of savings deposits.

The main purpose of these principles was to create a sound banking system as a precondition for restoring citizens' confidence. In order to increase the competitiveness between the banks, the barriers to entry in the banking sector have been reduced through the introduction of more liberal bank regulation. This resulted in an increase in the number of banks, from 5 to 20 banks in 2001, one foreign bank subsidiary and 17 savings houses. The upward trend in the number of banks and savings banks lasted until 2011, with 17 banks and 8 saving houses. Today, due to the consolidation of the banking system there are 14 banking and 2 savings banks that are operating.

Structure of the Banking System

Macedonian banking system has universal character which is typical for banking systems in Europe. Its structure is consisted of: commercial banks, saving houses, central bank, development bank and fund for deposit insurance.

Commercial banks in RNM have a universal character, which refers to the types of products and services they offer to customers. Macedonian commercial banks offer variety of services such as core banking products and other financial services, such as insurance, services related to issuing securities, brokerage, advising etc. According to total assets hold, banks are classified into three groups: large, medium sized and small banks, and in the first quarter of 2020, large banks hold 75% of total assets in the banking sector.

The primary purpose of **savings banks** is accepting savings deposits, paying interest on those deposits and giving loans, and particularly working with households. They are depository institutions which are established as Joint Stock Company and need a permit from the National Bank for their operating. The legislation on the operation of banks also applies and to savings banks in the following areas: savings deposits, money laundering protection, internal audit, accounting and auditing, operations supervision, bankruptcy proceedings, liquidation proceedings, trade secrets, criminal offenses and misdemeanors (Trpeski, 2009).

Development bank by definition is a national or regional financial institution designed to provide medium- and long-term capital for productive investment, often accompanied by technical assistance, in under developed or countries in development. Macedonian development bank is the only national development bank that has a crucial role in providing credit in the form of higher risk loans, equity positions and risk guarantee instruments to private sector investments. It is founded with the special Law on Establishing the Macedonian Bank for Development Promotion on May 21st, 1998. DBNM is a joint stock company and the Republic of North Macedonia is a sole founder and 100% owner of the Bank. Operating like a provider of finance to small, medium-sized and export oriented firms DBNM is fulfilling its strategic goal, i.e. it boosts economy development. The main activities of DBNM are: financing the development of the Macedonian economy, financing of infrastructure, providing support to the development of small and medium-sized enterprises in the Republic of North Macedonia, stimulating exports and environment protection, providing export credit insurance of Macedonian products and services against commercial and political risks and supporting the regional development. The Bank operates under the directives and strategic policies of the Republic of North Macedonia and in accordance with the banking regulation. DBNM is controlled by the Ministry of Finance, but under the supervision of the Central Bank of the Republic of North Macedonia.

The Deposit Insurance Fund (DIF) is a specialized state-owned financial institution established to provide insurance of individual deposits in banks and savings banks in the country, as well as reimbursement of insured deposits in banks, branches of foreign banks and savings houses where a risk

Macedonian banking system has a universal character which is typical for banking systems in Europe. Its structure is consisted of: commercial banks, saving houses, central bank, development bank and fund for deposit insurance.

Commercial banks in RNM have a universal character and offer variety of services such as core banking products and other financial services, i.e. insurance, services related to issuing securities, brokerage, advising etc.

The primary purpose of savings banks is accepting savings deposits, paying interest on those deposits and giving loans, and particularly working with households.

Macedonian development bank is the only national development bank that provides a crucial role in providing credit in the form of higher risk loans, equity positions and risk guarantee instruments to private sector investments.

The Deposit Insurance Fund (DIF) is a specialized state-owned financial institution established to provide insurance of individual deposits in banks and savings banks in the country, as well as reimbursement of insured deposits in banks, branches of foreign banks and savings houses where a risk event has occurred.

event has occurred. The deposits of legal entities - small traders shall also be insured from the day North Macedonia becomes a full member of the European Union. Banks, branches of foreign banks and savings banks established in the Republic of North Macedonia are considered as members of the DIF. The DIF membership is mandatory and from its members it collects premium at a rate of 0,25% on annual level from the total deposits of individuals in each depositary institution. The funds that are paid to DIF by depository institutions as premiums for deposit insurance are considered irrevocable and DIF can invest these funds in:

1) Securities issued by the Republic of North Macedonia and the Central Bank of the Republic of North Macedonia with maturity up to twelve months from the moment of purchase.

2) Debt securities issued by foreign countries, central banks or public international financial institutions, rated by at least two internationally acknowledged credit risk assessment agencies, in one of the highest categories, up to the level of insured foreign currency deposits

According to the Law on Deposit Insurance Fund, the term deposit covers: deposits in national currency – denar and deposits in foreign currencies, certificates of deposits, transaction accounts, deposits related to credit cards and foreign currency inflows of individuals. The DIF can reimburse insured deposits, but no more than equivalent of 30.000 € for a deposit in a bank, branch of a foreign bank or a savings bank, calculated by the average currency rate published by the Central Bank of the Republic of North Macedonia on the day the decision to revoke the license of the bank, branch of a foreign bank or a savings house has been made.

The insurance of deposits in Macedonian banks, branches of foreign banks and savings houses, as a core mission of DIF, contributes to maintaining stability and confidence of the community in the banking and financial system of the country.

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3.2. National Bank of Republic of North Macedonia

The Republic of North Macedonia had inherited the banking system from the former Yugoslav Republic, owned by the state and with a structure that was compatible with planning economy. The Constitution of the Republic of Macedonia from 1991 designated the NBRM as an issuing bank, independent and responsible for the stability of the domestic currency, monetary policy and general liquidity of payments in the country and abroad. On April 26th, 1992, the Assembly adopted the Law on the National Bank of the Republic of Macedonia, as the first legal act regulating the operation of the central bank after the independence of Macedonia. The most significant turning point in the development of the NBRNM after the monetary independence of Macedonia was made with the adoption of the new Law on the NBRNM from January 2002 which increased all aspects of central bank's independence, i.e. its institutional, personal, functional and financial independence.

The National Bank of RNM is an independent, issuing and responsible bank for the stability of the domestic currency, monetary policy and general liquidity of payments in the country and abroad.

Today, the NBRNM is a modern central bank that does not work with non-financial legal entities, does not finance the public sector and independently formulates and implements monetary policy, and its main goal, set by the Law on the NBRNM, is to maintain price stability. Other objective of the National Bank, subordinated to the primary objective, is to contribute to the maintenance of a stable, competitive and market-based financial system.

NBRNM main goal is to maintain price stability and indirectly to contribute to the maintenance of a stable, competitive and market-based financial system.

By reading parts of the articles in the Law on the NBRNM one can conclude that the National Bank in the Republic of North Macedonia is an independent central bank and ready to enter the ECB with the acceptance of our country in the EU.

National Bank's functions are as follows:

- design and conduct the monetary policy;
- participate in the determination of the exchange rate regime;
- design and conduct the exchange rate policy;
- hold and manage foreign reserves;
- issue and manage the banknotes and coins of our country;
- record and monitor the international credit operations and prepare the balance of payments of our country;
- collect and produce statistics in pursuance of the tasks as required by the law;
- establish, promote, register and oversee sound, safe and efficient payment, settlement and clearing systems;
- regulate, license and supervise banks, savings houses, e-money issuers and other financial institutions as further specified in this Law or any other law;
- supervise the application of regulations that govern foreign currency operations, currency exchange operations, money transfer services and anti-money laundering systems and customer protection;
- act as fiscal agent to the Government of the Republic of North Macedonia;
- participate in international institutions and organizations concerning matters within its competence;
- organize trading and settlement of securities on the OTC (over the counter) markets and carry out any other activities related to the exercise of its tasks under the Law on the National Bank of the Republic of North Macedonia or any other law.

NBRNM is the only supervisory body responsible for licensing and supervision of banks and saving houses in the Republic of North Macedonia, according to the Law on the National Bank of the Republic of N. Macedonia and the Banking Law. The main objective of the supervisory function performed by the National Bank of the Republic of Macedonia is the maintenance of safe and sound banking system and protection of the depositors and other creditors that had invested their money in the banking system.

NBRNM is the only supervisory body responsible for licensing and supervision of banks and saving houses in the Republic of North Macedonia.

Management Bodies of the National Bank of the Republic of North Macedonia

The governing bodies of NBRNM are the National Bank Council and the Governor. The National Bank Council is comprised of nine members, out of whom one is the Governor and three Vice Governors, as executive members, and five nonexecutive members. Members of the National Bank Council are appointed for a seven year term that can be renewed. The Governor is appointed by the Parliament of the Republic of North Macedonia, on a proposal of the President of the Republic of North Macedonia. The Vice Governors are appointed by the Parliament of the Republic of North Macedonia, on a proposal of the Governor. The nonexecutive members of the Central Bank Council are appointed by the Parliament of the Republic of North Macedonia, on proposal of the Government of the Republic of North Macedonia, for a seven-year term. The National Bank Council is the governing body of NBRNM and its main task is to define and adopt the monetary and the exchange rate policy of the Central Bank.

The governing bodies of NBRNM are the National Bank Council and the Governor.

The Governor acts as main representative of the National Banks and has the following responsibilities:

1) implements the monetary and exchange rate policy and other policies in accordance with the internal rules and decisions of the Central Bank Council.
2) makes sure that the decisions of the Central Bank Council are being executed and the Central Bank management and operations are under control.
3) registers the payment, settlement and clearing systems, in accordance with the Law on Payment Operations;
4) decides upon the issuance of licenses and approvals to financial institutions and revokes the issued licenses and approvals, in accordance with Law;
5) enforces measures to banks and other financial institutions subject to supervision of the Central Bank, or to the payment, settlement and clearing systems, in accordance with this or the respective laws;

Monetary Policy

According to its set of functions and tasks, NBRNM designs and conducts the monetary policy. The NBRNM prepares a Monetary Development Projections on a year level, which has to be adopted by the National Bank Council. The most important long-term monetary target of NBRNM is price stability that implies low and stable inflation levels (see Figure 9).

Figure 9 Monetary policy targets and goals

Source: (https://www.nbrm.mk/sprovieduvanjie_na_monietarnata_politika-en.nspx)

As already discussed in Chapter II, long-term goal can only be attained by setting short-term operational targets. Operational targets are usually necessary to achieve a particular level of interest rates, commercial banks' reserves or exchange rates. These operational targets are complemented by intermediate targets such as a certain level of exchange rate. Operational targets are more easily controlled, but they are far from the primary objective, while the intermediate targets are more difficult to control, but they are closer to the primary one. By managing the level of the interest rates, and hence the level of liquidity in the banking system, the NBRNM strives to influence the level of the exchange rate, as an intermediate target of the monetary policy. Instruments which are used for implementing the defined monetary policy are:

Instruments which are used for implementing the defined monetary policy are:
1. Open market operations.
2. Reserve requirements.
3. Deposit facility.
4. The marginal lending facility or overnight credit.
5. Intraday credit.

1. Open market operations. Open market operations are used for influencing the level of the short-term interest rates, i.e. the level of banks' liquidity. The increase in the interest rate with these operations indicates a more restrictive monetary policy and vice versa, the reduction of the interest rate acts towards relaxation of the monetary policy. Open market operations consist of: central bank bills auctions, auctions of repo transactions and outright transactions. The most common used tool for withdrawal of liquidity from the banking system is the issuance of central bank bills (CB bills) by the National Bank. On the other hand, in order to satisfy short-term liquidity shortage in the banking system, the National Bank may conduct repo operations to provide liquidity. Outright purchase and sale of securities on the secondary market are less present.

Open market operations consist of: central bank bills auctions, auctions of repo transactions and outright transactions.

a) The main function of the **Central Bank bills auctions** is managing the liquidity of the banking system through selling short-term securities by the Central Bank, on the primary market. All banks are invited to participate in these auctions. *Central bank bills* are short-term securities issued by the National Bank (NBRNM) with different maturity dates, usually within 28 to 35 days. The interest rate is announced publicly on the money market, in order to form all other interest rates depending on it. Central bank bills exist only as an electronic record, not in paper form. Same as the treasury bills, central bank bills are sold at a price lower than the face value.

The discounted value of the CB bills, for 100 units of nominal value, is calculated according to the following formula:

$$C = 100/(1 + P/100)^{n/365}$$

C - indicates the market price of the CB bill

P - is an annual interest rate

N - is the number of days until the bill matures

For example, if the nominal value of the central bank bill is 100 denars (and the central bank issues 200 units), and it has an interest rate of 5% per year, and its maturity is 28 days, the selling (discounted) value of the bills will be:

$$C = \frac{100 * 200}{\left(1 + \frac{5}{100}\right)^{\frac{28}{365}}}$$

$$C = \frac{20.000}{1.05^{0.077}} = \frac{20.000}{1.004} = 19.920\ den.$$

As stated before, the interest rate on the CB bills is the key interest rate, which determines the monetary policy stance. CB bills auctions are conducted in regular intervals and the amount of CB bills sold is determined depending on the short-term liquidity projections. NBRNM applies two main types of tenders in CB bills auction:

- *Interest rate tender*, where in the prospectus sent to banks, NBRNM announces the amount of CB bills offered for sale, and banks bid with amounts and interest rates;
- *Volume tender*, where in the prospectus sent to banks, NBRNM announces fixed interest rate at which CB bills will be offered for sale, and the banks bid only with amounts.

Important mentioning here is that CB bills may be traded on the secondary market and can be used as collateral for credits from the central bank.

b) Auctions of repo transactions. The main function of this instrument is managing the liquidity of the banking system in conditions of short-term movements of the liquidity, which could lead to significant fluctuations in the short-term interest rates. Auctions enable liquidity withdrawal through prompt sale of securities with obligation for their repurchase on a future date at predetermined price and vice versa, liquidity providing through prompt purchase of securities with obligation for their re-sale on a future date at a predetermined price.

Auctions for providing liquidity are held at regular periods, while auctions for withdrawal of liquidity are executed on the initiative of the National Bank. They are irregular. The amount and maturity of repo transactions is determined according to the projected movements of the factors which influence liquidity and all banks are entitled to participate in the auctions.

Repo auctions may be conducted through two main types of tenders:

- *Interest rate tender:* in the prospectus sent to the banks, Central Bank announces the amount, and the banks bid with amounts and interest rates;
- *Volume tender*: in the prospectus sent to the banks, Central Bank announces fixed interest rate at which repo transactions will be realized, and the banks bid only with amounts.

c) Outright transactions. Outright transactions may be conducted in both directions, for providing or withdrawing liquidity from the banking system, through an outright (definitive) purchase i.e. sale of securities on the secondary market. Outright transactions are conducted with the banks on a bilateral basis. The main function of this instrument is structural management of the liquidity in the banking system, which would lead to a long-term change in the liquidity level.

2. Reserve requirements. Reserve requirement is an instrument of the Central Bank's monetary policy, which obligates the banks and savings houses to allocate funds on the accounts with the central bank. Main functions of this instrument are: stabilization of the short-term interest rates on the money market, managing the money supply and the level of credit multiplication and reduction of the structural excess liquidity. Central Banks regulate the calculation of requirement

Main functions of this instrument are: stabilization of the short-term interest rates on the money market, managing the money supply and the level of credit multiplication and reduction of the structural excess liquidity.

reserve and the liabilities on which it is calculated. According to the Law on National Bank, the requirement reserve base is calculated from deposits, received loans, debt securities issued by banks and saving houses and other liabilities. In this calculation there are several items which are not included such as: liabilities to banks and savings houses, liabilities to the Central Bank and the subordinated debt which is part of Tier 2 capital. The basis for the reserve requirement of liabilities of banks in domestic currency is reduced by the amount of the claims on the basis on:

- newly approved loans to nonfinancial companies;
- investments in debt securities issued in domestic currency from non - financial companies referred, in the amount of face (nominal) value.

The basis for banks' reserve requirement for a certain period of fulfillment is calculated as the average of the obligations for each day of the calendar month preceding the fulfillment period. The basis of the liabilities in foreign currency is also denominated in euros, applying the middle exchange rate of the Central bank valid on the last day of the calendar month.

The reserve requirement rate for banks in RNM is:

- 8% for domestic currency liabilities;
- 50% for domestic currency liabilities with FX clause;
- 15% on foreign currency liabilities.

The reserve requirement fulfillment period is from the 11th day in the current month to the 10th day of the following month. The requirement reserve presents the minimum level of cash assets that the bank has to hold on its balance in the Central Bank. This cannot be taken literally into consideration, i.e. which does not mean that the cash assets that the bank holds in the Central Bank cannot be lowered under the level of the requirement reserve. When banks demand liquidity on a daily basis they can use part of their cash assets, but the daily average of the requirement reserve for the precedent month must be maintained.

The NBRNM applies the approach of lagged reserve calculation, where the reserve requirement calculation period differs from the fulfillment period. In other words, the basis for calculating reserve requirement is determined as the average of the banks and savings houses' liabilities for each calendar day of the previous month. There is a slight difference in the calculation of the reserve requirement in foreign currency, which is calculated on the banks' foreign currency liabilities at the end of the previous month. The reserve requirement fulfillment period is from the 11th day in the current month to the 10th day of the following month.

According to the Law, on the requirement reserve NBRNM pays remuneration rate, which for reserve requirement in denars is equal to 1%, and for reserve requirement in foreign currency is equal to 0,1%. The remuneration is paid upon expiration of the fulfillment period.

The calculation for the remuneration of the fulfilled reserve requirement, maximum to the amount of the reserve requirement, is according to this formula:

$$N = \frac{RR \times n \times d}{100 \times 360}$$

where:

N - remuneration of reserve requirement for the fulfillment period
RR - amount of the fulfilled reserve requirement
n - remuneration rate
d - number of days in the fulfillment period

For example:
In March the sum of the average daily liabilities to households – 60 mill. denars, deposits on demand from legal entities – 90 mill. denars, time deposits from legal entities – 50 mill. denars, time deposits from households – 120 mill. denars. How much is the requirement reserve for the fulfillment period in April and the remuneration?

The obligation for requirement reserve, which should be fulfilled, is calculated as follows:

RR = 320mill.denars x 8% = 25,6 mil. denars
(daily average of requirement reserve that has to be kept)

$$N = \frac{25{,}6\ mill.\ denars\ \times 1 \times 30}{100 \times 360} = 21.333\ denars$$

3. Deposit facility. The main function of this instrument is managing excess liquidity in individual bank and/or in the banking system in the short term, where banks may place funds in a deposit with the NBRNM at their initiative. The interest rate on the overnight deposit is the threshold of short-term interest rates on the money market and equals 0,15%. Banks may place funds in overnight deposit with the Central Bank every day. The interest rates on the seven-day deposit is 0,3%, and banks may place funds with the Central Bank once a week, on Wednesday.The most common example are the available deposits that banks transfer to the National Banks with a maturity of 1 day to 7 days.

The main function of deposit facility is managing excess liquidity in individual bank and/or in the banking system in the short term, where banks may place funds in a deposit with the NBRNM at their initiative.

4. The marginal lending facility or overnight credit. The foremost function of overnight credit is to overcome the liquidity problems of individual banks, thereby contributing to the stabilization of money market liquidity and short-term interest rate fluctuations. The loan is approved with overnight maturity. The interest rate on the overnight credit is a ceiling of the short-term interest rates on the money market and it is determined by adding 0,50 percentage points over the interest rate earned at the auction of CB bills. The facility is available to the banks every day and it is granted upon banks' initiative and is pledged with a eligible collateral, i.e. securities.

The function of overnight credit is to overcome liquidity problems of individual banks, thereby contributing to the stabilization of money market liquidity and short-term interest rate fluctuations.

5. Intraday credit. The main function of this credit is overcoming the liquidity imbalances of the banks, arising as a result of larger outflows relative to the inflows during the day. Thus, this instrument enables smooth realization of the payment transactions during the day and improves the banks' liquidity management. NBRNM does not charge interest on the intraday credit. There is a possibility to transform the intraday credit into a overnight credit at the end of the day.

The main function of intraday credit is overcoming the liquidity imbalances of the banks arising as a result of larger outflows relative to the inflows during the day.

Banking Supervision

According to the Law on the National Bank of the Republic of Macedonia and the Banking Law, the National Bank is the direct supervisory body responsible for licensing and supervision of banks and savings houses in the Republic of North Macedonia. NBRNM conducts its supervisory function through:

- Continuous off-site monitoring of the banks' operations by collecting and analyzing the reports and data submitted to the National Bank of the Republic of Macedonia.
- Direct full or partial control that is performed on site, i.e. in banks by monitoring their operations with direct insight in their documentation and in the established systems and procedures. Maintaining contacts with the members of the bank's bodies and with the audit company.

The main purpose of the supervisory function is to maintain safe and sound banking system by implementing supervisory standards that are incompliance with the international standards and practices set by the Basle Committee on Banking Supervision. Especially significant supervisory standards are related to:[9]

- capital adequacy, i.e. maintenance of an adequate capital base that will enable covering of the risk profile of banks. The capital adequacy ratio calculated as a ratio between the bank's own funds and its risk weighted assets, must not be lower than 8%;
- criteria for classification of on-balance and off-balance sheet asset items of banks according to their risk level and determining adequate amount of impairments and special reserves for coverage of the banks' potential and/or established losses;
- exposure limits as a ratio between the total on-balance and off-balance sheet exposure to a single persons and group of connected persons and the bank's own funds;
- limits of exposure to the FX risk and the manner of managing this type of risk;
- limits on investments in land, buildings, equipment and equity holdings

Through the supervision, the National Bank of the Republic of Macedonia assesses the reliability, stability, risk and compliance of the banks with the regulations. Special emphasis is placed on quantification and monitoring of banks' exposure to various types of risks such as: credit risk, liquidity risk, operational risk, currency risk and other risks. Banking supervision assesses the adequacy of the established procedures and systems by banks that are used to identify, measure, monitor and control risks.

[9] https://www.nbrm.mk/ns-newsarticle-supervisory_standards.nspx

Conclusions:

The development of banking undergoes five development phases of banking, which correspond with different organizational and institutional structure of banking systems. However, one may see banks with banking systems dated from the first three phases. Furthermore, there are banks that operate under the traditional banking system, i.e. banks that continuously try to attract and engage customers in the old fashioned way via physical presence; or banks that have electronic banking, but not mobile banking app. Many banks still do not provide the opportunity of account opening on a mobile, or creating a deposit, which still can be justified by legal demands. The move towards the contemporary and future model of banking systems requires more than just introducing mobile app for banking. Banking and non-banking financial institutions cannot continue operating if they do not follow the significant shifts in customer behavior.

Banking systems also differ on national level or sub-national level according to the characteristics and stage of national economy development. According to this criterion, one can differ between banking systems in developed countries and banking systems in emerging and transition economies. Also there are other criteria on which base banking systems might be overviewed, relating to central bank's characteristics or the characteristics of banking activities, from the aspect of product and service diversity.

In this chapter the banking systems of the USA, Italy, Germany and France are described as representatives of banking systems in developed countries. In the American banking system, there are the following financial intermediaries: commercial banks, saving institutions, credit unions and investment banks, which offer variety of banking and other financial services. Federal Reserve System is the central banking system responsible for providing sound banking system and healthy economy. The USA at the federal level, has three regulatory and supervisory bodies, which are the comptroller of the Currency (OCC), Federal Reserve System (Federal Reserve) and Federal Deposit Insurance Corporation (FDIC).

The German financial system is described as bank-based, where the key source of firms financing are bank loans. The banking system of Germany is dominated by universal banks engaging in various banking and non-banking activities. Depending on their legal form, universal banks are further classified into commercial, savings, mutual cooperative and other banks. The central bank, the Bundesbank has the task of continuously monitoring the banking system and is responsible for regulating and conducting supervision.

The French banking system as stable and organized banking system is comprised of all types of banks, starting from national high street banks, local financial institutions, international banks, internet banks and finishing with mobile banks. More precise, one can differentiate between several types of banks: credit institutions, state-owned banks, mutual or co-operative banks and investment banks. The lead bank supervisor in France is the Prudential and Resolution Control Authority (ACPR), which is an independent administrative

authority without legal personality, operating under the auspices of the French central bank (Banque de France).

The Italian banking industry consists of universal and co-operative banks (BCCs and BPs). While BCCs are characterized as local banks and must carry out banking activity for their members, BPs are more business-orientated, Bank of Italy is both the Italian central bank and the lead supervisory authority entitled, together with the Ministry of Economy and Finance (MEF) and the Inter-ministerial Committee for Credit and Saving (CICR),

Following its accession to the European Monetary Union and the establishment of the European Central Bank (ECB), the central banks of member states transferred its powers to the supranational body, the ECB, including conducting monetary policy and issuing money. The ECB is the central bank for the euro and administers monetary policy within the Eurozone, which comprises 19 member states of the European Union; is part of a larger system that is the European System of Central Banks (ESCB); is one of the largest monetary areas in the world; is one of the world's most important central banks; serves as one of the seven institutions of the European Union; and is intentionally modeled on the FED, but it is more decentralized. The primary objective of the ECB is to maintain price stability within the Eurozone. Its basic tasks are to set and implement the monetary policy for the Eurozone, to conduct foreign exchange operations, to take care of the foreign reserves of the European System of Central Banks and operation of the financial market infrastructure.

Afterwards, the banking systems in emerging economies are presented along with the actions taken by national government for their restructuring. Finally, the banking system in the RNM is presented. Macedonian banking system has a universal character which is typical for banking systems in Europe. Its structure is consisted of: commercial banks, saving houses, central bank, development bank and fund for deposit insurance. NBRNM is a modern and independent central bank with its main goal to maintain price stability and indirectly to contribute to the maintenance of a stable, competitive and market-based financial system.

Revision questions and problems:

1. How can banking system be defined?
2. By establishing a timeline in the development of banking one can be certain in distinguishing between five phases of banking. Which are they?
3. Which are the models of banking systems in the period of industrial banking?
4. Please do research about banks/depository institutions in your country and explain in which development phase are they.
5. According to which criteria can banking systems be classified?
6. Which are the types of financial intermediaries present in the American banking system?
7. What is Federal Reserve System and what is it responsible for?

8. Please explain the structure of the Federal Reserve System.
9. Which are the core functions of the Reserve Banks?
10. Which are the Federal Reserve's goals?
11. To carry out monetary policy, the Federal Reserve employs two groups of traditional monetary policy tools and nontraditional monetary policy tools. Which are they?
12. What do OMOs consist of?
13. What is discount window lending?
14. Which are the three types of discount window lending?
15. Please explain the non-traditional monetary policy tools – QE?
16. Please explain the non-traditional monetary policy tools – forward guidance?
17. Which are the three regulatory and supervisory bodies at federal level in USA?
18. What is The Office of the Comptroller of the Currency responsible for?
19. What is The Federal Deposit Insurance Corporation (FDIC)?
20. What is the meaning of a single market in financial services for providers and consumers?
21. Which are the forms of universal banks that dominate in the banking system of Germany?
22. What is the French banking system comprised of?
23. What does Italian banking industry consist of?
24. Please list the main characteristics of European Central Bank.
25. Which are ECB tasks?
26. Which monetary instruments do ECB use when conducting the monetary policy?
27. What are the principles based on which ECB is the most independent central bank?
28. How do ECB conduct its supervision?
29. Please explain the terms emerging market economies and transition economies.
30. What are the characteristics of banking systems in emerging economies?
31. What did the restructuring of the banking system comprise?
32. What is the National Bank of the Republic of North Macedonia?
33. Which is the main goal of NBRNM?
34. Which are the Instruments that are used for implementing the defined monetary policy by the NBRNM?
35. Which are the most significant supervisory standards used by the NBRNM?
36. Please visit the web pages of European Central Bank, Bank of England, and Federal Reserve System and discover their main monetary targets and their monetary instruments.

37. Please find out certain similarities and differences between the long term monetary targets of the above mentioned central banks and your national central bank.
38. Please list the similarities and differences between the monetary instruments used by monetary authorities in three countries by your choice.
39. Discover the differences and similarities between the Federal Reserve System and European Central Bank.

CHAPTER IV – PRINCIPLES OF BANKING

Learning objectives:

- to understand the need for banks to follow certain principles in their daily operations
- to be able to define the term liquidity of a bank
- to understand how banks provide their liquidity
- to understand the mechanisms for maintaining bank's liquidity
- to understand why the principle of liquidity conflicts with the principle of profitability
- to understand the principle of profitability
- to be able to explain the principle of safety
- to understand the principle of efficiency
- to be able to explain the principle of transparency
- to understand the purpose of the principles for responsible banking
- to be able to explain the six principles for responsible banking
- to understand the reasons for the significance of PRB framework

1. Principles of Banking – A Guide to Optimal Bank Performance

The core functions of banks comprise of deposit taking and loan granting, which in other words imply that banks operate with someone else's funds, for example firms' deposits, individuals' deposits, liquidity loans from other banks, foreign credit lines or funds from issued securities and lend these funds in form of loans or invest them in various types of securities. Additionally, banks act as the main providers of payment services and they are responsible for opening, maintaining checking accounts and securing transfer of funds from legal entities/individuals to legal entities/individuals. In this context banks are responsible for their operating activities and undertake various risks for satisfying interests of different stakeholders, i.e. depositors, borrowers, customers, shareholders, employees, etc. Due to the complexity of their activities and because of achieving the traditional core economic function of every enterprise, i.e. profit, banks follow certain principles. The principles which will be discussed in this section are: liquidity, profitability, safety and efficiency in investing and transparency.

Due to the complexity of banks' activities and because of achieving profit, banks follow certain principles such as liquidity, profitability, safety and efficiency in investing and transparency.

1.1. Principle of Liquidity

According to BIS (2008) liquidity is the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. The issue of liquidity arises from the transformation functions of banks,

i.e. maturity transformation. By borrowing short and lending long banks expose themselves to risk of not being able to meet obligations on time. In other words and looking at the bank's balance sheet, banks transform short-term, liquid liabilities into long-term, illiquid assets. By doing so, banks provide customers with smooth and continuous consumption or investment, and protect them against liquidity problems, but simultaneously they expose themselves to liquidity risks. Banks as liquidity provider, may unexpectedly experience extreme shortages of liquidity which could be initiated by larger amount of drawn credit or/and unexpected reduction in deposits. According to Macedonian banking law, banks should respect the principle of liquidity by managing their assets and liabilities in a manner that ensures settlement of due liabilities at all times. In general, for banks to respect the principle of liquidity means that they always maintain certain amount of cash funds or easily convertible assets into cash funds in order to be always able to respond the fulfillment of their obligations coming from their liabilities.

Liquidity is the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses.
By borrowing short and lending long banks expose themselves to risk of not being able to meet obligations on time.

For banks to respect the principle of liquidity means that they always maintain certain amount of cash funds or easily convertible assets into cash funds in order to be always able to respond the fulfillment of their obligations coming from their liabilities.

First of all, important to discuss here is the term easily convertible assets into cash funds, which means that the bank must hold certain amount of liquid assets which can be easily and in short time be converted into cash. Regarding the process of the conversion of assets into cash it depends mainly on two factors:
1. Required time for converting specific type of assets into cash. In that sense, it is easier to sell securities like Central Bank bills instead of collecting of loans or selling fixed assets.
2. Cost of conversion, or whether the asset can be sold on the market or repaid according to its book value.

The bank must hold certain amount of liquid active which can be easily and in short time be converted into cash without significant loss in their value.

However, in economic sense banks tend to limit the amount of liquid assets, because it does not generate much income for the bank. Looking at the structure of bank balance sheet, there are several categories of liquid assets:
- Cash assets and balances at central banks, also known as super liquid assets, which comprise cash and balances at central banks (above the required reserve). These assets or funds are easily available and with them banks can immediately meet their obligations, like deposit withdrawals or cashing in the loans approved to legal entities or individuals. This primary reserve does not generate income for the bank, and that is why banks tend to limit the amount of this super liquid assets.
- Secondary reserve, which comprises of the primary reserve and bank's deposits on demand in other financial institutions, as well as marketable securities, (such as central bank bills, government bonds, deposit certificates and commercial papers), that can be easily sold on secondary market. These types of assets can also be used as collateral for loans in the central bank.

There are several categories of liquid assets:
- Cash assets and balances at central banks or primary reserve;
- Secondary reserve comprised of the primary reserve and bank's deposits on demand in other financial institutions and easily convertible securities.

As discussed above, liquid assets represent broader term than cash assets. Liquid assets are all the assets that can be quickly converted into cash without significant losses.

However, maintaining liquid assets is only one way of providing liquidity. Banks have alternative sources of liquidity, for example, by borrowing money from the financial markets. Banks can raise funds if necessary by

Banks provide liquidity by:
- Maintaining cash and liquid assets;
- Sell of liquid assets;
- Borrowing from financial markets;
- Collecting deposits;
- Repayment of loans;
- Sale of non-deposit services.

borrowing from other banks, or central bank, issuing bonds or stocks. To summarize, banks supply their need for liquidity through:

1. Maintaining certain amount of cash and liquid assets;
2. Sell of liquid assets;
3. Borrowing from financial markets;
4. Collecting deposits;
5. Repayment of loans;
6. Sale of non-deposit services.

Considering the fact that liquidity flows are predictable (based on signed contracts) or unpredictable, bank's liquidity needs to be constantly planned in a certain time frame.

Due to the high opportunity costs of cash and its equivalent, banks keep only a limited amount of that type of liquidity assets. As a result, cash assets do not serve as an instrument of securing liquidity; instead banks provide their liquidity through selling liquidity assets and borrowing on financial (money and capital) markets.

On the other hand, everyday banking activities require sufficient level of liquidity, related to withdrawal of deposits or cashing in approved loans. In the first case, every money withdrawal promptly lowers the bank's amount of available cash assets. The second case refers to the moment the bank has received a loan application, because after approving this loan, the bank has to have cash to transfer the funds from the approved loan to the borrower/client. The demand of liquidity also comprises: repayments of loans borrowed from other banks or the central bank, payment of accrued obligations from issued securities, tax payments, invoice payments, dividends etc.

Banks need liquidity for:
- withdrawal of deposits,
- cashing in approved loans,
- repayments of loans borrowed from other banks or the central bank,
- repayment of accrued obligations from issued securities, tax payments,
- invoice payments,
- dividends.

When discussing about the supply and demand for liquidity we have to mention two important aspects, that is liquidity has to be monitored in time dimension, and second, there are predictable and unpredictable flows of liquidity. Time dimension of liquidity refers to the time frame of the bank's liquidity position. For example, today the bank can have liquidity surplus, but in the next couple of weeks it might have liquidity deficit. This time dimension implies the need for planning the bank liquidity for a certain period of time. The second dimension refers to the fact that most of the liquidity flows are predictable, because they are based to prior signed contracts or they are happening in defined time periods (e.g. repayments of loan, wages, pensions, tax payments, payments of obligations etc.). However, some flows of liquidity are unpredictable. For example, repayment of total debts by borrowers or withdrawal of cash by debit/credit card owners etc.

All banking activities have to be guided by the principle of liquidity for providing stable and safe banking system. Therefore, every bank maintains an appropriate level of liquidity by using several mechanisms such as: every day planning and monitoring cash inflows and outflows; establishing and maintaining an appropriate maturity structure of assets and liabilities; monitoring significant sources of funds and their concentration, as well as establishing, i.e. maintaining regular communication with large depositors; maintaining of mandatory prescribed liquidity rates and determining and monitoring of liquidity indicators. In practice, banks:

1. Follow and conduct all legal requirements and standards for liquidity (such as requirement reserve and the usage of requirement reserve)

Every bank maintains appropriate level of liquidity by using several mechanisms such as:
- every day planning and monitoring cash inflows and outflows;
- establishing and maintaining an appropriate maturity structure of assets and liabilities;
- monitoring significant sources of funds and their concentration, as well as establishing, i.e. maintaining regular communication with large depositors;
- maintaining of mandatory prescribed liquidity rates, and
- determining and monitoring of liquidity indicators.

2. Determine internal level of deposit coverage with liquid active.
3. Monitor the maturity structure of the assets and liabilities.
4. Monitor and follow the expected cash inflows and outflows.
5. Determine and monitor the level of stable deposit base.

The key factor of liquidity lies in the ability of the bank to adjust cash flows (inflows and outflows), on the basis of which a projection of future cash flows is carried out. The level of liquidity prescribed by the regulatory body is not sufficient to be fulfilled in a given period, but to be maintained in the future. Maintaining liquidity implies preserving assets for the normal flows of current transactions, as well as for payment of liabilities. If the bank has a higher amount of liquidity than necessary, it faces opportunity costs, because of the lost opportunity to earn income that would have been achieved if the bank had put the surplus of free funds into readily resistant securities. If the bank does not have sufficient liquidity, additional resources are needed, which brings new costs. The next conclusion is that the principle of liquidity conflicts with the principle of profitability, since excessive money supply and cash equivalents reduce profitability and vice versa.

The principle of liquidity conflicts with the principle of profitability. This is because if the bank has a higher amount of liquidity than necessary, it faces opportunity costs, because of the lost opportunity to earn income that would have been achieved if the bank had put the surplus of free funds into readily resistant securities. On the other hand, if the bank does not have sufficient liquidity, additional resources are needed, which brings new costs.

1.2. Principle of Profitability

The main motive in the operation of each bank is to make a profit. In order to achieve this goal, the bank should direct its placements/funds to cost-effective projects. Relying on the underlying motive - maximizing profits, the bank will invest the funds raised in assets that generate a higher rate of return. Hence, banks may increase their profits by investing in highly profitable assets/projects, but they are also riskier. Whether the bank chooses to make less profitable, but less risky placements, or vice versa, the choice will be a higher yield but higher risk rate, depending on the bank manager and other management bodies. Banks tend to prefer stable and reliable profits as opposed to maximizing profits, but on the other hand, this would jeopardize liquidity.

The profitability of a bank can be measured by using financial indicators such as Return on Assets (ROA) and Return on Equity (ROE). The indicator ROA reveals how much profit a bank earns for every denar of its assets and it shows management effectiveness. It is calculated as follows:

The profitability of a bank can be measured by using financial indicators such as Return on Assets (ROA) and Return on Equity (ROE).

Based on the principle of profitability the bank will invest the funds raised in assets that generate a higher rate of return.

ROA shows management effectiveness and ROE shows whether management is increasing the bank's value at an acceptable rate.

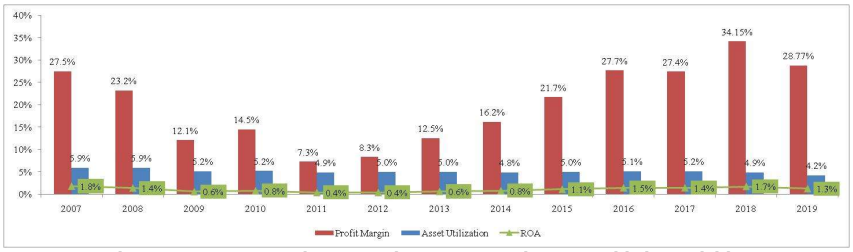
$$ROA = \frac{Net\ Income}{Total\ assets}$$

ROE is a basic test of how effectively a bank's management uses investors' funds, and it shows whether management is increasing the bank's value at an acceptable rate. Also, it measures the rate of return that the bank earns on stockholder's equity. Because only the stockholder's equity appears in the denominator, the ratio is influenced directly by the amount of debt the bank is using to finance assets. Practically, ROE reflects the profitability of the bank by measuring the investors` return. ROE is calculated by taking the profit after tax and preference dividends of a given year and dividing it by the book value of

equity (ordinary shares) at the beginning of the year. Average equity can also be used. Equity would consist of issued ordinary share capital plus the share premium and reserves.

$$ROE = \frac{Net\ Income}{Equity}$$

Figure 10 ROAA – Profitability indicator of Macedonian Banking Sector



Source: Own data processing according to Banking system indicators publicly available on: http://www.nbrm.mk/bankarska_supervizija_i_rieghulativa-en2.nspx

For example, on Figure 10, banks' profitability in RNM measured by return on average assets (ROAA) is shown, which shows banks' ability to use financial and material resources in a way that will ensure the highest possible earnings. It has its greatest declines in 2009 and 2011. Additionally, the main factors that contributed to this reduced profitability by Macedonian banks, can be derived by using the Du Pont Analysis.

Briefly explained, Du Pont Analysis is a common form of financial statement analysis and it was first developed by Eleuthere Irenee du Pont de Nemour and was first used in 1920 by his corporation. The model was developed as a result of the fact that none of the individual financial indicators explains the reasons behind the achieved financial results, i.e. net income. Du Pont analysis makes an attempt to give an overview of all activities and diagnose potential problems in the company. Therefore, according to Du Pont Analysis, the formula for calculating ROA can be broken down in two parts: profit margin and asset utilization, while ROE can be broken down in three parts: profit margin, asset utilization, and equity multiplier.

The main purpose of the Du Pont Analysis is to explain the reasons behind the achieved financial results, i.e. net income.

$$ROA = \frac{Net\ Income}{Total\ revenues} \times \frac{Total\ revenues}{Total\ Assets}$$

$$ROE = \frac{Net\ Income}{Total\ revenues} \times \frac{Total\ revenues}{Total\ Assets} \times \frac{Total\ Assets}{Equity}$$

Profit margin is an indicator of a bank's effectiveness in cost control and in generating revenues.
Asset utilization reflects the bank's management efficiency in investing in different types of assets which have different yield.
Equity multiplier shows the effects of the way the bank's funds are financed.

The Profit margin, calculated as a ratio between the net-income and total revenues, acts as an indicator of a bank's effectiveness in cost control and in generating revenues. Asset utilization, calculated as a ratio between the total revenues and total assets, reflects the bank's management efficiency in investing in different types of assets which have a different yield. If ROA is multiplied by the equity multiplier, the rate of return on equity (ROE) is reached, and the equity

multiplier is calculated when the total assets are divided by equity. Equity multiplier shows the effects of the way the bank's funds are financed.

In Figure 10, the profit margin in 2009 and 2011 has its lowest values, 12.1% and 7.3%, respectively. In 2009, the Asset utilization has a value of 5.2%, and this lowered value comes as a result of the increase in the total assets and decrease in total income.

1.3. Principles of Safety and Efficiency in Investing

The principles of safety and efficiency are based on a series of measures and activities that banks undertake when assessing the creditworthiness of customers. Banks are especially careful when approving loans, because they try avoiding situations when they are unable to collect its claims. As discussed earlier, banks work with deposits and money that it borrows and uses this money when approving loans to individuals, businesses, and other organizations and the securities that it holds. The capability to pay its due liabilities depends on the practicing the principle of safety when investing (e.g. placement of loans). Therefore, in order to prevent situations in which it is unable to collect its claims, banks assess the creditworthiness of the clients based on the following five "C" elements:

1. Assessment of character; The creditworthiness assessment comprises of evaluation of two aspects of character, i.e. assessment of the character of the loan applicant, related to reputation, financial discipline, legal status etc.; and assessment of project/investment character, related to purpose of the loan, its aim and sustainability.

2. Assessment of customer's capacity, i.e. examining production and financial capacity; The term "capacity" means an assessment of the borrower's financial standing and ability to properly repay the loan. This part of the analysis is primarily based on the financial statements of the company. Thus, the analysis of the income statement should give an idea of the costs, revenues and profitability of the client, while the cash flow report should show whether its operation generates sufficient cash inflows for a regular loan repayment. In addition, capacity includes some other aspects, such as: the ability of top management to successfully run an enterprise, whether the loan application is supported by a decision of the management, whether the person negotiating the loan terms is authorized etc.

3. Assessment of the level of capital, i.e. the net value of the client's property; Capital reflects borrower's financial power, i.e. its ability to bear the financial burden of loan repayment. To this end, the bank should analyze the size and structure of the client's assets and liabilities, with particular attention to the net worth of the enterprise. In doing so, the bank should check not only the book value of the subscribed capital, but also its market value, as they may vary significantly. Equity is of particular importance in credit analysis, because it represents the ultimate collateral for a company in the event of a company being liquidated. Also, within this element of credit analysis, the bank should also pay attention to the client's participation in the project financing.

The principle of safety considers the capability of borrowers to pay its obligations. Therefore, in order to prevent situations in which are unable to collect their claims, banks assess the creditworthiness of borrowers based on the following five "C" elements:
1. Assessment of character
2. Assessment of customer's capacity;
3. Assessment of the level of capital;
4. Assessment of collateral;
5. Assessment of conditions in which the company operates.

The first "C" element - Assessment of character implies that bank evaluates the character of loan applicant and the character of the investment/project, or purpose of the loan.

The second "C" element - Assessment of customer's capacity implies that bank evaluates the borrower's financial condition and its ability to repay the loan according to the agreed conditions.

The third "C" element - Assessment of the level of capital implies that bank evaluates the borrower's financial power, i.e. it analyzes the structure and the size of client's assets and liabilities.

4. Assessment of collateral, i.e. the type of collateral that further secures the repayment of the loan; Banks usually try to secure the loan repayment by seeking certain collateral, such as real estate mortgages, securities, deposits, receivables, merchandise, and so on. If the debtor fails to repay the loan properly, the bank will collect the claim by taking over the collateral in order to sell it. Thus, the purpose of the collateral is to incentivize a proper repayment of the loan, as the debtor is aware that he will lose the pledged property if he does not repay the loan. Although collateral reduces credit risk, it should be noted that it is a secondary source of debt collection. This means that with the credit analysis, the bank should determine the client's ability to repay the loan based on the cash flows from the operation.

The fourth "C" element - Assessment of collateral implies that bank evaluates the collateral that secures the loan repayment.

5. Assessment of conditions in which the company operates. Finally, assessing the creditworthiness of a client should also include external factors that the company has no control over, but which can have a strong impact on the regular repayment of the loan. In fact, this is an analysis of the business environment in which the borrower operates. The following should be assessed: trends in the industry in which the borrower operates, technological trends in the industry, the position of the borrower in the market, the stability of its relationships with suppliers and customers, the business cycle phase, future interest rate movements, etc. An analysis of the characteristics of the borrower's industry and its competitive advantages and disadvantages is particularly important in long-term lending.

The fifth "C" element - Assessment of conditions in which the company operates implies that bank evaluates the external factors under which the client operates.

The principle of efficiency in investing is closely linked to the principle of safety and consists of the bank's intention to direct its financial placements to those entities that are expected to achieve the best results, highest output, and productivity.

The principle of efficiency in investing consists of bank's intention to direct its financial placements to those entities that are expected to achieve the best results or the highest output and productivity.

1.4. Principle of Transparency

The principle of transparency means providing sufficient information to the public about the bank's operations. In general, these data relate to the following: who are the bank's major shareholders, the composition of the bank's management team, the location and type of financial activities performed by the bank, and the bank's basic financial statements, such as the balance sheet and the income statement. Here, we should emphasize the role and legal obligation of audit firms, which at least once a year, review and audit bank's financial statements and give their audit opinion on the actual results and indicators. Bank's transparency is essential for depositors and investors, because based on these reports and information they decide in which bank to deposit their money, or which securities to buy.

The principle of transparency means providing sufficient information to the public about the bank's operations.

2. Principles for Responsible Banking

Principles for Responsible Banking (PRB) can be seen as enlargement of the basic principles of liquidity, profitability, safety and efficiency and

transparency. They are constructed in this new contemporary environment where global climate changes are occurring and their main motive is to remind and oblige banks to commit to creating sustainable future. They were signed on September 22, 2019 during the United Nations General Assembly in New York. These principles were created in 2018 in Paris thanks to the initiative of 28 financial institutions working together under the framework of the United Nations Environment Programme – Finance Initiative[10] (UNEP FI). The UNEP FI activities, together with the 2016 adoption of the United Nations Sustainable Development Goals (SDGs) — which aim to end poverty, protect the planet, and ensure everyone enjoys peace and prosperity — and the world action plan to limit global warming adopted the year before at the Paris conference on climate, have served to define the six Principles for Responsible Banking. The Principles provide the framework for a sustainable banking system and help the industry to demonstrate how it makes a positive contribution to society. They embed sustainability at the strategic, portfolio and transactional levels and across all business areas. More than 190 banks have now joined this movement for change, leading the way towards a future in which the banking community makes the kind of positive contribution to people and the planet that society expects. These banks now represent more than 40% of the global banking industry.

PRB provide framework for a sustainable banking system and helps the industry to demonstrate how it makes a positive contribution to society.

One of the fundamental goals of the PRB is to define the banking industry's role and responsibilities in creating a sustainable future, aligning it to the United Nations Sustainable Development Goals (SDGs) and the Paris Agreement. That is, the banking sector plays a crucial role in promoting sustainable development. It can lead the way to a more sustainable economy by financing endeavors that yield the best return from society's point of view and by guiding customers and stakeholders to manage social and environmental challenges and opportunities.

The fundamental goal of PRB is to lead banks to a more sustainable economy by financing endeavors that yield the best return from society's point of view and by guiding customers and stakeholders to manage social and environmental challenges and opportunities.

The purpose behind this framework is to build a responsible banking industry that is an integral part of the society of the 21st century, because it serves and contributes to an inclusive society that uses its natural resources sustainably.

The purpose behind PRB framework is to build a responsible banking industry that is an integral part of the society of the 21st century, because it serves and contributes to an inclusive society that uses its natural resources sustainably.

The six principles are:

1. Alignment.

"We will align our business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional

PRB are signed by more than 190 banks worldwide under the framework of the United Nations Environment Programme – Finance Initiative. Activities of UNEP FI tend to end poverty, protect the planet and ensure everyone enjoys peace and prosperity.

[10] UNEP FI emerged in 1992 as an alliance between the United Nations and the private sector with the objective of positioning sustainability at the forefront of financial institutions' business strategies. Today, it comprises more than 240 financial institutions worldwide. UNEP FI supports global finance sector principles to catalyze integration of sustainability into financial market practice. The frameworks UNEP FI has established or co-created include:
- Principles for Responsible Banking (PRB) launched with more than 130 banks collectively holding USD 47 trillion in assets, or one third of the global banking sector, on 22 September 2019.
- Principles for Sustainable Insurance (PSI), established 2012 by UNEP FI and today applied by one-quarter of the world's insurers (25% of world premium).
- Principles for Responsible Investment (PRI), established in 2006 by UNEP FI and the UN Global Compact, now applied by half the world's institutional investors (USD 83 trillion).
These frameworks establish the norms for sustainable finance, providing the basis for standard-setting and helping to ensure private finance fulfils its potential role in contributing to achieving the 2030 Agenda for Sustainable Development and Paris Agreement on Climate Change agreed by governments around the world in 2015.

frameworks." This principle describes how participating entities commit to aligning their business strategies with the objectives expounded in the SDGs and the Paris Agreement. The SDGs and the Paris Climate Agreement identify the most pressing societal, environmental and economic needs of our time, and banks have a pivotal role to play in enabling them to be delivered. While the SDGs and the Paris Climate Agreement are directed at governments, they are underpinned by a series of specific targets and programme areas where banks can make substantial contributions and, by doing so, align themselves clearly with the needs of society, their countries, clients and customers. Strategic alignment means remodeling a bank's business strategy towards being consistent with, and contributing to, the Sustainable Development Goals (SDGs), the Paris Climate Agreement and other relevant national, regional or international frameworks, such as the UN Guiding Principles on Business and Human Rights, where a bank is best positioned to do so through its business. By aligning its strategy with society's goals, the bank shows that its business, and the products and services it provides, can support a sustainable future while achieving long-term business benefits. It signals that the bank accepts its shared responsibility for shaping and securing our future.

2. Impact and target setting.

"We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts." Banks, signatories of this new framework commit to increasing the positive impacts and decreasing the negative impacts of their business activities, concentrating on those areas where the impact is most significant. For this purpose, banks need to identify, assess and improve the impact on people and environment resulting from their activities, products and services. For the banks to continuously increase positive impact while reducing negative impact on people and the environment, they need to incorporate assessment of risks and impacts on all three dimensions of sustainability (environmental, social and economic) into business decision-making at strategic, portfolio and transaction levels. This principle requires that banks set a minimum of two targets that address at least two of the identified significant impacts. Setting targets is an essential component to scaling up banks' contributions to society's goals.

3. Clients and customers.

"We will work responsibly with our clients and our customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations." A bank's most significant impacts on society, the economy, and the environment, are indirect. They are associated with the activities of the bank's clients and customers. As vital economic intermediaries, they can make their most significant contributions to society's goals by creating synergies with customers and clients, encouraging sustainable practices and accompanying their customers and clients in their transition towards more sustainable business models, technologies and lifestyles. In addition to contributing towards shared prosperity for current and future generations,

The PRB are:
1. Alignment of bank's business strategy with the needs of society, its country, clients and customers.
2. Banks tend to increase their positive impacts and decreasing their negative impacts of their business activities by setting targets that contribute to society goals.
3. Banks' impact on society, economy and the environment is indirect through the activities of the bank's clients and customers, i.e. they have to encourage customers' and clients' activities directed towards more sustainable business models, technologies and lifestyles.
4. Banks will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.
5. Banks will establish a daily business culture and practice in which all employees understand their role in delivering the bank's purpose and integrate sustainability in their work and their decision-making.
6. Banks will review the implementation of these principles periodically, thus committing to transparency and assuming full responsibility for positive and negative impacts.

enabling sustainable economic activities in this way presents a clear business case for banks: clients that are shifting to sustainable business models and technologies are better prepared for emerging regulations, and better positioned to succeed in our changing economy and society. Accompanying their clients in their own journeys to contribute to society's goals enables stronger relationships with customers and clients; and positions the bank as the partner of choice. Further, getting to know the bank's customers and clients better drives business growth and supports improved risk management. A strong relationship between the banks and its client and customers—built on trust—is crucial for any bank's success.

4. Stakeholders.

"We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals." Banks are a crucial part of our economic and social system and can contribute to the achievement and fulfillment of SDGs, the Paris Climate Agreement or other relevant national, regional or international frameworks by partnering with relevant stakeholders (notably peers, investors, clients, customers, regulators, employees, policy-makers, suppliers, scientists, academia, civil society, trade unions and communities). Proactively consulting stakeholders ensures bank's benefits from their knowledge and subject-matter expertise and enables the correct/legitimate definition of society's goals; it drives legitimacy and capacity to identify positive and negative impacts. Proactively engaging stakeholders early on ensures that all relevant interests are taken into account and a bank will not encounter challenges down the line.

5. Governance and culture.

"We will implement our commitment to these Principles through effective governance and a culture of responsible banking." The participating institutions will set public objectives and will implement them through an effective system of governance and a culture of responsible banking, seeking to address the most negative impacts that result from their business. In other words, this principle requires establishing a daily business culture and practice in which all employees understand their role in delivering the bank's purpose and integrate sustainability in their work and their decision-making. To deliver on its commitments under these Principles, a bank needs to put in place effective governance procedures pertaining to sustainability, including assigning clear roles and responsibilities, setting up effective management systems and allocating adequate resources.

6. Transparency and responsibility.

"We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society's goals." The implementation of these principles will be reviewed periodically, thus participants commit to transparency and assuming full responsibility for positive and negative impacts. Signatories' banks are required to provide information on their implementation of the Principles for Responsible Banking, in their existing public reporting, within the first 18 months of becoming a signatory and every year thereafter. Banks are accountable to their employees, investors and society as a whole.

Public disclosure is critical because it enables internal and external stakeholders to assess your banks' contribution to society, and the progress it is making. This, in turn, it helps build confidence in your bank's sustainability-related commitments and helps to distinguish your bank from its competitors.

The PRB framework is significant in creating the future, because it provides banks with a vision linked to society's goals, and a comprehensive framework for hardwiring sustainability into all organizational levels and across all business areas. For becoming a signatory bank, the PRB require from banks to take three key steps designed to ensure effective implementation of the Principles, and to enable banks to continuously improve its impact and contribution to society. These key steps are: impact analysis, target setting and implementation and accountability. Due to the fact that the requirements outlined in the PRB framework constitute a significant stepping up of current practice in most banks, and because PRB framework brings together banks with very different starting points and operating contexts, typically banks need up to four years to fully implement the outlined requirements. Therefore, banks have support from the UN Environment Programme Finance Initiative (UNEP FI) Secretariat and the Banking Committee. By becoming a signatory to the Principles for Responsible Banking and with that a UNEP FI member, the bank joins a community of banks committed to advancing together and has access to structured peer learning, expert-supported working groups, trainings, tools, regular feedback and expert advice.

The PRB framework is significant in creating the future, because it provides banks with a vision linked to society's goals, and a comprehensive framework for hardwiring sustainability into all organizational levels and across all business areas.

Conclusions:

This chapter tends to explain the reasons for banking businesses to follow certain principles or frameworks, starting with the basic principles of liquidity, profitability, safety and efficiency and transparency. First of all the principle of liquidity is explained, which means that banks always have to maintain certain amount of cash funds or easily convertible assets into cash funds in order to be always able to respond the fulfillment of their obligations coming from their liabilities. However, maintaining liquid assets is only one way of providing liquidity. Banks supply liquidity from borrowing from financial markets, collecting deposits, repayment of loans or sale of non-deposit services. As such, bank's liquidity is defined as its ability to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. The principle of liquidity conflicts with the principle of profitability. This is because if the bank has a higher amount of liquidity than necessary, it faces opportunity costs because of the lost opportunity to earn income that would have been achieved if the bank had put the surplus of free funds into readily resistant securities. On the other hand, if the bank does not have sufficient liquidity, additional resources are needed, which brings new costs. The principle of profitability leads the bank towards investing the funds raised in assets that generate a higher rate of return. Banks may choose to make less profitable, but less risky placements, or vice versa, the choice will be a higher yield but higher risk rate, depending on the bank manager and other management bodies. The

principles of safety and efficiency are based on a series of measures and activities that banks undertake when assessing the creditworthiness of customers. Simply put in other words, banks work with deposits and money that they borrow and use this money when approving loans to individuals, businesses and other organizations and the securities that it holds. By following the principle of safety, banks ensure that borrowers are capable of fulfilling their obligations and therefore others' funds are kept safe. The principle of efficiency in investing consists of bank's intention to direct its financial placements to those entities that are expected to achieve the best results or the highest output and productivity.

Principles for Responsible Banking (PRB) can be seen as an enlargement of the basic principles of liquidity, profitability, safety and efficiency and transparency. They are constructed in this new contemporary environment where global climate changes are occurring and their main motive is to remind and oblige banks to commit to creating sustainable future. PRB framework is constructed under the UNEP – FI and is already signed by 190 banks around the world. This means that signatories banks must follow the principles of: alignment of bank's business strategy with the needs of society, its country, clients and customers; banks tend to increase their positive impacts and decreasing their negative impacts of their business activities by setting targets that contribute to society goals; banks' have to encourage customers' and clients' activities directed towards more sustainable business models, technologies and lifestyles; banks will have to proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals; banks will have to establish a daily business culture and practice in which all employees understand their role in delivering the bank's purpose and integrate sustainability in their work and their decision-making; and banks will review the implementation of these principles periodically, thus committing to transparency and assuming full responsibility for positive and negative impacts.

Revision questions and problems:

1. Why do banks need to follow certain principles in their operating?
2. What is liquidity of bank?
3. Where does the issue of liquidity arise from?
4. What does the principle of liquidity stand for?
5. Which are the categories of liquid assets in bank's balance sheet?
6. How can banks provide liquidity?
7. Which are the mechanisms that banks have for maintaining appropriate level of liquidity?
8. What does the principle of profitability stand for?
9. How can the profitability be measured?
10. Please explain the financial indicators of profitability?
11. Please explain the principles of safety and efficiency in investing.
12. How do banks access clients' creditworthiness?
13. Please explain the element assessment of character.
14. What does the element assessment of customer's capacity comprise?

15. What does the element assessment of the level of capital imply?
16. What is the purpose of the collateral?
17. What does the assessment of conditions comprise?
18. What does the principle of efficiency in investing mean?
19. Please explain the principle of transparency and why it is essential for banks to follow this principle.
20. How do Principles for Responsible Banking emerged and why?
21. What does the PRB provide?
22. What is the purpose behind the PRB framework?
23. Which are the principles for responsible banking?

CHAPTER V – MODERN BANKING ACTIVITIES

Learning objectives:

- to understand what banks do and to make a distinction between traditional and modern banking activities
- to be able to make classification of banking activities according to different criteria
- to describe and define active and passive banking activities
- to understand off balance sheet activities
- to be able to define and explain short term and long-term passive banking activities
- to understand the role of bank as a creditor
- to be able to understand the terms loan and loan agreement
- to understand and to be able to describe short term loans for corporate clients and short-term loans for households
- to understand and to be able to describe long term loans for corporate clients and long-term loans for households
- to understand bank's neutral banking activities
- to be able to define and describe traditional and electronic payment systems
- to be able to define and understand bank's services in payment system
- to understand and to be able to define and describe the latest trends in banking activities
- to understand and to be able to define electronic banking
- to understand bancassurence and proposed banking models for bancassurence
- to understand the introduction and usage of financial derivates by banks
- to define and understand the purpose and process of securitization

1. Banking Activities according to Bank's Balance Sheet

Traditional or core banking activities are deposit, lending and payment services.

Banks are distinguished from other financial firms because of their intermediary and payment functions. The type and content of their banking activities and organizational structure is what defines and constitutes the banking system. Although there is a constant increase of new banking activities and functions, bank's crucial role is channeling and supplying the economies with money and credit. Therefore, *traditional or core banking activities* are deposit, lending and payment services.

In the 21st century, banks remain a central component of well-developed financial markets and have expanded their activities beyond the traditional core functions. The banking sector is comprised of specialist banks, which operate in niche markets and universal banks which offer a variety of

banking and non-banking financial products such as deposit accounts, loan products, real estate services, brokerage and life insurance. Additionally, in the banking market one can find "private bankers'', who accept deposits from high net worth individuals (HNWI) and invest in a broad range of financial assets. These modern investment banks have a relatively small deposit base, but significant share in the equity, bond and syndicated loan markets. On the other side, there are universal banks, which offer virtually every financial service, from core banking to insurance.

Considering the above discussed diversification of banking activities, we can conclude that banking activities have significantly expanded into the non-banking financial services, offering wide product range to customers. In this sense, all of the banking activities can be divided according to different criteria, i.e. time (maturity), function and balance sheet criterion. From the point of view of maturity criteria, banking activities can be divided into short-term and long-term activities. According to the functional criterion, banking activities can be: activities related to money creation, mobilization of deposits, lending and intermediation and own affairs. Lastly, according to the balance sheet criterion, banking activities can be classified as: passive, active, and off-balance sheet activities. Off – balance sheet activities are consisted of traditional and modern banking activities which banks perform on behalf of their clients for the purpose of earning certain fees, i.e. income. These activities are not shown on the bank's balance sheet, because they do not implicate changes on the asset or liabilities' side. However, they are very much important for bank's bottom line performance, i.e. profit. This fact can be confirmed by the increased share of non-interest income over the interest income in total bank's income.

From the point of view of maturity criteria, banking activities can be divided into short-term and long-term activities.
According to the functional criterion, banking activities can be: activities related to money creation, mobilization of deposits, lending and intermediation and own affairs.
According to the balance sheet criterion, banking activities can be classified as: passive, active, and off-balance sheet activities.

If we briefly look at the bank balance sheet in its simplified form as shown on Figure 11 we can easily and more practically explain banking activities. On the right side of the bank balance sheet bank's sources of funds are shown, i.e. depository and non-depository, such as deposits from individuals, deposits from legal entities and loans from other banks, issuance of debt and equity securities and retained earnings. This raised funding is then invested in loans, other investments and fixed assets (such as buildings for the branch network) and it is reported on the assets side of the balance sheet. What is specific about banks is that the bulk of their money comes from deposits and it is this ability to collect deposits from the public that distinguishes banks from other financial institutions.

Passive's side of the balance sheet describes bank's sources of funds: depository and non-depository, such as deposits from individuals, deposits from legal entities and loans from other banks, issuance of debt and equity securities and retained earnings.

Off balance sheet activities are not shown on the bank's balance sheet, because they do not implicate changes on the asset or liabilities' side. However, they are very much important for bank's bottom line performance, i.e. profit.

Figure 11 Simplified bank balance sheet

Active side (Assets)	Passive side (Liabilities&Equity)
Cash and cash equivalents	Retail deposits
Trading securities	Wholesale deposits
Loans to other banks	Loan liabilities
Loans to other clients	**Total liabilities**
Investment in securities	Equity
Intangible assets	Retained earnings
PP&E	Total equity and reserve
Total assets	**Total liabilities and equity**

Source: Own adaption of a sample of bank's balance sheet

1.1. Passive Banking Activities

Passive banking activities *are activities related to accumulation of funds*. When mobilizing funds, banks appear in the role of debtors (i.e. have an obligation) to owners of funds. In these banking activities, funds from businesses and individuals, government funds, and shareholders' funds, are attracted to the bank. Therefore, sources of formation of banking resources/funds can be own or borrowed. With these banking activities funds are collected for the purpose of being used when conducting active banking activities. Therefore, the activity on bank's active side, i.e. on the side of lending services is determined by the realization of the bank's plan for mobilization of funds. In other words they provide financial potential and enable better operations. In the bank's balance sheet these funds appear on liabilities' side and act as bank's credit potential, which on the other hand indicates the success of the bank's concentration policy of funds. In continuation, passive banking activities are briefly described and explained, but classified according to their maturity to short term and long term passive banking activities. Short term passive banking activities are:

Passive banking activities are activities related to accumulation of funds and in the bank's balance sheet these funds appear on liabilities' side.

With passive banking activities funds are collected for the purpose of being used when conducting active banking activities, and therefore it is said that they create bank's credit potential.

a) Issuing money; ***Issuing money*** *is a short-term passive banking activity through which banks supply the economy with money.* Issuing of money as a passive banking activity has been going on since the evolution of the gold standard, i.e. when the issuing bank and other privileged banks issued a note (banknote) according to a certain amount of gold deposited in the bank. The holder of these banknotes had a financial claim from the bank (debtor) for a certain amount of gold in the face value of the note. With a gradual decrease in the gold basis, i.e. by issuing a higher nominal value of money than the value of the gold and the growing influence of the state in the issue of money needed for payment operations, the perception of the value of money also changes. Banknotes become legal mandatory means of payment on the territory of a particular state and gain new economic significance and role in payment operations. Banknotes switch from surrogates (i.e. bills of exchange) to "real" money with a particular value. In such a relationship, the issuance of banknotes and coins represents a specific banking activity in any country and is entrusted to the central bank. Since money issuance was not limited to the amount of gold that was deposited in the bank, a real danger of excessive emission of money occurred, which could have a very negative effect on the economy, especially on inflation in a certain country. Therefore, the primary issue of money is under control of a monetary authority, i.e. the central bank. The central bank maintains the value of the money and oversees the amount of money in circulation and maintaining it on a certain level.

Short term passive banking activities are: issuing money, deposit services, short term interbank passive things, issuing of short term securities.

Issuing money as a short term passive banking activity can be seen as primary issue of money, where money is issued from the central bank, and as secondary issue of money occurs as a consequence of approving a short-term bank loan.

Secondary issue of money occurs as a consequence of approving a short-term bank loan. By approving a short-term loan the bank supplies the customer with a certain amount of a deposit (demand deposits), thus increasing the obligations to itself, but also enabling an increase in its credit funds in the future (an increase in both assets and liabilities). Issuing money is the active part of this activity, and creating deposits is the passive part of the multiplication process.

The secondary issue of money occurs in two steps. Firstly, the bank approves a short-term bank loan (which represents an active banking activity), and secondly, when cashing in the loan, the bank supplies the client with a deposit and thereby increases obligations to itself (passive banking activity), but also enables an increase in its credit funds in the future.

b) Deposit services; Banks collect funds by attracting customers to use checking accounts and savings deposits (up to one year). **Current or checking accounts** can also be met under the name of demand deposits, where customers can withdraw their funds instantly or at short notice and use it for conducting payments. Typically deposits that can be withdrawn on demand pay lower rates than those deposited in the bank for a set period. **Savings deposits** involve depositing funds for a defined or set period of time at a fixed or variable rate of interest. Banks offer an extensive range of such savings products, from standard fixed term and fixed deposit rates to variable terms with variable rates. Deposit services are core passive banking activities and the operation of a particular bank, and especially its credit potential and approval of loans depend on them. Activities connected with collection of deposits and attracting customers to have checking accounts in a particular bank actually provide the basic raw materials for approving loans and present the ultimate source of profit and bank development.

Banks attract customers to open checking accounts and savings deposits, and these are core passive banking activities. The operation of a particular bank, and especially its credit potential and approval of loans depend on these activities.

Current or checking accounts can also be met under the name of demand deposits, where customers can withdraw their funds instantly or on a short notice and use it for conducting payments.

c) Short-term interbank passive activities; in passive banking a special place is occupied by things that the bank exercises when borrowing from other banks. That is how a bank comes to funds, and at the same time has the role of a debtor to the lender of those funds. ***Interbank loan*** *is a loan between banking institutions, with terms ranging from overnight to one week.* The principal reason behind interbank loans is that they cover liquidity requirements set by a regulatory agency. In instances where a bank has a shortage of liquid assets, it borrows from other banks whose liquid assets are in excess than that required. The medium by which banks extend loans to one another is called an interbank lending market, and such loans are made at an interbank rate (also called an overnight rate, if the term of the loan is overnight). These sources of funds are generally more expensive than deposits, because they are absorbed in credit markets. Interbank cooperation can be reflected through central bank loans and loans from other commercial
banks. Central bank loans mainly take the form of rediscount, relombard, selective and liquidity loans.

Savings deposits involve depositing funds for a defined or set period of time, at a fixed or variable rate of interest.

Banks can borrow from other/ commercial banks or from the central bank. Central bank loans mainly take the form of rediscount, relombard, selective and liquidity loans.

Interbank loan is a loan between banking institutions, with terms ranging from overnight to one week.
The principal reason behind interbank loans is that they cover liquidity requirements set by a regulatory agency.
They are generally more expensive than deposits, because they are absorbed in credit markets.

- ***Rediscount*** *is a passive banking activity during which a bank sells a discounted bill of exchange to a central bank.* This bill of exchange was already discounted when the drawer raised a loan within the maturity of the bill of exchange. Instead of keeping the bill of exchange until maturity, the bank discounts it again, i.e. the bank sells it to a central bank. Unlike discount rates, when a central bank sells securities on the money market, rediscount rate is the rate at which the central bank purchases back securities and in general is always higher than the discount rate.

Rediscount is a passive banking activity according to which a bank sells a discounted bill of exchange to a central bank.

- ***Relombard*** *is a short-term interbank loan granted by a central bank to a commercial bank, which has previously been approved a Lombard loan (at a Lombard rate) secured with securities (collateral) to another commercial bank.* Relombard is a very similar banking activity to the rediscount, but here bills of exchange are not subject to the transaction; other securities are used instead. If a bank needs cash, and there are

Relombard is a short-term interbank loan granted by a central bank to a commercial bank which has previously been approved a Lombard loan (at a Lombard rate) secured with securities (collateral) to another commercial bank.

securities that are lombarded (pledged) for it, it will pledge them again (it will re-lombard them) with a central bank, thus receiving liquid funds. In short, the Lombard and the Relombard loans consist of giving in to a pledge security and raising a loan amounting to a certain percentage of the value of those securities;

- *The essence of **selective lending** is having a selective credit program by the central bank for each year.* This central bank's selective credit mechanism works for the purpose of realization of two goals, i.e. it provides directing loans for sectors that are priorities in a macroeconomic policy, and quantitatively regulates the growth of the credit potential.

Selective lending consists in having a selective credit program by the central bank for each year.

- ***Liquidity loans** are approved to commercial banks for the purpose of bridging over short-term periods of illiquidity.* This type of loan is not popular, but it is good for banks, which is why it is called a loan of last resort. Banks must pledge government securities as collateral for these loans.

Liquidity loans are approved to commercial banks for the purpose of bridging over short-term periods of illiquidity.

Credit indebtedness with other banks is a special loan approved by one bank to another, to maintain current liquidity. The overflow of credit resources between banks is considered a secondary form of credit potential formation in the banking system and hence called re-deposition.

d) Issuance of short-term securities: ***Issuance of short-term securities*** is a form of fundraising necessary for the current operations of a bank, and is tied to the money market. The basic precondition for this way of obtaining funds is a developed money market. Central Banks can issue central bank bills (CBBs), while banks can issue their own bills of exchange and certificates of deposit. Central bank bills (CBBs) are also known as central bank securities or central bank bonds. **CBBs** are short-term (up to a year) financial instruments issued by a country's central bank or a monetary authority to commercial banks. CBBs are issued for a range of monetary policy purposes, exchange rate regulations, and are also used as a primary means of reducing excess liquidity (via reserves management). The holder of CBBs easily gets the necessary liquid assets to carry out its own activity. What is more, if the holder faces a temporary lack of liquidity, instead of selling CBBs it may request a loan and can offer CBBs as a collateral (pledge). Banks can draw own bills of exchange and discount them at the central bank or any other financial intermediary.

Issuance of short-term securities is a form of fundraising required for the current operations of a bank, and is tied to the money market. Central Banks can issue central bank bills (CBBs), while banks can issue their own bills of exchange and certificates of deposit.

CBBs are short-term (up to a year) financial instruments issued by a country's central bank or monetary authority to commercial banks.

Bill of **exchange** is a written order to a person requesting to make a specific payment to the signatory or to the payee.

Bill of exchange is a written order to a person who requests to make a specific payment to the signatory or to the payee.

Certificate of deposit (CD) is the most typical security that banks issue and it represents a bank certificate that reads to the bearer, on a certain amount deposited in the bank, for a precisely determined period (usually 3, 6, 9 and 12 months) and with a precisely determined interest rate.

Certificate of deposit (CD) is a bank certificate that reads to the bearer, on a certain amount deposited in the bank, for a precisely determined period and with a precisely determined interest rate.

Long-term banking is a form of mobilization and concentration of long-term assets that the bank uses to lend for financing capital investments, such as industry development and commerce. Banks are interested in collecting and concentrating funds that are termed over a longer period of time. Some of the most important long-term passive banking activities include:

a) Collection of long term savings deposits; ***Long term savings deposits*** *are deposits that are termed on a time period longer than one year and have a higher interest rate than short term time deposits.* They are also called time deposits, and they remain to be the most significant source of long-term funding. The basic motive for long term savings deposit is the interest rate, which increases with the term of the deposit. Regarding a bank's deposit structure we can notice differences between small retail time deposits and large time deposits, which are typical for corporations, institutional investors, etc.

The most important long-term passive banking activities are: collection of -term time deposits, issuance of securities, obtaining long-term loans and increasing capital.

Long- term savings deposits are deposits that are termed on a time period longer than one year and have a higher interest rate than short term time deposits.

b) Issuance of long-term securities; When issuing long-term securities a bank comes to the safest and most stable funds available for approving long-term loans. The basic prerequisite for using this mechanism is the existence of a developed capital market. The most significant long-term securities are stocks and bonds. **Bond** is a debt security, which confirms that the holder (buyer, creditor) has paid the debtor (issuer) a certain amount of money as a counter value of the bond and that the debtor will pay the creditor the amount borrowed, together with the interest, which is according to the established interest rate and within the agreed deadlines. Bonds are an additional source of funds for the issuer. Issuers of bonds can be legal entities, banks and governments. Often, the funds obtained by issuing them serve to finance special programs or facilities whose revenues are further used to pay off overdue bonds. Bonds are very similar to credit, because they are also a form of borrowing. **Stock**, i.e. share is a security that acquires ownership over an ideal part of the company, in proportion to the size of the share in the total share capital. What is characteristic of the capital provided through the sale of shares is that it is permanent, i.e. without obligation to return. Ownership of stock gives the stockholder certain tangible and intangible rights regarding the bank. Intangible rights include: the right to participate in the work of the General meeting of shareholders; the right to vote; the right to receive business information. Tangible rights include: the right to a proportional share of the profit; pre-emptive right to purchase newly issued shares; the right to a proportional share of liquidation estate.

Banks can provide the safest and most stable funds when issuing long term securities. These raised funds are used for approving long-term loans.
The most significant long-term securities are stocks and bonds.
Bond is a debt security, while stock is an ownership security.

Bonds confirm that the holder (buyer, creditor) has paid the debtor (issuer) a certain amount of money as a counter value of the bond and that the debtor will pay the creditor the amount borrowed, together with the interest, according to the established interest rate and within the agreed deadlines.

Stock, i.e. share is a security that acquires ownership over an ideal part of the company, in proportion to the size of the share in the total share capital.

c) Long-term borrowing through loans. If the capital market is not developed, banks will not be able to effectively issue long-term securities for fund raising. However, they can still use long-term loans. Long term loans from abroad represent an efficient substitute for insufficient domestic long-term sources of funds.

d) Increasing the capital is an additional way of forming the total banking potential and represents the conversion of past profits into additional capital. Strengthening competition in the banking markets leads to a decrease in interest rates, which in turn results in a lower rate of profitability. Therefore, banks tend to enter more risky businesses, which on the other hand entail higher rates of capital. The basic function of the bank capital is to provide potential for absorbing losses and to protect depositors and other creditors. The general principle is that the bank's capital must grow in proportion to the increase in bank assets (the minimum rate of capital in relation to its risk-weighted assets is 8%).

Banks can increase their capital by converting past profits into retained earnings, i.e. additional capital.

Passive banking activities are presented in the passive side of a bank balance sheet. Based on the discussion above we can conclude that banks' funds, which are accumulated for conducting active banking activities, can come from: the general public (retail deposits); companies (small, medium, and large corporate deposits); other banks (interbank deposits or loans); equity issues (share issues, conferring ownership rights on holders); debt issues (bond issues and loans); and saving past profits (retained earnings).

1.2. Active Banking Activities

Active banking activities *comprise all those activities in which the bank appears in the role of a creditor or investor, or when the funds it collects (mobilizes) using passive banking activities are placed in the form of loans or securities.* ***A loan*** *is a monetary debtor-creditor relationship in which the creditor of the loan (i.e. the bank) assigns the right to use a certain amount of funds to the debtor (borrower/client) for a predetermined period of time and under agreed repayment conditions.* In its essence, it is about investing one's own and other people's funds in appropriate placements, which are also the most important sources of income for every bank as a business entity.

Active banking activities are the most important sources of income for every bank as a business entity.

Active banking activities comprise all those activities in which the bank appears in the role of a creditor or investor, or when the funds it collects using passive banking activities are placed in the form of loans or securities.

While passive operations form the platform which banking operations are based on, and determine the amount of business assets, such as types of loans and placements, active banking activities define banks as business entities and their place in the economy. A credit banking activity is one in which the bank gives the client a loan - a certain amount of money, and the client commits to return the amount within the agreed deadline and pay the bank a certain fee in the form of interest.

Banks, guided by basic banking principles, liquidity, profitability, transparency, safety and efficiency in investing, and bank regulations, independently form and conduct credit policy. The credit policy sets the general framework for developing an appropriate structure of a bank's credit portfolio, complete assessment of loans, appropriate monitoring and servicing of approved loans and supervision of loans in delay. In practice, active banking activities, i.e. lending activities, are divided into two basic groups following the maturity of funds' sources: short-term and long-term lending. Banks approve short-term loans from the accumulation of demand deposits and short-term bank loans, and create a new purchasing power, i.e. they increase the existing money supply. A bank uses these funds to approve loans for a period of three months to one year. If the bank wants to approve a long-term loan, it forms its credit potential from its own capital (recapitalization, issue of shares and bonds from accumulated profits, etc.) or funds obtained with longer repayment terms, long-term deposits, special state funds, long-term loans obtained from international organizations on the capital market, etc. In other words, long-term loans are approved from funds created through the accumulation of money (savings deposits), and their redistribution does not affect the amount of existing money supply.

The credit policy sets the general framework for developing an appropriate structure of a bank's credit portfolio, complete assessment of loans, appropriate monitoring and servicing of approved loans and supervision of loans in delay.

Short-term loans are approved from the accumulation of demand deposits and short-term bank loans, and create a new purchasing power, i.e. they increase the existing money supply.
On the other hand, long-term loans are formed from its own capital (recapitalization, issue of shares and bonds, from accumulated profits, etc.) or funds obtained with longer repayment terms, long-term deposits, special state funds, long - term loans obtained from international organizations on the capital market, and their redistribution does not affect the amount of existing money supply.

Banks' income is generated mostly through credit transactions in which interest is charged on approved loans. The interest charged through credit

operations is called active interest. The bank's position in active operations ranges from the bank (creditor) to the client (debtor). Operations of banks in this area are regulated by a Loan Agreement, which specifies the obligations of both parties (creditors and debtors). The drafting of this contract is based on the national "Law on Obligations".

However, if we narrow down active banking activities only to placements of funds in the form of loans, we will make an unforgivable mistake. The notion of placement of funds includes not only placements of funds in various forms of loans, but also the activities of banks related to various other placements of funds, like guarantees, securities, etc. It is considered that the total placements in loans occupy the most significant part of banks' assets, and these are the most massive forms of active banking.

Types of Loans

Credit operations are operations that involve giving various cash loans to clients, with the obligation to repay them within agreed maturity and with appropriate interest. Loan agreements are the most common and most important banking issues in modern society. Economic systems are essentially based on credit relations. Loans are associated with the existence of money, commodity production and the market. The Law on Obligations regulates loan agreements in our country. ***A loan agreement*** *is an agreement by which a bank undertakes to make available to the borrower a certain amount of money, for a definite or indefinite period of time, with a specific purpose or without a specific purpose, and on the other hand, a borrower undertakes an obligation to return the required amount to the bank in a defined period of time, with interest or without interest, as already stipulated in the contract.*

A loan agreement is an agreement by which a bank undertakes to make available to the borrower a certain amount of money, for a definite or indefinite period of time, with a specific purpose or without a specific purpose, and on the other hand, a borrower undertakes an obligation to return the required amount to the bank in a defined period of time with interest or without interest, as already stipulated in the contract.

Banks approve different types of loans to their customers depending on:

1. The duration of the credit borrowing, which can be;

- short-term loans - up to 1 year;
- long-term loans - over 1 year.

2. The purpose of the borrowing or economic use, which can be loans for:

- Working capital;
- Investment placements in land, forests, construction buildings, equipment, vehicles, tools, furniture, etc.;
- Buying residential property for living, or commercial real estate space;
- Buying motor vehicles;
- Economic or current needs of clients.

3. The method of loan settlement, which can be loans with:

- one-time settlement on an agreed maturity date;
- settlement with periodic installments, with or without a grace period, and repayment of fixed amounts in , after the grace period, according to the settlement plan for repayment;
- settlement with periodic installments, with a grace period or without grace period and repayment of predefined (variable) amounts in installments after the grace period according to the settlement plan.

Loans can be classified according to different criteria, such as:
- the duration of the credit borrowing,
- the purpose of the borrowing or economic use,
- the method of loan settlement,
- the pledged collateral,
- the basis for loan approval.

4. The pledged collateral, which can be loans secured with: a cash deposit/depot; guarantees and securities issued by the RNM; securities (excluding securities issued by the RNM); guarantees from financial institutions; guarantees issued by legal entities; residential property for living and renting out; other residential property; commercial real estate; warehouse space; production facilities; other real estate; motor vehicles; other movable items; guarantors and bills of exchange; guarantors; guarantee agreement with/without executive clause; collateral applicants; and other security.

5. The basis for approval. There can be placements in: overdraft; credit lines; specific loans as part of credit lines; discount loans; and credit cards.

According to the classification above there is a variety of credit placements on the banking market. We will now discuss short-term and long-term credit placements, for corporate clients and individuals.

Short Term Loans for Corporate Clients and Households

Most often short-term loans are those whose repayment period does not exceed one year. Short-term loans are approved to finance the current consumption of a population or to finance the working capital of companies. Traditionally, short-term loans occupy a large part of the total loans of commercial banks. In this part, we will first describe the short term loans for corporate clients.

Short-term loans for corporate clients are:
1. Working capital loans;
2. Credit lines (revolving loans);
3. Loans secured with working capital;
4. Bridge loans;
5. Discounting bills of exchange;
6. Overdraft facilities;
7. Lombard loans;
8. Acceptance credits;
9. Banker's guarantees;
10. Reimbursement loans.

1. Working capital loans are one of the most common loans that banks grant to companies and these loans fund everyday business operations. Businesses use working capital loans to cover things like payroll, rent and debt payments. They are also often used by cyclical businesses during the off-season — the debt of which is paid down during the busy season. Since their main goal is financing seasonal working capital they are also called inventory loans. Inventory loans are approved for purchasing materials or trade goods, and later, when the products or goods are sold, which automatically provides cash inflows, the companies repay the loans. Usually, these are repaid at once, i.e. with one time settlement on an agreed maturity date. They are usually uninsured, because the risk is very small as it arises from their self-liquidating nature.

Working capital loans or inventory loans are typically approved:
- for purchasing materials or trade goods, or for covering payroll, rent and debt payments;
- with one time settlement on an agreed maturity date;
- uninsured, because of their self-liquidating nature.

2. Credit lines (revolving loans). Credit line is a revolving loan agreement, which the bank uses so that it makes an aggregate amount of capital available to the client, over a specified period of time. The credit line is usually agreed upon for a period of six months to one year, and then the bank and the client agree on its renewal, depending on the financial condition of the company and market conditions in general. These loans are characterized by great flexibility, because they determine only the maximum amount of the loan, but the client is not obliged to use the entire approved amount. The biggest advantage of these loans is that the client can decide independently on the time and amount of borrowing within the approved credit line. Hence, credit lines are suitable for companies that need financing, but do not know exactly how much money they will need during a given period. The bank must comply with the terms of the agreement and can withdraw the credit line only if the debtor's financial position

Credit lines have several features:
- loans with an aggregate /maximum amount of loan which may not be used entirely by the client;
- available over a specified period of time, i.e. the client may draw funds from the credit line during the defined time frame;
- clients pay interest only on the withdrawn part of the loan, but the banks also charge a certain fee (commitment fee), expressed as a percentage of the unused part or of the entire amount of the credit line.

deteriorates or if the client does not comply with the terms of the contract. An additional benefit of credit lines is that the debtor pays interest only on the withdrawn part of the loan, but the banks also charge a certain fee (commitment fee), expressed as a percentage of the unused part or of the entire amount of the credit line. An additional form of this loan is a credit line which can be approved for a medium term (2 to 5 years).

3. Loans secured with working capital. This group includes any loan secured with the debtor's current assets. However, loans secured with working capital are backed (or "secured") by collateral in the event of a default, such as stocks of materials, finished products, or receivables. These loans are approved with a certain percentage of the book value of collateral (40% - 60% of the value of inventories or 70% - 80% of the value of receivables from customers). In addition, just as the company sells its goods and collects receivables, part of the cash inflows automatically goes for repaying the loan. another characteristic of these loans is that in the procedure of loan approval, the bank places much greater importance on the collateral than in other types of loans. In addition, in the event of an irregular loan repayment, banks can easily decide to activate the collateral. Therefore, when approving these loans, the following factors are of utmost importance: characteristics of collateral (quality of goods, durability, etc.), its liquidity, market value, existence of legal risk related to legal procedures, and documents for collateral activation.

Loans secured with working capital are loans:
- secured with the debtor's/client's current assets;
- that are approved according to the book value of the pledged collateral, i.e. current assets;
- which if the bank takes over default, pledged current assets it can further sell them, i.e. the bank activates the collateral.

4. Bridge loans. Bridge loans are short-term loans designed to meet client's temporary financial needs that last until an event occurs. For example, if a company has started a procedure for issuing shares, it can bridge over the time interval until the issuance of shares with this loan. It allows users to meet current obligations by providing immediate cash flow. Later, when shareholders buy the issued shares, the company will repay the loan. Most often banks approve such loans to construction companies to complete the construction of a facility (for example, a commercial real estate), which will then be sold or financed with a long-term loan from another bank. Furthermore, these loans are used by investment banks when buying shares issued by companies. Once the shares are sold to the investors, the investment banks return the loans taken from the realized cash inflows.

Bridge loans are short-term loans designed to meet client's temporary financial needs that last until an event occurs. In other words, bridge loans bridge over the time interval until issuance of shares, bonds, or completion of a constructed facility.

5. Discounting bills of exchange. A bill of exchange is a written order that binds one party (drawee/debtor) to pay a fixed sum of money to another party (payee/drawer/creditor) upon demand or on a predetermined date. If the creditor needs liquidity/cash they can sell the bill of exchange before its maturity to a third party (for example a bank), i.e. discount the bill of exchange. The bank will pay the drawer the amount specified on the bill but deducted for a certain interest rate or fee, because the bill of exchange is not due yet. At maturity of the bill of exchange, the bank will collect the payment from the debtor. This is a special type of a loan, usually given for a short period, where the bank buys short term receivables from a company before its maturity. Because the company/borrower gets the amount of money specified on the bill of exchange before its maturity, the sum is reduced by the interest and other charges, i.e. the company is paid with a reduction in nominal value for interest or other fees

Discounting bills of exchange mean that a creditor sells the bill of exchange to a third party - the bank, before its maturity for a sum in the face value of the bill of exchange reduced for interest or other fees.
At maturity of the bill of exchange, the bank collects the payment from the debtor in a sum equal to the face value of the bill of exchange.

(discount). By discounting the bills of exchange before they are due, the entities can monetize their claims on the basis of the goods sold but not paid. At maturity, the bank collects the full nominal value from the drawee. The discounting of bills expands the commercial credit and speeds up the circulation of capital.

$$TD = \frac{FV \times t \times i}{360 \times 100}$$

where:

TD – true discount

FC – face value of the bill of exchange

t – time, number of days from day of discount until maturity

i - discount rate

For example, the bank purchases a bill of exchange on 15.03.2020, with due date on 08.04.2020. The face value of the bill of exchange is 9.000.000,00 denars. The discount rate is 8%. Now calculate the true discount and the discount value of the bill of exchange.

$$TD = \frac{9.000.000 \times 24 \times 8}{360 \times 100} = 48.000$$

The discount amount is 48.000 denars, while the bank discounts the bill of exchange to 9.000.000-48.000 = 8.952.000 denars.

6. Overdraft facility is the most flexible short term loan. The overdraft facility allows the account holder to continue withdrawing money even when the account has zero balance or has insufficient funds to cover the amount of the withdrawal. In this situation the account is said to be "overdrawn". If there is a prior agreement with the account provider for an overdraft, and the amount overdrawn is within the authorized overdraft limit, then interest is normally charged at the agreed rate. The borrower must be careful not to exceed the limit of the cash approved. Moreover, the borrower is only charged interest on the amount withdrawn and not on the approved amount.

Overdraft facility allows account holder to continue withdrawing money even when the account has a zero balance or has insufficient funds to cover the amount of the withdrawal.

7. Lombard loan is an old type of loan that has been practiced since the Middle Ages in the Italian province of Lombardy and consists of lending on the basis of movable property: gold, foreign currency, bills of exchange, securities, and even physical goods. The main characteristic of this short term loan is that the quality of the collateral has a decisive role when approving it rather than the creditworthiness of the company. The company pledges assets that are currently out of production function and activates them with the obtained loan, makes them mobile and functional without selling them. The pledged loan brings benefits for the debtor company as it gives it the opportunity to meet its financial obligations accurately and on time, without being forced to sell securities or goods when market conditions are unfavorable. The market value of the pledged assets presents the basis for obtaining this type of loan, i.e. the amount of lombard loan depends on the amount of the pledged value. The securities are valued at market value, but the lombard loan is approved below that value, not exceeding 60-75% or three quarters of the daily value of the pledge. The only exception is gold, where the amount of loan reaches 100% of the gold value. Lombard loan can be realized only after signing the Lombard loan agreement,

Lombard loan's features are:
- the quality of the collateral has a decisive role when approving it rather than the creditworthiness of the company;
- pledged collateral can be movable property such as: gold, foreign currency, bills of exchange, securities, and even physical goods;
- the amount of the approved lombard loan depends on the amount of the pledged value;
- if the company defaults, the bank has the right to sell the pledged assets publicly and collect its claim.

when the conditions are determined (term and interest, nominal loan amount) and when the collateral is pledged in favor of the bank. The bank is obliged to keep the pledge and to perform all actions related to the pledge. If the company defaults, the bank has the right to sell the pledged assets publicly and collect its claim.

8. Acceptance credit is a specific type of letter of credit, i.e. type of guarantee loan, by which the bank does not directly approve the amount of money to its client but accepts the bill of exchange and by signing it the bank increases its creditworthiness and quality, which on the other hand, helps the drawer to obtain a loan in a more secure and faster way, by selling it, i.e. discounting it to domestic or foreign banks. The bank, by placing its signature on the bill of exchange as the main debtor, undertakes an obligation that it will pay the bill if the drawer does not do so - the applicant for the bank's acceptance fails to do so on the due date. The bank actually sells or, to be more precise, rents its signature, business and moral reputation. This type of loan is accompanied by an acceptance loan agreement which determines the amount of the loan up to which the bank's client can draw on the bank's bill of exchange, the term of the acceptance loan, the method of securing the loan and the amount of commission and other arrangements that banks will charge.

Acceptance credit is a type of guarantee loan where:
- the bank does not directly approve the amount of money to its client
- the bank accepts the bill of exchange, i.e. undertakes an obligation that it will pay the bill if the drawer does not do so - the applicant for the bank's acceptance fails to do so on the due date;
- this loan is accompanied by an acceptance loan agreement which determines the amount of the loan up to which the bank's client can draw on the bank's bill of exchange, the term of the acceptance loan, the method of securing the loan and the amount of commission and other arrangements that the bank will charge.

9. Banker's guarantee is a specific loan, similar to the acceptance credit. It functions in the following way: the bank putting its signature on a client's bill of exchange guarantees that if the principal debtor does not pay the debt, the bank will do it. The bank unconditionally and irrevocably undertakes an obligation that in case of non-payment on the maturity of the bill of exchange by the applicant - a debtor of a bill of exchange, it will pay the bill as a guarantor. This is, in fact, about giving the company a good chance of postponing the payment of its obligations until the due date of the bill of exchange. Additionally, the bank that guarantees fulfillment of its client's obligations, provides its client, based on such aval (guaranteeing) of bill of exchange, with the possibility of getting a discount loan much easier. When approving this kind of "aval" loan, the bank does not engage its own funds, except in extraordinary situations when its client cannot pay the due bill, and the bank pays the bill of exchange as a debtor. In addition, as a collateral to protect against risk of default, banks require from its clients to deposit denar or foreign currency deposit, which cannot be withdrawn before the warranty expires. Banks can also accept a mortgage on real estate as collateral for the guarantees. The technique of approving is almost identical to other short-term loans, except that this loan sets a guaranteeing limit under which the bank can endorse the bills of exchange of the loan applicant - its client.

A banker's guarantee is similar to an acceptance credit. However, the difference lies in that the acceptance credit/ letter of credit is a document issued by a bank that guarantees the payment of the importer's draft for a specified amount and time and ensures that the transaction proceeds, while a banker's guarantee reduces the risk of loss if the transaction is not performed according to the agreement.

In acceptance credits, or letters of credit and banker's guarantees, the bank promises/obliges that it will repay the borrower's debt to another party if the borrowing party cannot repay what it owes. However, the difference between these two types of loans depends on the circumstances in which they are used. Therefore, letters of credit are used in international trade or global transactions, due to:

- the distance involved and the different legislations in the countries of the business entities involved, and

- the difficulty of the parties meeting in person.

On the other hand, bank guarantees are typically used in real estate contracts and infrastructure projects, where the bank guarantees to a third party that the loss will be compensated if the borrower does not follow or conduct the transaction/construction according to the agreement (signed between the borrower and the third party).

10. Reimbursement loan. This loan is applied exclusively in international trade, both in import and export, and includes: an importer, an importer's bank, a reimbursement bank, an exporter, and an exporter's bank. Only large banks, i.e. banks with high international reputation and trust, are interested in such activities. The most renowned banks that provide reimbursement loans are the London banks. We will explain the process of approving and using this type of loan as it involves many participants. When concluding a contract between an importer and an exporter, it is stipulated that the goods should be paid through an intermediary bank-reimbursement bank, when the exporter sends the goods to the importer. The importer appeals to his bank to secure a reimbursement loan in favor of the exporter. The importer's bank sends the loan request to the reimbursement bank. The reimbursement bank accepts the loan application and at the same time informs the bank of the exporter and the exporter. After receiving a notification, the exporter sends the goods to the importer, and the documents (bill of lading, insurance policy, invoice, certificate of origin of the goods, etc.) are sent to the reimbursement bank through the exporting bank. The reimbursement bank then sends an accepted bill of exchange to the exporting bank. With this bill of exchange, the exporter can make a payment or discount it and turn it into money. The reimbursement bank sends copies of the documents to the importing bank and the importer then gives an order to his bank from his account to pay for the purchased goods to the reimbursement bank. Today, reimbursement loans are the most common, safest and cheapest foreign trade loans. The disadvantage is that it can only be approved by internationally known and recognized banks, so companies from underdeveloped countries are referred to the mediation of foreign banks.

Reimbursement loan includes an importer, an importer's bank, a reimbursement bank, an exporter, and an exporter's bank. The steps are as follows:
1. The importer appeals to his bank to secure a reimbursement loan in favor of the exporter.
2. The importer's bank sends a loan request to the reimbursement bank.
3. The reimbursement bank accepts the loan application and at the same time informs the bank of the exporter and the exporter.
4. After receiving the notification, the exporter sends the goods to the importer, and the documents are sent to the reimbursement bank through the exporting bank.
5. The reimbursement bank then sends an accepted bill of exchange to the exporting bank.
6. The reimbursement bank sends copies of the documents to the importing bank and the importer then gives an order to his bank from his account to pay for the purchased goods to the reimbursement bank.

Short-term loans to households are used to finance the current consumption of the population, i.e. people use them to overcome a temporary lack of money. This group includes various types of loans people use to finance current expenses, buy permanent consumer goods, travel, etc.

Short-term loans for households can be typified as:
1. Revolving consumer loans.
2. Purpose commercial loans.
3. Non-purpose consumer loans.

1. Revolving consumer loans. There are several types of loans in this group: loans based on credit cards (credit cards) and overdraft facilities on current accounts. With these loans, the consumer has an open credit line of a certain amount which is constantly extended. In other words, the client has a certain amount of a loan available and as soon as he repays the debt (in part or in full) the loan is renewed. Depending on the method of repayment of the loan, they can occur as loans that are repaid at once, or loans with repayment in installments. Namely, consumers have great flexibility in debt repayment, i.e.

Revolving consumer loans can be in the form of credit cards and overdraft facilities. Their main feature is that they act like open credit lines with a certain amount, which is constantly extended, i.e. the client repays his/her debt in part or entire, and afterwards the loans are renewed.

they can repay the entire used loan amount at once or pay only a certain percentage of the loan. On the other hand, consumers decide for themselves when and how much to borrow, by paying interest only on the amount of loan that is withdrawn. It is because of these features that renewable loans are very popular.

2. Purpose commercial loans. This type of consumer loans are approved through companies that the banks have concluded an agreement with, and they are intended for purchasing certain products in stores (household appliances, video and audio equipment, furniture, jewelry, clothing, etc.). The loan amount can be small (for example, about 10,000 denars), but these loans may also be approved for larger amounts, ranging up to about 300,000 denars. The borrower does not receive the money at all, but the loan is approved so that the bank transfers the money to the seller's account. In terms of maturity, consumer loans have a shorter maturity (for example, six months to one year). At the same time, short-term loans have a constant interest rate. In addition to the interest rate, banks charge various fees, such as: manipulative loan approval costs, early repayment fees (according to the Macedonian legislative consumer loans are not subject to early repayment fees), etc., ranging from 1.5% to 5% of the loan amount. From the point of view of repayment, these loans usually appear as installment loans. Finally, most of these loans are secured with bills of exchange, an administrative salary ban or by one or two guarantors.

Purpose commercial loans are intended for purchasing certain products in stores such as household appliances, video and audio equipment, furniture, jewelry, clothing, etc.
The borrower does not receive the money as the payment is transferred to the store/company with which the banks have concluded an agreement.

3. Non-purpose consumer loans. Banks also offer other types of loans, intended to finance various consumer needs. For example, many individuals and families can afford a vacation or travel abroad with the help of travel loans. These are short-term loans, with repayment in equal monthly installments, with constant or variable interest rates and secured with an administrative ban on salaries and bills of exchange, while other terms of lending remain standard.

Non-purpose commercial loans are intended for financing various consumer needs.
The borrower receives the money on his account.

Long-Term Loans for Corporate Clients and Households

The long-term financial needs of companies and households are covered by long-term loans, which are used for the purchase or construction of fixed assets (machines, trucks, equipment, buildings), for permanent working capital, buying residential property etc. These loans are approved for a period of several years, and the maturity of the loan should be in line with the lifespan of the fixed asset. Long-term loan is a loan whose maturity (repayment period) exceeds one year. However, there is no strict definition of the minimum repayment period of a long-term loan, i.e. sometimes only those with a maturity of more than three or five years are considered long-term loans.

Long-term loans belong to the group of secured loans and during their approval, the clients are required to have a certain share in the total value of the fund that is financed, i.e. the loan amount is less than the collateral value. In this way, the bank is partially protected from credit risk and the problem of moral hazard. Namely, if the client participates in the financing of the procurement of fixed assets, he/she will not be motivated to avoid repaying the loan, because he will suffer a loss.

Long-term loans are used for the purchase or construction of fixed assets (machines, trucks, equipment, buildings), for permanent working capital, or for buying residential property.
Typically, loan maturity is in line with the lifespan of the purchased/constructed fixed asset, which exceeds one year.
Long-term loans are secured loans with collateral.
Long-term loans can be used in full at once, i.e. for buying real estate, equipment or in tranches, i.e. for construction, renovating etc.
Long-term loans can be repaid at once (with a grace period included in installments) or in periodic installments (with or without a grace period) according to the agreed installment plan.

Clients use long-term loans in full and at once, or in several tranches, according to the client's financial needs. For example, if the company or individual uses the long-term loan for buying a machine, equipment, a residential or commercial real estate, then the loan is used at once. However, if the loan is used for construction of a building or renovating, then the long term loan is used in several tranches according to the investment plan and the concluded agreement between the bank and the client. In addition, the repayment of long-term loans can be done at once or in periodic installments (annuities), which is the most common case. However, the bank and the client can agree on a different course of the installments (an ascending or descending plan of installments, a free installment plan or a plan with equal installments) or whether the installment plan includes a certain grace period or not.

Long-term loans for corporate clients may appear in the form of:
1. Mortgage loans
2. Investment loans

Due to longer maturity, long-term loans are more complex and riskier compared to working capital loans. Therefore, the approval of these loans is preceded by an extensive credit analysis, which assesses a number of factors that affect the repayment of the loan. Thereby, the most important element in the credit analysis is the assessment of the future financial ability of the client for proper repayment of the loan. This means that, in addition to historical financial statements, special attention is paid to the future projected cash inflows of the company. At the same time, in these loans, collateral is of secondary importance in the decision to approve these types of loans. Finally, the long-term nature of these loans means that they are exposed to higher risk, not only credit risk but also other risks, such as interest rate risk, currency risk, etc. Therefore, banks can charge a variable interest rate on these loans or a combination of fixed and variable interest rate, for the purpose of adding a premium for the risk and they are with a foreign exchange clause. Most common long-term loans for legal entities or companies are:

Long-term loans are exposed to higher risk of default, i.e. credit risk and therefore:
- the approval of these loans is preceded by an extensive credit analysis, in which the most important element is the assessment of the future financial ability of the client for proper repayment of the loan,
- collateral is of secondary importance in the decision to approve these loans, and the amount of loans is tied to the market value of the collateral.
Due to their long-term maturity long term loans are also exposed to other risks, such as interest rate risk and currency risk.

1. Mortgage loan is a loan that is approved based on the creditworthiness of the loan applicant, i.e. the company and the quality of the pledged collateral. The loan amount usually depends on these two factors, and it is also in accordance with the legal framework (such as the Credit Risk Management Methodology). In order for a mortgage loan to be approved the pledged collateral must be insured against natural disasters, and the insurance policy must be vinculated in favor of the bank. With the vinculation the pledge creditor (the Bank) gets a primary role in the payment of damages, because the rights under the policy are transferred in its favor. The process of pledging in favor of the bank and activating the mortgage are regulated by law on the basis of property rights, legal relations and enforcement. The mortgage can be: land, (such as agricultural land, land on which construction is underway or under construction), buildings, apartments, leisure and recreation facilities, commercial real estates, plants, warehouses, built-in equipment, production halls and other construction facilities. These loans can be approved as non-purpose loans, loans for the purpose of refinancing credit exposures in other banks or loans for the construction of buildings, such as: administrative and residential properties, shopping malls etc. The last one is usually secured with the real estate

Mortgage loans are approved to corporate clients:
- after assessing the creditworthiness of the loan applicant, and the quality of the pledged collateral,
- for stated purpose or non-purpose loans.

The pledged collateral must be insured and vinculated in favor of the bank. This means that in case of an adverse event (which is insured) the bank takes the primary role in the payment of damages of pledged collateral, because the rights under the policy are transferred in its favor.

being financed and the loan amount is used in tranches as construction progresses.

2. Investment loans (project loans) are long-term loans for funding certain long-term, large-scale investment projects, such as mines, refineries, pipelines, power plants, etc. In addition to creditworthiness, when approving these type of loans credit analysts also analyze the investment study in detail to determine the return on investment. Investment loans are very large loans, with long maturity, and banks are exposed to very high risks (credit risk, interest rate risk, country risk, etc.). Hence, due to risk diversification, these loans usually appear as syndicated loan or loans approved by consortium banks. In the previous chapter we already discussed consortium banks as a group of banks that jointly finance a single borrower. On the other hand, a syndicate loan is when multiple banks lend money to a borrower all at the same time and for the same purpose, and each bank participates with only one share in the total amount of the loan. In the consortium bank there is a legal contract that delegates responsibilities among its member banks and it exists until the final objective is achieved. In the case of a syndicate loan there is only a syndicate loan agreement for financing a certain project.

Investment loans are intended for financing long-term, large-scale investment projects. Therefore, credit analysts have additional assessment to do when approving these kinds of loans, i.e. they analyze the investment study in detail to determine the return on investment, or the projected cash inflows from the project.

Long-term loans to households are usually for the purchase of permanent consumer goods (for example, motor vehicles, residential properties) or for financing construction or renovation. The long-term nature of these loans is also related to the large amounts of loans that debtors could not repay in a shorter period of time.

Long term loans for households may appear in the form of:
1. Automobile loans;
2. Non-purpose consumer loans;
3. Residential loans.

1. Automobile loans are approved for the purchase of new or old cars, engines and off-road vehicles. Automobile loans are usually approved with a currency clause. This comes from the need for banks to protect themselves against currency risk, given the fact that these are loans with longer maturities (usually one to six years), which are intended to finance the procurement of imported products. The approved loan amount is equal to the purchase price noted in a pro-invoice from the authorized seller reduced by (at least) 20% as a share requested from the buyer. Automobile loans are secured loans by the motor vehicle that is purchased (together with a policy for insurance, vinculated in favor of the bank). Also, the following instruments can be used as collateral for these loans: bills of exchange, an administrative ban on salary, one or two guarantors, denar or foreign currency deposit or mortgage on real estate.

Automobile loans are purpose and secured loans (with the purchased vehicle) approved in amount that is equal to the purchase price noted in a pro-invoice from the authorized seller reduced by (at least) 20% as a share requested from the buyer.

2. Non-purpose consumer loans. Banks approve consumer loans that do not have a predetermined purpose. These loans are paid in cash, or the bank transfers the money to the client's account, who can then use the money for any purpose. The offer of non-purpose consumer loans is abundant, i.e. banks offer loans with different amounts, maturity and other lending conditions in order to meet the needs of their customers. The maturity of non-purpose consumer loans can be up to five or ten years, and repayment is made in equal monthly installments. Typically, banks charge variable interest rates, which depend on the maturity, the type of security and whether it is in a denars or foreign exchange clause. In addition, loans are encumbered with numerous commissions and fees, ranging from 0.5% to 5% of the loan amount. Usually, these loans are

Non-purpose consumer loans do not have a predetermined purpose and the bank transfers the money to the client's account without further interfering/control of the funds.

Non-purpose loans are usually approved without pledged collateral and with a maturity from 5-10 years.
However, non-purpose loans can also be approved as mortgage loan (secured with time deposit, securities or real estate) with longer maturity of up to 25 years and higher amounts than 1 mill. denars.

secured with an administrative ban on salaries, bilsl of exchange or/and with guarantors, but it is worth mentioning that these are loans that are not secured with a collateral. Non-purpose consumer loan can also be approved as a mortgage loan, with amounts higher than 1 million denars and long maturities of up to 25 years. They have similar characteristics with the above-mentioned consumer loans, but the only feature that distinguishes them is that these types of non-purpose consumer loans are to be secured with certain collateral, such as a time deposit, securities or real estate.

3. Residential loans. Banks approve residential loans for the following purposes: buying an apartment or a house, buying a house with land, renovating an apartment or a house, construction, extension and upgrading of the house etc. They belong to the group of secured loans, namely loans secured by real estate (mortgage loans). Finally, from the point of view of the repayment method, housing loans belong to the group of loans that are repaid in installments. Worldwide, mortgage lending is a traditional activity of banks, which occupies a large part of the loan portfolio. The amount of residential loans depends on the income of the borrower, the purpose of the loan and the value of the property that is mortgaged. It ranges between EUR 3,000 and EUR 100,000. These loans have by far the longest maturity of any other loan: from 5 to 30 years.

Residential loans are purpose loans for buying or upgrading an apartment, a house or commercial real estate.

These loans are similar to mortgage loans, but unlike them the real estate that is subject to purchasing or upgrading is their pledged collateral.

Despite the above discussed various types of long-term and short-term loans, nowadays we cannot make a specific distinction between their characteristics, because banks continuously innovate and introduce new loan products so that they can handle the increased market competition and constant evolution of customers' financial needs.

1.3. Neutral Banking Activities

If banking activities are analyzed in terms of their importance, then active and passive banking activities are banks' main tasks, while neutral ones or intermediary activities are secondary. Neutral banking got its name because the bank appears neither as a debtor nor as a creditor. These activities are also called intermediary and banks charge certain provision or fees in accordance with their publicly announced price list. In other words, the bank does not charge interest for neutral banking activities but a commission, and that is why it is also called commission banking. The most significant neutral banking activities are: intermediation in payment operations, depot and trust services, forfeiting, factoring, letters of credit (L/C), and banker's guarantees.

When conducting neutral banking activities, the bank appears neither as a debtor nor as a creditor.
Banks conduct intermediary activities for which they charge certain provision or fees in accordance with their publicly announced price list.

Among the most significant neutral banking activities are: intermediation in payment operations, depot and trust services, forfeiting, factoring, letters of credit (L/C), and banker's guarantees.

Intermediation in Payment Operations

Payment systems are the most vital parts of every economic and financial infrastructure. The efficient functioning of payment systems enables safe and timely completion of financial transactions, which contributes to the performance of national economies. It is because of this significance that central banks are responsible for monitoring and/or are included in the payment

infrastructure, while banks are the main providers of payment operations. ***Payment system*** *can be defined as any organized arrangement for transferring value between its participants, i.e. individuals, companies, government bodies and financial institutions.* Payment systems are a by-product of the intermediation process, as they enable the transfer of ownership of claims in the financial sector. If any of these circulation systems failed, the functioning of large and important parts of the economy would be affected. An efficient national payment system reduces the cost of exchanging goods, services, and assets. It is especially important for proper functioning of the interbank, money, and capital markets.

Payment system can be defined as any organized arrangement for transferring value between its participants, i.e. individuals, companies, government bodies and financial institutions.

Traditional payment systems include instruments such as cash and check payments, credit transfers, and payments using credit or debit cards. However, with the emergence of computers and electronic communications, many alternative electronic payment systems have been introduced. The electronic payment system is the ability to send cash/money electronically for products and goods purchased via the internet. ***Electronic payment*** *is a payment made from one bank account to another via electronic means without direct intervention of bank staff, and instead of using cash or check, in person or by mail.*[11] We can also say that electronic payment is any kind of non-cash payment that does not involve paper. Narrowly defined ***electronic payment*** refers to e-commerce - *payment for buying and selling goods or services offered through the Internet, or generally to any type of electronic funds transfer.* The main feature that distinguished the electronic payment system from the traditional is that the former uses cash-substitutes as compared to traditional payment systems. Electronic payment systems include payment instruments such as debit cards, credit cards, electronic cash, software wallets, and smart cards.

Traditional payment systems include instruments such as cash and check payments, credit transfers, and payments using credit or debit cards, while electronic payment systems include debit cards, credit cards, electronic cash, software wallets, and smart cards, where cash/money is electronically sent for products and goods purchased via the internet.

Payment systems can have their own procedures and protocols, and some of these systems and networks have grown to a global scale, but still there are many country-specific and product-specific systems. For example, globally available payment systems are tied to credit cards, debit cards and automated teller machine networks. Other specific forms of payment systems are also used when conducting financial transactions for products in the equity markets, bond markets, currency markets, futures markets, derivatives markets, or options markets. At a national level country use Automated clearing house (ACH) and real-time gross settlement (RTGS) systems. Additionally, on international level, payment systems use the SWIFT network, which will be explained later on.

Country specific payment systems are Automated clearing house (ACH) and real-time gross settlement (RTGS) systems. On international level payment systems use the SWIFT network.

An automated clearing house (ACH) *system is a net settlement system, which means settlement may be delayed.* For example, in the Macedonian payment system, payment is made as follows: when the bank's customer gives a payment order in favor of a person who has an account in another bank, the bank forwards the payment order to the Clearing House (KIBS). However, at that moment, the final payment is not made, but only messages are exchanged for payments from one bank to another. Thus, during the working day, all banks submit their payment orders and at the end of the day, all inflows and outflows are calculated, separately for each bank, and thus the net balance of each bank's account is determined. At the end of the day, all payment orders between the banks are

An ACH is considered a net settlement system, which means the settlement may be delayed.

[11] Schueffel, P. (2017), *The Concise Fintech Compendium*, School of Management Fribourg, Switzerland

mutually exclusive and the balance is obtained on the account of each bank, which shows whether during the working day the bank had more payments than pay offs or vice versa. Money is paid to the accounts of banks that have had net inflows. Thus, at the end of the business day, the accounts of all banks in KIBS should be reduced to a balance of zero, because these accounts are used only for calculation, i.e. for the needs of netting. However, if a bank does not have enough money on its account in the central bank, then its payment orders cannot be executed and therefore final payments are not made in the KIBS.

The main difference between ACH and RTGS is that in ACH messages about payments between banks are exchanged, and at the end of the day the net balance of each bank's account is netted, i.e. the payments are delayed, while in RTGS payment transaction does not require any waiting period like ACH, i.e. the transactions are settled as soon as they are processed.

According to the Bank For International Settlement (BIS, 1997) ***real-time gross settlement systems (RTGS)*** *are funds transfer systems where the transfer of money or securities takes place from one bank to another on a "real-time" and "gross" basis.* Settlement in "real time" means that payment transaction does not require any waiting period like ACH. The transactions are settled as soon as they are processed. "Gross settlement" means the transaction is settled on a one to one basis without bunching or netting with any other transaction. Once processed, payments are final and irrevocable.

Real-time gross settlement systems (RTGS) are funds transfer systems where the transfer of money or securities takes place from one bank to another on a "real-time" and "gross" basis.

It is worth mentioning that ACHs are typically used for low-value, non-urgent transactions, while RTGS systems are typically used for high-value, urgent transactions.

Banks as carriers and intermediaries in payment systems provide varieties of paper based or electronic payment services to clients, such as:

Banks, as carriers and intermediaries in payment systems, offer a variety of payment services to clients:
- cash transactions;
- cheques;
- credit transfers or wire transfers;
- standing orders;
- direct debits;
- plastic cards.

- **Cash transactions** via cash desks in a bank branch. Main payment services offered to clients are cash paying in and paying out, by which they can increase the amount of money on their current account or withdraw money in bank branches.
- **Cheques** are widely used as a means of payment for goods and services. The cheque is a document that orders a bank to pay a specific amount of money from one person's account (drawer) to another on whose name the cheque has been issued (payee). The person, who writes the cheque (drawer), has a transaction banking account (current or checking account) where their money is kept. The drawer writes the various details including the amount, date, and a payee on the cheque, and signs it, ordering to their bank, known as the drawee, to pay that person or company the amount of money stated. Cheque payments are also known as debit transfers because they are written requests to debit the payee's account.
- **Credit transfers or wire transfers** are payments where the customer instructs their bank to transfer funds directly to the beneficiary's bank account, individual or legal entity. Consumers usually use this kind of payments to pay invoices or to send payments in advance for their ordered products.
- **Standing orders** are instructions from the customer (account holder) to the bank to pay a fixed amount at regular intervals into the account of another individual or legal entity. The bank has the responsibility to remember to make these payments and only the account holder can change the standing order instructions.

- **Direct debits** are arrangements made with a bank that allow a third party to transfer money from a customer's account, usually to pay bills. The direct debit instructions are usually of a variable amount and the times at which debiting takes place can also be either fixed or variable (although usually fixed).
- **Plastic cards** include credit cards, debit cards, cheque guarantee cards, travel and entertainment cards, shop cards and 'smart' or 'chip' cards. It should be noted that that plastic cards do not act themselves as a payment mechanism. They only help to identify customers and assist in creating either a paper or electronic payment. *Credit cards* provide holders with an approved revolving loan (i.e. credit line) to use for purchases at retail stores and other outlets. The retailer pays the credit card company a commission on every sale made via credit cards and the consumer obtains free credit if the bill is paid off before a certain date. If the bill is not fully paid off then it attracts interest. Visa and MasterCard are the two most important bank-owned credit card organizations. *Debit cards* are issued directly by banks and allow customers to withdraw money from their accounts or from their approved overdraft facility. They can also be used to obtain cash and other information when used through automated teller machines (ATMs). ***ATM** is a machine that dispenses cash or performs other banking services (payment of bills, money exchanging etc.) when an account holder inserts a bank card (credit or debit card).* Credit cards and debit cards can both be used on point of sale terminals (POS). ***POS** is an electronic device used to process card payments (nowadays and mobile payments) at retail locations.* An additional neutral banking activity is when banks offer arrangements for POS terminals to retailers for a certain commission.

ATM is a machine that dispenses cash or performs other banking services when an account holder inserts a bank card.

POS is an electronic device used to process card payments (nowadays and mobile payments) at retail locations.

Cross border payment operations are performed by banks thanks to The Society for Worldwide Interbank Financial Telecommunication (SWIFT). SWIFT was founded in Brussels in 1973 under the leadership of its inaugural CEO, Carl Reuterskiöld (1973–1989), and was supported by 239 banks in fifteen countries. It is a vast messaging network used by banks, brokerage and trading houses, securities dealers, asset management companies, clearing houses etc. for accurate and safe exchange of information, such as money transfer instructions. The wide acceptance and usage of SWIFT is related to its standardization, i.e. adding specific new message codes to transmit different financial transactions. Additionally, it assigns each financial organization a unique code that has either eight characters or 11 characters and this code identifies the bank name, country, city, and branch. Although it started operating for simple payment instructions, today SWIFT is used for sending messages for a variety of actions, including security transactions and treasury transactions. Nearly 50% of SWIFT traffic is still used for payment-based messages, but 47% is used for security transactions, and the remaining traffic consists of flows to treasury transactions.[12] SWIFT

SWIFT is an international payment system used by banks, brokerage and trading houses, securities dealers, asset management companies and clearing houses for sending messages related to payment, security and treasury transactions.

[12] SWIFT. "SWIFT IN FIGURES December 2019 YTD," Downloaded from "SWIFT FIN Traffic document centre," Page 3. Accessed March 1, 2020.

sends payment orders between financial institutions, which must be settled by correspondent accounts that the institutions have within each other. It does not facilitate funds transfer. In order to exchange banking transactions each financial institution must have a banking relationship by either being a bank or affiliating itself with one (or more) so as to benefit from these particular business features.

Depot and Trust Services

Banks offer depot and trust services to their clients. Depot services include safekeeping in deposit boxes with various sizes, which can be used in full discretion and without any queuing. Trust services include management, safeguarding and maintaining clients' assets, storage and registration of securities,

Banks are interested in safekeeping valuables (money, securities, jewelry, gold etc.) for their clients in specially built rooms - vaults (safes). Banks offer clients safe deposit boxes with various sizes, which can be used in full discretion and without any queuing. Depot services present one of the oldest banking activities. Trust services are characteristic for developed economies and they imply systematic care for estates or financial securities. This type of services may include management, safeguarding and maintaining clients' assets, storage and registration of securities, revenue collection on the basis of ownership over securities such as dividends and interest, monitoring corporate activities of issuers whose shares client owns, as well as changes in legislation. Banks have specialized trust departments for these activities or establish their own trust companies. A special type of trust services is the management of pension funds, where the trust bank collects pension payments, invests in certain financial instruments, manages the investment portfolio, pays pensions, keeps records, etc.

Factoring

Factoring is a financial activity when a company sells its receivables to a financial intermediary - a factor (bank, financial company etc.) at a reduced (discounted) value, and then the factor collects receivables from debtors.

Factoring *is a financial activity when a company sells its receivables to a financial intermediary - a factor (bank, financial company etc.) at a reduced (discounted) value, and then the factor collects receivables from debtors.* The factoring agreement is defined as a contractual relationship between one party - the supplier (client) and the other party - the financial intermediary – bank (factor) according to which:

- the customer transfers to the factor their discounted non-matured cash receivables, which arise on the basis of contracts for the sale of goods or services between them - the client and his buyer (debtor),
- and the factor undertakes appropriate compensation to accept to collect those claims, if he maintains that the solvency of the client's debtors is good.

The factoring agreement is defined as a contractual relationship between one party - the supplier and the bank (factor) according to which:
- the customer sells the discounted non-matured cash receivables to the bank,
- the factor accepts to collect those claims and
- the debtor is notified of the transfer of claims.

An important condition for the existence of a factoring agreement is the notification of the debtor of the transfer of claims. Namely, the seller of the claims (the client) should inform the debtor that the claims have been transferred to the factor, although the notification can be performed by the factor himself. Otherwise, the factoring agreement has a longer character, because it can refer not only to existing missing claims, but also to the transfer of future claims. However, most often the factoring agreement is concluded for a certain period of

time and it includes all monetary claims that the client has, and not just certain individual claims or transactions.

Forfeiting

Unlike factoring, which only applies to financing international and domestic trade, forfeiting is used in financing international trade. ***Forfeiting*** *is a means of financing that enables exporters to receive immediate cash by selling their medium and long-term receivables (i.e. the amount an importer owes the exporter) at a discount through an intermediary - bank.* The exporter eliminates the risk by making the sale without a recourse. He has no liability regarding the importer's possible default on the receivables. In this case the bank acts as a forfeiter. From the moment of purchase of the claim from the exporter, it becomes a new creditor of the buyer of the goods and it takes the risk of possible problems in collecting the claim. For these reasons, the bank must carefully analyze its buyer's ability to repay the loan. Since it is a buyer located in another country, and he is typically not known to the bank, the bank forfeiter usually requests, in addition to other documents, a guarantee from a first class bank or in certain cases from a government, to ensure itself that the buyer will pay for the goods.

Forfeiting is a means of financing that enables exporters to receive immediate cash by selling their medium and long-term receivables (i.e. the amount an importer owes the exporter) at a discount through an intermediary - bank.

Letter of Credit (L/C)

Letter of credit (L/C) *is a banking instrument by which a bank, at the request of its client, orders another bank to make available to the subject designated on the letter of credit a certain amount of money within a certain period.* L/C is the most common tool for financing foreign trade. Although these payments are most commonly used to pay for delivery of goods, its use for other transactions is not excluded.

The opening of L/C is considered to be a very complex banking operation with special attention being paid to accurate specification of the terms of the letter of credit, documents, security, etc. The issuance of letter of credit means its inclusion in international payments, and therefore highly professional banking behavior is required. It is specially recommendable in case of mistrust between the seller and the buyer or when they do not know each other. In this case, the seller is exposed to a number of risks such as credit risk, legal risk due to distance, differences in laws, and difficulties arising from not knowing the other party personally. This payment method was developed in 1933 by the International Chamber of commerce and is based on a set of rules, known as the Uniform Customs and practice for documentary credits (UCP), which are considered a worldwide standard by financial institutions and professionals alike. As outlined in the UCP 600, when using L/C, the bank will give an undertaking (or a promise), on behalf of the buyer (who is often the applicant) to pay the beneficiary (seller) the value of the goods shipped, if acceptable documents are submitted and if the stipulated terms and conditions are strictly complied with. The buyer can be

Letter of credit (L/C) is a banking instrument by which a bank, at the request of its client, orders another bank to make available to the subject designated on the letter of credit a certain amount of money within a certain period.

confident that the goods he is expecting will be received since they will be recorded in certain documents, after having met the specified terms and conditions. The supplier can also rest assured due to the fact that if such conditions are met, he will receive payment from the issuing bank, which is independent of the parties in the contract. In some cases, a letter of credit will require the documents to be collected. Figure 12 describes the payment process of L/C. As we can see in step 1 the buyer and the seller make a deal and the sales contract indicates that the letter of credit is selected as a method of payment.

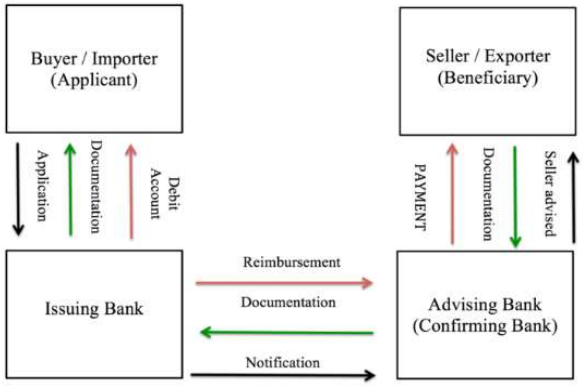
Letter of credit (L/C) is used in international trade and in case of mistrust between the seller and the buyer or when they do not know each other

In step 2 the buyer asks his bank to issue a letter of credit, by determining a set of instructions that must be met meticulously by the seller. Afterwards, the issuing bank sends a notification (via SWIFT) to the advising bank located in the buyer's country, which includes the details of the letter of credit and the full instructions that must be followed by the beneficiary / exporter (documentation, validity period). In step 4 the advising bank informs the seller that he is the beneficiary of the letter of credit and gives him the entire set of instructions. The advising bank is not obliged to pay the beneficiary.

In L/C the bank gives a promise on behalf of the buyer of goods to pay the seller if acceptable documents are submitted and if they strictly comply with the stipulated terms and conditions.

In L/C the buyer applies in his bank for issuance of a letter of credit, by determining a set of instructions that must be met meticulously by the seller. After receiving the documents from the bank, the buyers account is debited by the issuing bank.

Figure 12 Letter of credit payment process



Source: Adopted according to Casu, B., Girardone, C., & Molyneux, P. (2006). *Introduction to Banking.* Essex: Pearson Limited.

In L/C the seller, after being informed that he is the beneficiary of a letter of credit, provides the full documentation requested by the buyer and gets paid by the advising / confirming bank.

However, if the issuing bank is located in a country with a high country risk, the beneficiary can ask the advising bank to confirm the letter of credit and only then become a confirming bank. In this case, the confirming bank will have the obligation to pay the beneficiary, provided rigorous documentation requirements are fully met. Furthermore, the beneficiary must ensure that the letter of credit is irrevocable. Otherwise, in the case of a revocable letter of credit, the issuing bank can cancel it unilaterally and at any time. Conversely, the cancellation of an irrevocable letter of credit requires the beneficiary's consent. In step 5 the seller is advised that he is the beneficiary of a letter of credit and informed about the extent of his obligations. At this stage, it is crucial that the seller makes sure that he is able to provide the entire documentation requested by the buyer. Indeed, if for some reason, there are instructions that are difficult to comply with, it is extremely important that the seller ask the buyer to amend the documentation requirements accordingly, as failure to do so, might

compromise payments made to the seller. In addition, as previously highlighted, if the seller has some doubts about the reliability of the issuing bank, he might ask the advising bank (the local bank) to confirm the letter of credit and then become the confirming bank. By doing so, the exporter will ensure that if he meets the documentation requirements, the confirming bank will fulfill its obligation and pay the beneficiary. In step 6 the seller provides the bank (confirming bank) with complete documentation, and the seller is paid accordingly. The advising / confirming bank transmits the requested documents to the issuing bank, which processes the reimbursement, and then the issuing bank transmits the documents to the applicant (buyer) and debits his account in accordance with the terms of the letter of credit.

Documentation required in L/C typically consists of:
- Financial documents;
- Shipping documents or transport documents;
- Commercial documents;
- Official documents, and
- Insurance documents.

The documents required by the L/C and the form of documents is open to negotiation, and there might be requirements for presenting documents issued by a neutral third-party to prove the quality of the goods shipped, or their place of origin. A letter of credit usually requires:

- *Financial documents*, such as bills of exchange (a negotiable instrument to be given to the bank in order to get paid);
- *Commercial documents*, such as invoices and packing lists;
- *Shipping documents* or transport documents, i.e. bills of lading (B/L) which act as a contract between a seller and a carrier and provide evidence for the delivery of goods into the care and custody of the carrier;
- *Official documents*, such as a license, embassy legalization, an origin certificate, an inspection certificate, or a phytosanitary certificate;
- *Insurance documents*, such as an insurance policy or a certificate, requested by the buyer/importer and insurance coverage against buyer's risk of loss or damage to the goods during carriage.

Banker's Guarantee

Banker's guarantee *is a guarantee from a bank, on behalf of a bank's client (individual or legal entity) to fulfill obligations of a contract to their beneficiary.* If banker's guarantees are not activated, i.e. a bank's client fulfills his obligations towards the third party, this activity is classified as a neutral banking activity, and banks only charge commission, which is expressed as a percentage of the amount of the guarantee (from 0.3% to 1.2%), and is paid at once, monthly or quarterly. Furthermore, the great attractiveness of guarantees derives from the fact that when issuing them, banks do not experience any money outflow at all, because most often the guarantees remain unused. Also, guarantees generate low operating costs, as they are most often issued to customers with whom banks maintain close, long-term relationships, so there is no need for additional credit risk assessment.

Banker's guarantee is a guarantee from a bank, on behalf of a bank's client (individual or legal entity) to fulfill obligations of a contract to their beneficiary.

If banker's guarantees are not activated, then this activity is classified as a neutral banking activity, and banks charge commission only.

There are several types of guarantees, but they are generally divided into two groups:

- A financial guarantee is when a bank guarantees that its client will perform a monetary obligation. For example, a bank can guarantee that its client will repay the loan taken from another bank.
- A performance bond guarantee is when a bank guarantees that its client will perform a particular activity (delivery of equipment, construction activity, etc.).

A banker's guarantee and a letter of credit are similar instruments used in the banking industry, i.e. they both act as promises by banks that the borrower will be able to repay the debt to a third party. Nevertheless, it is important to note that the main difference results from their area of usage, i.e. L/Cs are typically used in international trade, while banker's guarantees are used in real estate contracts and infrastructure projects.

2. New Trends in Banking

In current modern banking, there has been a major shift in banking activities, which has led to the creation of universal products and services such as loans, deposits, insurance, securities and investment banking, pensions and other financial services. Net interest, fees and commission have become major income sources in a highly competitive environment. Banks are strategically focusing on generating high returns for shareholders, while expanding their activities into non-bank financial services and trying to offer as many products and services as they can in order to keep their current customers and acquire new ones.

Banks have marked a major shift of banking activities towards non-bank financial services for the purpose of offering as many products and services as they can, in order to keep their current customers and acquire new ones.

What is more, the growth of global banking, the intense competition and the rise of other financial markets has exposed banks, investors and borrowers to greater credit, currency, market, and interest rate risks. As a response banks have been using financial derivatives as instruments for hedging against some of these risks. On the other hand, there is an increasing trend of active trading with these instruments because of the additional income they generate for banks.

Additionally, the digital economy has brought in rapidly changing technologies, and increased knowledge intensity in the banking business with new models of operating and service delivery channels.

Therefore, in this section we will discuss the latest trends in banking, i.e. deregulation, globalization, digitalization and hedging, and the by-products of those trends such as bancassurence, electronic banking, usage of financial derivatives and securitization.

New trends in banking are deregulation, globalization, digitalization and hedging, and the by-products of these trends are bancassurance, electronic banking, usage of financial derivatives and securitization.

2.1. Deregulation and Globalization of the Banking Sector

Banking activities and banking operations have been continuously changing due to the ever-changing macro environment and uncertain future. Banks must always try and manage to adapt to market changes and respond to challenges that the future and society holds. The greatest transformation in the History of banking occurred during the 80s and 90s, relating to the processes of

The greatest transformation of banking occurred during the 80s and 90s, relating to the processes of deregulation, privatization of state owned credit institutions and globalization.

deregulation, privatization of state owned credit institutions (in transition economies, see Chapter V) and globalization.

Deregulation *in banking implies liberalization of domestic and international financial markets, by removing financial barriers and ensuring market behavior of banks.* However, the term deregulation presupposes financial and structural deregulation. Financial deregulation essentially consists of removing controls and rules that in the past have protected financial institutions, especially banks. Structural deregulation, more generally, refers to the opening up, or liberalization, of financial markets to allow institutions to compete more freely (Casu, Girardone, & Molyneux, 2006). These processes in particular encompass structure and conduct rules deregulation (such as the removal of branch restrictions and credit ceilings, respectively). The main purpose of deregulation, in general, is improving industry performance. If efficiency in performance is raised, a society will benefit from the improvement in resource allocation and this will lead to price reductions and/or service expansion for consumers, provided there is sufficient competition.

Deregulation in banking implies liberalization of domestic and international financial markets, by removing financial barriers and ensuring market behavior of banks.

The main purpose of deregulation is improving industry performance, which society will benefit from by improving resource allocation and price reductions and/or service expansion for consumers, provided there is sufficient competition.

As banking systems started opening up with new liberalizations' legislative, many financial institutions started pursuing international strategies. Consequently, the traditional focus on banking as a mainly domestic business has changed. This rapidly evolving environment has posed threats and has created opportunities for both bank managers and owners. Furthermore, some authors have identified three joint effects of the deregulation process and technology development. The relaxation of banking laws together with the advancement in technology have reinforced ***the consolidation process***. The consolidation process implied increased efficiency and profitability of newly merged banks and has resulted in a reduced number of banks everywhere. The second joint effect refers to the introduction of new technologies in a deregulated context which have ***intensified competition*** and improved banks' ability to adjust prices, terms of financial products and to introduce financial innovations. Finally, ***the barriers between bank and non-bank financial institutions have disappeared***, thus enabling, for example, the universalization of banks.

Technology development and deregulation in banking have caused three joined effects:
1. Reinforcement of the consolidation process.
2. Intensified competition.
3. Disappearance of barriers between bank and non-bank financial institutions.

The consolidation process has intensified competition and the introduction of international strategies implied the creation of financial conglomerates and universal banks.

Because of the organizational structure, consolidation processes, intensified competition and the introduction of international strategies financial conglomerates have been established around the globe. Banks have started operating as universal banks and provide an extensive range of bank and non-bank financial services. In Europe (the European Union), this was enabled through the Second Banking Directive (1989), and in the US through the passing of the Gramm-Leach-Bliley Act of 1999.

A financial conglomerate can be defined as any group of companies under common control, the activities of which consist of providing services in at least two different financial sectors, such as banking, securities, or insurance.

The process of ***globalization*** was inevitable as banks started pursuing international strategies in intensified competition, trying to increase their profit margins. It started in the 60s, when banks started intensifying international activities, due to the global economic development. With the help of digital development, globalization had its peak during 90s. The globalization phenomenon refers to the emergence of a broadly integrated, international but practically single market in finance: in short, the so-called 'global village' concept. ***Globalization*** *can be defined as the evolution of markets and institutions such that*

Globalization is the evolution of markets and institutions in such a way that geographic boundaries no longer limit financial transactions. The globalization phenomenon actually refers to the emergence of a broadly integrated, international but practically single market in finance: in short, the so-called 'global village' concept.

geographic boundaries do not limit financial transactions. Hausler (2002) lists four factors that have driven globalization in finance:

1. Advances in information and computer technologies have made it easier for market participants and country authorities to collect and process the information they need to measure, monitor, and manage financial risk; to price and trade the complex new financial instruments that have been developed in recent years; and to manage large books of transactions spread across international financial centers in Asia, Europe, and the Western Hemisphere.

2. The globalization of national economies has advanced significantly as a real economic activity (production, consumption, and physical investment) dispersing in different countries or regions. Nowadays, the components of a television set may be manufactured in one country and assembled in another, and the final product sold to consumers around the world. New multinational companies have been created, each producing and distributing its goods and services through networks that span the globe, while established multinationals have expanded internationally by merging with or acquiring foreign companies. Many countries have lowered the barriers of international trade, and cross-border flows in goods and services have increased significantly. These changes have stimulated demand for cross-border finance and, in tandem with financial liberalization, fostered the creation of an internationally mobile pool of capital and liquidity.

3. The liberalization of national financial and capital markets, coupled with the rapid improvements in information technology and globalization of national economies, has catalyzed financial innovation and spurred the growth of cross-border capital movements.

4. Competition among the providers of intermediary services has increased because of technological advances and financial liberalization. The regulatory authorities in many countries have altered rules governing financial intermediation to allow a broader range of institutions to provide financial services, and new classes of nonbank financial institutions, including institutional investors, have emerged. Investment banks, securities firms, asset managers, mutual funds, insurance companies, specialty and trade finance companies, hedge funds, and even telecommunications, software, and food companies are starting to provide services similar to those traditionally provided by banks.

Since the financial system is the most rigid and regulated area the financial globalization was the most difficult segment of the whole process of globalization. It is characterized by subnational operating, standardized multinational products and services, and digitally connected network of cross-border transactions. Its international character requires specific techniques, knowledge, risks and confidence from customers. It was therefore essential to establish international or subnational financial and accounting standards and regulation frameworks to enable successful financial globalization.

Factors that have driven financial globalization are:
1. Advances in information and computer technologies;
2. The globalization of national economies;
3. The liberalization of national financial and capital markets,
4. Competition among the providers of intermediary services.

Advances in information and computer technologies meant easier collection and processing of information for market participants and country authorities.

The globalization of national economies meant that real economic activities such as production, consumption, and physical investment have been dispersed over different countries or regions.

The liberalization of national financial and capital markets has speeded up financial innovation and has initiated increased capital movements on international level.

Competition among the providers of intermediary services meant that broader range of institutions could provide financial services, and new classes of nonbank financial institution have emerged.

Mergers and Acquisitions

Simultaneously with the process of financial globalization and because of pursuing international strategies in the intensified competition on the global

financial and banking market, the process of fusion between banks and other financial institutions has emerged. Mergers and Acquisitions (M&As) started changing the structure of the global and national banking sectors. ***Merger*** *is when two, usually similarly sized, banks and/or other financial institutions agree to go forward as a new single entity rather than remain separately owned and operated (consolidation).* ***An acquisition*** *is when a bank or a financial institution takes over another one and clearly becomes the new owner.*

Merger is when two, usually similarly sized, banks and/or other financial institutions agree to go forward as a new single entity (consolidation).

An acquisition is when a bank or a financial institution takes over another one and clearly becomes the new owner.

There may be several main motives for the fusion of banks, such as:

- Value creation through synergies, i.e. operating synergies, which are related to cash flow enhancement and financial synergies, which stem from a reduction in the cost of capital.
- Increasing market power.
- Self-serving objective, e.g. creating a larger company.
- Reaction to unexpected shocks in an industry structure, e.g. technological innovation or deregulation.
- Informational cascade where an action informs other firms in similar circumstances about the profitability of similar actions.

The fusion of banks has its disadvantages as well. First of all, the costs of M&As may sometimes overwhelm the values created through synergies. Another disadvantage is the difficulties and problems that arise when establishing new business politics, procedures, or culture among existing employees.

Supervisory Re-regulations

Global pressures have shaped the process of supervisory re-regulation. Increased competitiveness and acquiring higher profit margins implied increased riskiness of the banking business. Banks adapted to the newly created environment and introduced new financial products and services, which meant leaving their traditional regulatory framework. At international level, the first efforts to encourage convergence towards common standardized approaches of banks' performance were initiated by the Basle Committee on Banking Supervision in the 1970s. Since then capital adequacy standards and associated risk regulations have been important policy issues and fundamental components of bank prudential re-regulation. By definition re-regulation is the process of implementing new rules, restrictions and controls in response to market participants' efforts to circumvent existing regulations.

The process of supervisory re-regulation meant implementing new rules, restrictions and controls in response to market participants' efforts to circumvent existing regulations, because of the creation of a new banking environment, which is more competitive, and the introduction of new financial products and services.

2.2. Digitalization

Another process that has had a great impact on the banking industry and banking in general, is the development of information technology. With the introduction of ATMs, banks started considering customers' needs and behavior. This led to improvements in bank management and the development of new banking services and products. As a result of the technological advancement, banks started becoming cost efficient, i.e. their costs related to communications,

The development of information technology and introducing it into banking meant that banks were already changing and taking into consideration customers' needs and their behavior.

payment services, and updating were decreasing and banking organizational structures started transforming.

Recently, many authors share a common opinion that the role banks have in economy would fade and that with the declined function of banks as an intermediary and liquidity provider, they would even disappear. In this regard, financial systems evolve through time, passing through three phases (Rybczynski, 1997). In the first phase, banks are the most important financial intermediaries in the financial system, and interest income from loans is the main source of bank revenue. In the second phase, banks respond to the intensified competition implied by non-bank financial institutions (which offer near-bank products, such as money market accounts) and increase their off-balance sheet activities, including proprietary trading, underwriting and asset management. The third phase is market or securitized phase when the financial markets are the source of external finance for both the financial and non-financial sectors. Corporate bank loans are largely replaced by corporate bonds and commercial paper; mortgages and consumer credits originate from banks, but they are securitized. In this third phase, trading, underwriting, advising and asset management activities become more important for banks than the traditional core banking functions. Empirical findings show that banks are looking for other sources of income by expanding their non-interest bank activities.

Financial systems evolve through time, passing through three phases.
In the first phase, banks are the most important financial intermediaries in the financial system.
In the second phase, banks respond to the intensified competition implied by non-bank financial institutions and increase their off-balance sheet activities.
The third phase is market or securitized phase when banks realize that trading, underwriting, advising and asset management activities are more important than the traditional core banking functions.

However, the famous futurist in the area of modern banking, Brett King, goes further in his research and findings and states that: "The bankers of tomorrow are not bankers at all—the bankers of tomorrow are technologists who enable banking experiences your customers will use across the digital landscape. The bankers of today, the bank artifacts of today, the bank products of today are all on borrowed time. If you're a bank steeped in tradition, run by lots of bankers, with an old core, in a market with tons of regulation, reliant on branch traffic for revenue then, yes, it is very likely too late to make a complete transformation of the bank." In fact, the fastest-growing financial services organizations we see around the world today are not banks, but the FinTech companies, challenger banks and neobanks. These new financial intermediaries are changing the banking landscape and fully digitalizing banking products, services and activities.

In the 21st century new financial intermediaries emerged and they are changing the banking landscape and adding full digitalization of banking products, services and activities. FinTech companies, challenger banks and neo-banks are the fastest-growing financial services organizations we see around the world.

Fintech companies *use technological innovation for providing financial services.* The FinTech industry is a new and emerging financial industry, which uses advanced technology to improve financial activities. It is comprised of startups, established financial institutions and technology companies that are trying to replace or enhance the usage of financial services provided by existing financial companies, including banks. Financial technology has already been used to automate investments, insurance, trading, banking services and risk management.

Fintech companies use technological innovation for providing financial services.

Challenger banks *are small, relatively new retail banks that compete directly with the longer-established banks in the country*. These banks distinguish themselves from the traditional banks by offering modern financial technology experiences, such as online-only operations. By using this business model, challenger banks avoid the costs and complexities of traditional banking.

Challenger banks are small, relatively new retail banks that compete directly with the longer-established banks in the country.

The traditional banking sector as we know it is also affected by the existence of ***neo-banks*** *that operate exclusively online without traditional physical branch networks.* Firstly established in 2010, they have grown massively over the last decade and with challenger banks their Compound Annual Growth Rate (CAGR) stands at 46% (FinTech Magazine, 14/09/2020). The first thing that distinguishes them from challenger banks is that they are digital and are often called digital banks. They reach out to customers exclusively by web platforms or mobile banking, while challenger banks maintain a small "brick and mortar" physical presence in addition to being fintech operative. The second difference between neobanks and challenger banks is that they offer SME's and startups flexibility and access to a wide range of services. Neo-banks provide a platform that not only has a current account, but also offers additional features such as payroll, expense management and automated accounting services. However, neo-banks do not hold a banking license; they must have a partner bank instead. Examples of neobanks include: Atom Bank, Aion Bank, Monzo, Good Money etc.

Thanks to digitalization in the 21st century the financial landscape is shifting. For years, banks competed primarily with other banks with mass branch networks, marketing campaigns and interest rates. Universal banks served a variety of financial services and in most countries, there was moderate competition with several large banks that had a large share of the market. We all use deposit, payment and credit facilities offered by banks, but they are no longer the only players in the banking market. For example, today's customers may pay with a debit/credit card but they can also pay through PayPal. The payment market is quickly evolving. It is not only PayPal that sits alongside debit and credit cards. The following fintech companies are examples of contribution to this growing trend, by making payments faster, simpler and more secure: Circle, Remitly, Stripe, Braintree, Aeropay, DailyPay, Bolt, Ripple, and Affirm.

Households and legal entities apply for bank loans for a particular purpose, but today they can also borrow from peer-to peer (P2P) platforms. ***Peer-to-peer lending****, abbreviated as P2P lending, also known as crowd lending, is the practice of lending money to individuals or businesses through online services that match lenders with borrowers.* It is important to note that the P2P market does not act only as a source of cash, but it also offers investors and depositors a place to deposit cash and earn higher interest rates than from a traditional bank account. Customers do not borrow from a financial institution, but rather from an individual or a group of individuals who are willing to loan money to qualified applicants. It is important to put emphasize the word "qualified", because P2P lending websites make a credit score model, based on which decision is made about the transaction. Each peer-to-peer platform sets the rates and terms (sometimes with input from investors) and enables the transaction online. As a result, P2P fintech companies operate with lower costs and provide cheaper services than traditional banking institutions. Therefore, lenders can earn higher returns compared to savings and investment products offered by banks, while borrowers can borrow money at lower interest rates. Prosper is the first peer-to-peer lending marketplace, founded in the U.S in 2005. According to their website,

Neobanks operate exclusively online without traditional physical branch networks.

The differences between neobanks and challenger banks are that:
- neobanks are entirely digital, while challenger banks maintain a small "brick and mortar" physical presence;
-challenger banks offer SME's and startups flexibility and access to a wide range of services, while neobanks provide a platform that not only has a current account, but also offers additional features such as payroll, expense management and automated accounting services.
- neobanks do not hold a banking license; they must have a partner bank instead.

We all use deposit, payment and credit facilities offered by banks, but they are no longer the only players in the banking market. Today's customers may pay with a debit/credit card, but they can also pay through PayPal.
Households and legal entities may apply for a bank loan, but they can also borrow from and invest their free funds on peer-to peer (P2P) platforms.

Peer-to-peer lending, also known as crowd lending is the practice of lending money to individuals or businesses through online services that match lenders with borrowers.

they have coordinated over $12 billion in loans to more than 770,000 people. P2P platforms offer a variety of services, such as:

- an online platform to enable borrowers to lend unsecured personal loans or secured loans with luxury assets or other business assets as collateral to lenders;
- an online platform for investors to identify and purchase loans that meet their investment criteria;
- development of credit models for loan approvals and pricing;
- verifying borrowers' identity, bank accounts, employment and income;
- performing borrower credit checks and filtering out the unqualified borrowers;
- processing payments from borrowers and forwarding those payments to the lenders who invested in the loan;
- servicing loans, providing customer service to borrowers and attempting to collect payments from borrowers who are delinquent or in default;
- legal compliance and reporting;
- finding new lenders and borrowers (marketing).

P2P platform:
- does not act only as a source of cash, but it also offers investors and depositors a place to deposit cash and earn higher interest rates than in a traditional bank account;
- Customers borrow from an individual or a group of individuals who are willing to loan money to qualified applicants;
- P2P platforms make a credit score model based on which a decision is made about the transaction;
- Each peer-to-peer platform sets the rates and terms and enables the transaction online;
- P2P lending can be in the form of student loans, commercial and real estate loans, payday loans, as well as secured business loans, leasing, and factoring.

Furthermore, peer-to-peer lending can also be in the form of student loans, commercial and real estate loans, payday loans, as well as secured business loans, leasing, and factoring. Examples of such fintech companies are Peerform, LendingClub, Upstart, Prosper, Funding Circle, and Payoff.

In order to respond to these new entrants and the intensified competition, banks must adapt to this connected world, by removing friction and enabling utility, and by embedding banking services in the world of their customers. Otherwise, they will become a victim. This means transforming banks into providers of embedded banking utility, driven by behavior, location, sensors, machine learning and AI. However, transformation does not imply that technology will transform the elements of banks. It will transform banking activities irretrievably. Gupta (CEO) at DBS says banking must become "invisible", simply embedded in the world around us, through technology. In 2017 Francisco González, BBVA's executive chairman stated that internet giants like Amazon, Facebook, Google would be the main bank rivals, and in 20 years the ranks of banks worldwide could be thinned from thousands to dozens.

In order to respond to these new entrants, banks must adapt to this connected world, by removing friction and enabling utility, and by embedding banking services in the world of their customers.
This means transforming banks into providers of embedded banking utility, driven by behavior, location, sensors, machine learning and AI.

2.3. Electronic Banking

Modern banking and the new digital economy has given rise to customer-led demands for banking products and services. Customers seek for products with more value, customized to their exact needs, at a lower cost, and as quickly as possible. To meet these demands, banking businesses need to develop innovative ways of creating value, which often require different enterprise architectures, different IT infrastructures and a different way of thinking about doing business. This transformation of the banking business from a traditional banking model to new agile electronic banking is not easy and

requires a lot of innovative thinking, planning and investment. Electronic banking is one form of e-commerce and e-commerce is about buying and selling information, products and services via computer networks such as the Internet and Electronic Data Interchange (EDI). However, if a broad scope definition of e-commerce is used, then the term electronic banking can be defined from the following perspectives:

- Electronic banking is the delivery of information, products/services, or payments over telephone lines, computer networks, or any other electronic means.
- Electronic banking is the application of technology towards the automation of banking transactions and workflows.
- Electronic banking may be seen as a tool that addresses the desire of firms, consumers, and management to cut service costs while improving the quality of banking products and services and increasing the speed of service delivery.
- Electronic banking provides the capability of buying and selling products and information on the Internet and other electronic channels such as EDI.

In its very basic form, e-banking can mean the provision of information about a bank and its services via a home page on the World Wide Web (WWW) or via Internet. More sophisticated e-banking services provide customer access to accounts, the ability to move their money between different accounts, and make payments or apply for loans via e-Channels. E-banking started in the form of PC banking in the early 1990s, through which a user could use a PC and a dial up modem to log in into their bank's system without connecting to the Internet. Owing to various reasons such as lack of functionality, call costs and so on, this approach was not widely accepted. With the arrival of the Internet, interest in e-banking re-emerged and many banks started offering e-banking in the late 1990s. Over the last decade or so, new players such as Internet only banks as well as other organizations such as supermarkets or clothing retailers have also started offering e-banking.

Why is it so important to understand e-banking? It offers benefits to several stakeholders, mainly to banking management, due to lower transactions costs, as well as to customers, because of lower costs of transactions and quicker service, anytime and anywhere in the world. The usage of the Internet as a channel for the delivery of banking services is fundamentally different from other channels that banks use, such as branch networks, telephone banking or ATMs.

Many banks and other organizations already use this channel to deliver their services because of its relatively lower delivery cost, higher sales and potential for offering greater convenience for customers. A large number of organizations from within and outside the financial sector are currently offering e-banking which includes delivering services using Wireless Application Protocol (WAP) phones and Interactive Television (iTV). Many people see the development of e-Banking as something revolutionary, but broadly speaking, *e-banking is just another step in the banking evolution*. Just like ATMs, it gives

The transformation of the banking business from a traditional banking model to new agile electronic banking requires different enterprise architectures, different IT infrastructures and different way of thinking about doing business.

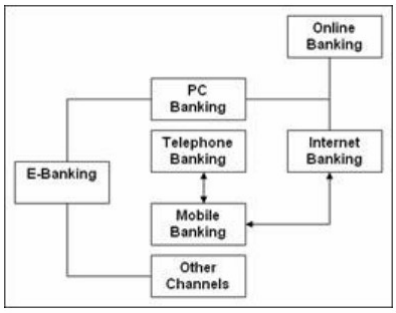
E-commerce is about buying and selling information, products and services via computer networks such as the Internet and Electronic Data Interchange (EDI).

Electronic banking can be defined as:
- delivery of information, products/services, or payments over telephone lines, computer networks, or any other electronic means;
- application of technology towards the automation of banking transactions and workflows;
- a tool that addresses consumer needs for improved quality and increased speed of delivery of banking products and services, and management priority for cutting service costs;
- options for buying and selling products and information on the Internet and other electronic channels.

consumers another medium for conducting their banking. The fear that this channel will completely replace existing channels has become realistic.

Figure 13 shows the structure of e-banking, where one can note the options customers have for virtual banking.

Figure 13 Structure of E-banking



Source: Goi, C.L., (2006), Development of E-Banking in Malaysia, *Journal of Internet Banking and Commerce,* Vol.11, no.2

Online banking is the broadest term and refers to all transactions conducted electronically using the internet as a gateway. These transactions include secure connection to banking information through customers' personal computers or other devices. With online banking, customers have a virtual bank 24/7 on their devices, and its only disadvantage is that customers cannot deposit or withdraw money from their bank account.

Online banking is the broadest term, which includes internet and mobile banking.

Internet banking is the same as online banking, but online banking has one more feature that makes it distinctive, i.e. open banking. The term ***open banking*** *can be defined as a systematically designed model which allows access to and control of consumers' banking and financial accounts by third party providers (TPPs).* Open banking can also be defined as a system under which banks open up their application programming interfaces (APIs)[13], allowing trusted third parties (upon given consent by customers) to access financial information needed to develop new apps and services and provide account holders with greater financial transparency options. The main purpose of open banking is to give third party providers (TPPs) access to customers' financial information, and indirectly offer them, especially to individuals and small to medium-sized enterprises, new products and services that could help them get a better deal. In this way

The difference between online and internet banking is that internet banking has one more feature, i.e. open banking.

Open banking can be defined as a systematically designed model which allows access to and control of consumers' banking and financial accounts by third party providers.

[13] Majority of banks are already using APIs for one or more of the following four main reasons: reach, speed, domains, or the Internet of Things (IoT). In turn, operations become more efficient, and all parties mutually benefit. For example, a bank may develop a mobile app that allows customers to access their account details as well as information about ATM locations, branch hours, etc. In order to optimize their app, they would need to use an API to connect with a third party like credit card companies, brokerage firms, or other large corporate clients who streamline and optimize the customers' experience. An example of a bank that uses API technology is BBVA, which offers API services to clients in Spain, Mexico, and the U.S. These are open APIs, meaning any company can use them and BBVA offers you the ability to gather customer information, collect financial statements, view your company's financial position, and much more. BBVA makes it easy for organizations to access essential information without hassle or delay. Another example of a bank that uses open banking platforms is HSBC Group. HSBC Group supports open banking APIs and private open banking APIs, that can provide valuable information on business and personal accounts, ATM locations, branch locations, loans and commercial credit cards. Their private APIs ensure the secure exchange of information between businesses and other parties, so that they can protect sensitive customer information.

customers can also get more customized services as per their spending behavior, leading to a more responsible and systematic lending process. Thanks to Open Banking, banks are being forced to rethink their core business models and to work in a more collaborative and open manner, both with other financial institutions and up-and-coming financial technology startups, for the benefit of end-customers. Concerning FinTech, open banking may widen their offer for financial services, such as managing personal accounts, finance management, access to credit services through a single application, and many more. Overall, this revolution in the financial markets has the potential to support a dynamic and competitive market place, where businesses offering new products and services will be able to compete on an equal footing with the larger incumbent providers.

The main purpose of open banking is to give third party providers (TPPs) access to customers' financial information, and indirectly offer them, especially to individuals and small to medium-sized enterprises, new products and services that could help them get a better deal.

In open banking:
- customers get more customized services as per their spending behavior, leading to a more responsible and systematic lending process;
- banks rethink their core business models and work in a more collaborative and open manner, both with other financial institutions and up-and-coming financial technology startups;
- fintech companies may widen their offer for financial services.

Mobile banking may be described as a channel in electronic banking that provides a convenient way of performing banking transactions using smart mobile phones or other mobile devices. The potential for mobile banking is far greater than typical desktop access, as there are several times more mobile phone users than online PC users. Increasingly "mobile life styles" may also fuel the growth of anywhere, anytime applications. Mobile banking is already an inevitable part of every society. Mobile banking apps statistics show that the mobile app market is projected to generate a revenue of $581.9 billion from downloads in 2020, and by 2021, there will be roughly 7 billion mobile users worldwide. As expected, the rapidly increasing number of mobile consumers has also fueled the growth of mobile payment services.

Mobile banking may be described as a channel in electronic banking that provides a convenient way of performing banking transactions using smart mobile phones or other mobile devices.

E-banking brought a new set of risks and banks have to put in place structures to manage these risks. These structures may include e-banking risk management frameworks that provide controls for strengthening security, availability and adequacy of systems. The nature of those controls will depend on several factors, such as the extent of the technological dependency, sources of threat, and the level of cross industry collaboration to combat these threats. Organizations need to have a policy statement setting out their e-banking risk management framework, as well as an organizational structure with clear responsibilities for the implementation of the framework and relevant controls. Adherence to the principles of ISO Standard, the international standard for information security management, could help in developing organizational structures to manage e-banking related risks.

Banks have to implement e-banking risk management frameworks that provide controls for strengthening security, availability and adequacy of systems.

Advantages of Electronic Banking

E-banking largely came into being as a result of technological developments in the field of computing and communications, but there are a number of other factors or challenges which have played an important part in its development. According to Jayawardhena and Foley (2000) the challenges for banks are fourfold. First, they need to satisfy customer requirements that are complex and ever changing. Second, they need to deal with increased competition from old as well as new entrants coming into the market. Third, they need to address the pressure on the supply chain to deliver their services quickly. Finally,

they must continually develop new and innovative services to differentiate themselves from the competition, since having a large branch network is no longer regarded as the main source of a competitive advantage. E-banking is seen by many banks as a key tool to address these challenges.

Other reasons for adopting e-banking by banks may include achieving a competitive advantage (at least in the short term), creating new distribution channels, improving image, and reducing costs. Despite the challenges that banks nowadays face due to the emergence of e-banking, its establishment offers many advantages which are briefly described below:

1. Creating more value for customers. Modern banking has to deal with the current challenge, which is to offer more products and services through more channels of distribution. Customer want to make a choice. They want a wide range of banking services, augmented by the convenience of online capabilities and a stronger focus by banks on developing personal relationships with their customers. Offering extra service delivery channels means a wider choice and convenience for customers, which itself is an improvement in customer service. E-banking can be made available 24 hours a day throughout the year, and the widespread availability of the Internet, even on mobile phones, means that customers can conduct many of their financial tasks virtually anywhere and anytime. This is especially true of developed countries, but there has also been an increase in the spread of wireless communications in developing countries, which means that services such as e-banking are becoming more accessible.

2. Attracting customers with higher-than-average income. E-banking often attracts high profit customers with higher than average income and education levels, which helps to increase the size of revenue streams. For retail banking, e-banking customers are therefore of particular interest, and such customers are likely to have a higher demand for banking products. Most of them are using online channels regularly for a variety of purposes, and for some there is no need for regular personal contacts with the bank's branch network, which is an expensive channel for banks to run (Berger & Gensler, 2007).

3. Creating an image of a bank that follows or brings in the latest trends. E-banking helps to enhance the image of the organization as customer oriented and focused on continuous innovations. However, this was especially true in the early days, when only the most innovative organizations were implementing this channel. Nowadays, not having this delivery channel is simply unimaginable.

4. Easier Expansion. Traditionally, when a bank wanted to expand geographically it had to open new branches, thereby incurring high start-up and maintenance costs. E-channels, such as the Internet, have made this unnecessary in many circumstances. The existence of neo-banks confirms this.

5. Load Reduction on branch networks and other channels. E-Channels are largely automatic, and most of the routine activities such as account checking, or bill payment may be carried out using these channels. This usually results in load reduction in other delivery channels, such as branches or call centers. This trend is to continue with more sophisticated services offered via e-banking, such as mortgages, deposits or asset finance.

Electronic banking faced several challenges which contributed to its development:
- Customer requirements are complex and ever changing;
- Increased competition from old as well as new entrants coming into the market;
- Increased pressure on the supply chain for fast delivery of their services;
- Development of new and innovative services to differentiate themselves from the competition.

The advantages of electronic banking are:
1. Creating more value for customers;
2. Attracting customers with higher-than-average income;
3. Creating an image of a bank that follows or brings in the latest trends;
4. Easier Expansion;
5. Load Reduction on branch networks and other channels;
6. Reduction of overhead costs and costs per service;
7. Organizational Efficiency;
8. E-marketing.

6. Reduction of overhead costs and costs per service. The main economic argument of e-banking so far has been the reduction of overhead costs in other channels such as branches, which require expensive buildings and the presence of staff. Costs per transactions in e-banking often decrease more rapidly than those of traditional banks, once a critical mass of customers is achieved.

7. Organizational Efficiency. To implement e-banking, organizations often have to re-engineer their business processes, integrate systems and promote agile working practices. These steps result in greater efficiency and agility in organizations. However, banks must also be aware that radical organizational changes could imply low employee morale, or collapse of traditional services or reduction in customer base.

8. E-marketing. E-marketing in the financial services sector has been made possible by the arrival of e-banking. E-marketing builds on the e-channel's ability to provide detailed data about customers' financial profiles and purchasing behaviour. Detailed understanding of customers enables customized advertising, customized products and enrichment of the relationship with customers through such activities as cross selling.

As previously mentioned, the main goal of e-banking is to provide most, if not all, of the services offered at a branch. This may include transactions as well as information, advice, administration, and even cross selling. However, the interactive nature of the Internet not only allows banks to enhance these core services, but also to communicate more effectively and enrich customer relationships. Analytical capabilities of data mining are constantly improving, and combining these with other technologies related to customer relationship management creates huge potential for enriching the relationship with customers.

2.4. Bancassurance

The introduction of bancassurance has not only been stimulated by insurance companies but also by the banking sector, in the pursuit of means to acquire additional income. First and foremost, serious and positive competition among banks resulted in the continuous reduction of interest conditions and administrative costs in the standard operation process, i.e. credit sales, thus causing the decrease of the main income from active interest rates. Secondly, legislation in many countries requires taxation of interest income on saving deposits, coinciding with the risk of reducing the volume of traditional savings and deposits that the banking sector is facing. This only redirects depositors towards purchasing life insurance policies, which in many countries have a more affordable tax treatment, as well a significant investment component. Banks are attempting to keep and "bind" clients using "bancassurance". Additionally, this relatively new distribution channel allows combining of clients' database between banks and insurance companies and using mutual strengths to compare traditional insurers or banks, such as brand awareness, marketing knowledge, existing customers and know – how on creating financial packages that include insurance policy.

The introduction of bancassurance was stimulated by:
- the pursuit of additional income, different from active interest rates;
- taxation of interest income on deposits;
- acquiring brand awareness, marketing knowledge, and know-how on creating new financial packages;
- acquiring customers database from insurance companies;
- cross-selling opportunities for banks, by offering a wider range of products;

Shortly, we can define ***bancassurance*** *as the distribution of insurance products (life and non-life insurance products) by using the bank branches or channels.* Bancassurance – also known as allfinanz – describes a package of financial servicesthat can fulfill both banking and insurance needs at the same time. The insurance company uses the bank's marketing to increase its sales by accessing a significantly larger potential customer base. What is crucial in bancassurance is the conception of a global movement to break down traditional barriers between various financial services and products. The focus of bank insurance is on consumers, offering financial consulting services "under one roof".

Bancassurance is the distribution of insurance products (life and non-life insurance products) by using the bank branches or channels.

Bancassurence models appear in several models of cooperation. The choice of cooperation model depends on several factors such as the legal-political and socio-economic setting, market regulations, and consumer preferences. Based on the level of integration of the bank and the insurance company, the following models may appear:

According to the level of integration between the bank and the insurance company, the following models may appear:
1. Intermediation;
2. Strategic partnership;
3. Joint venture;
4. Financial conglomerate.

1. Intermediation. In this model the bank is an intermediary of several insurance companies and its clients. The insurance company pays a certain prearranged commission to the bank for using this service. The rationale behind this business model is that the bank cannot or does not want to develop expertise and knowledge in the field of insurance, but wants to provide financial advice for various insurance products to its customers. The weakness of this model lies in the limited control of the insurance company when selling insurance products and the risk of insufficient information and commitment of bank clerks in the bank branches due to insufficient compensation or reward.

In the intermediation bancassurence model:
- the bank appears as an intermediary between several insurance companies and its customers;
- the bank cannot or does not want to develop expertise and knowledge in the field of insurance, but wants to advise its clients in this field;
- the insurance company pays a certain prearranged commission to the bank;
- the insurance company has limited control over the sale process, regarding the insufficient information and commitment of bank clerks.

2. Strategic partnership is when a bank performs activities on behalf of a certain insurance company and sells only its products. The main advantage of this model of cooperation is the possibility for the bank to choose an insurance company based on its reputation, image or product quality. On the other hand, the insurance company gets access to the bank's customer base with no additional financial investment. In this form of cooperation, the bank and the insurance company may form a product and integrate a certain type of insurance coverage in it (e.g. a loan secured with a life insurance policy). Additionally, in this model the insurance company can overcome the disadvantage of the intermediation model regarding the limited control by creating compensation packages, rewards and training courses to stimulate bank clerks and enhance their knowledge in sale of insurance policies. The biggest drawback of this and the previously mentioned model of cooperation is the danger of insufficient connection between the two corporate cultures and the fact that they are function as separate entities.

The model of strategic partnership differs from the intermediation model in that:
- the bank performs activities on behalf of only one insurance company;
- the bank and the insurance company may form a product and integrate a certain type of insurance coverage in it;
- the insurance company may create financial packages to stimulate bank clerks for the sale of insurance products and organize training courses in insurance and sales.

3. Joint venture is when a bank and an insurance company create a joint insurance company, i.e. create a new entity. The advantage of this model is the equal partnership and joint decision-making, as well as the possibility for each of them to focus on their own product and the synergy that arises from the cooperation.

4. A financial holding company or a financial conglomerate, is the owner of an insurance company and a bank. The biggest advantage of this model of cooperation is the full integration of the operating and system processes. The

'conglomerate' model goes beyond the traditional bancassurance model of 'distribution alliances', which involves simply cross-selling insurance products to banking customers, as it involves retaining the customers within the banking system and capturing the economic value added, which is a measure of the bank's financial performance, rather than simply acting as a sales desk on behalf of the insurance company. The conglomerate model means that the bank has its own wholly owned subsidiary to sell insurance through its branches.

The financial conglomerate means:
- full integration of the operating and system processes of an insurance company and a bank;
- the bank has its own subsidiary to sell insurance through its branches.

The advantages for both parties are in terms of innovation in creating new products, joint promotional campaigns and events, using the customer base and attracting new ones due to the diversified product range, and using their expertise and synergy in achieving long-term profitability. In the next section we will list the advantages for banks when entering in insurance sector.

The advantages for banks providing bancassurence services are:
- enlarging their product lines i.e. creation of new bank credit products or banking product packages;
- life insurance policies may be regarded as loan protection instruments according to the national legislative;
- commission income from insurance companies;
- transfer of "know-how" and expertise from insurance companies;
- continuous education and training of employees;
- marketing support for integrated product development, joint promotional campaigns for integrated product market research;
- increase of deposit base;
- use of ready-made software solutions and their implementation in the banking operating system.

With the inclusion of life insurance policies, banks are given the opportunity to enlarge their product lines, i.e. to create new bank credit products or banking product packages. Loan markets offer a variety of integrated loan products (housing loans, mortgage loans, consumer loans and credit lines) with life (risk) insurance, as well as packages with several products (consumer loans, overdrafts, credit cards, electronic banking) with life (risk) insurance. Risk insurance is a characteristic type of life insurance, which is concluded only in case of death for the duration of the loan and has no savings character. Therefore, there is no payment of profit or payment of the insured amount in case of experiencing the agreed duration of insurance. Life insurance coverage on risk policies may be equal to the agreed sum insured from the beginning to the end of the policy, or the insured amount may be reduced and the principal repayment should follow according to the repayment plan of the approved loan. Unlike the classic life insurance, in which the borrower has the right to return part or the entire paid premium after the expiration of the insurance, in the case of risk insurance after the end of the policy there is no payment of an insured amount to the borrower. Typically, integrated loan products have more favorable terms regarding annual interest rates (which are up to 0.5 pp lower than regular loan products), loan maturity, maximum loan product amount, and administrative costs and fees.

Life insurance policies may also fall into the category of other financed loan protection instruments according to the national legislative for determining a bank's capital adequacy. The credit protection instrument is an instrument for reducing the credit risk, i.e. when determining the weighted value of assets included in the credit risk weighted assets the bank may take into account the impact of the credit protection instruments. In other words, integrated loan products reduce calculated risk weighted asset and indirectly improve the capital adequacy. Additionally, insurance companies can establish and maintain strong relationships with cooperating banks, which will deposit part of its funds, and indirectly, with the increase of the deposit base, the crediting of the bank will also increase.

Perhaps one of the biggest motives and advantages of introducing bancassurence for banks is the realization of additional commission income from insurance companies, by cross-selling their products and services. Additional

advantages that banks enjoy when they include insurance products in their range of products are: the transfer of "know-how" and expertise from insurance companies; continuous education and training of employees, which is not limited only to the initial training for licensing of employees for insurance agents, but also to their continuous education for new insurance products, changes in legislation, etc .; marketing support for integrated product development, joint promotional campaigns for integrated product market research, increase of deposit base, use of ready-made software solutions and their implementation in the banking operating system.

Ohridska banka (Societe Generale) was the first to start bancassurance in the Republic of North Macedonia, by acting as an agent of the Life Insurance Company GRAVE AD Skopje, in 2012. The first integrated product launched as credit life insurance is a blend of crediting the population sector with liability insurance in the event of death of the borrower. By using this product, in the event of death or permanent disability of the borrower, the life insurance company settles the outstanding loan. These characteristics make the product beneficial for the bank, as well as the population. Bancassurance applies a win-win strategy, i.e. both institutional business partners profit from it. To be more precise, the bank offers a wider variety of additional financial, i.e. insurance services for its clients, all the while acquiring a new source of income from this additional activity.

2.5. Financial Derivatives - The Product of Modern Banking

In response to the exposure of increased credit, currency, market, and interest rate risks banks started using financial derivatives as instruments for hedging against some of these risks. In this context, hedging is used by banks in order to protect themselves from various types of risks or losses. When hedging, financial instruments are used as derivatives. A financial derivative can be defined as a financial security with a value that is derived from an underlying asset or group of assets. By definition a ***financial derivative*** *is a contract that gives one party a contingent claim on an underlying asset (e.g. a bond, equity or commodity), or on the cash value of that asset, at some future date.* The other party is bound to meet the corresponding liability. A derivative is a contingent instrument, because its value depends on the future performance of the underlying asset.

A financial derivative is a contract that gives one party a contingent claim on an underlying asset (e.g. a bond, equity or commodity), or on the cash value of that asset, at some future date.

The key derivatives are futures, forwards, swaps and options. In this section, we will briefly discuss the four key types of derivatives, with special attention to credit derivatives (credit default swap and total return swap), because of the main advantage for banks to transfer credit risk to another financial institution while maintaining relations with their clients.

Forward contract *is a contract in which two parties, a buyer and seller, agree to carry out the purchase of a security or other stock product - oil, grain, metals, etc., on a future date, at a predetermined price.* The advantage of forward contracts is that they are flexible and can be arranged or defined according to the needs of both parties. Because of this, they are customized and over the counter

Forward contract is a contract in which two parties, a buyer and seller, agree to carry out the purchase of a security or other stock product - oil, grain, metals, etc., on a future date, at a predetermined price.

contracts. Forward contracts are mainly used to hedge against potential losses and enable participants to lock in a price in the future. This guaranteed price can be very important, especially for industries that commonly experience significant volatility in prices. For example, a bank wants to use a forward to deal with interest rate risk. In one year, the bank agrees to sell to the other party corporation bonds with a nominal value of € 1 million, which mature in 2022, with a coupon rate of 5%. Because the other party is going to buy the bonds on a future date (and hoping that their price will rise) they are in a forward long position, while the bank (hoping that their price will fall) is in a forward short position. So, the bank benefits when the bond prices fall, i.e. the interest rates on market increase, and the other party benefits when the bond prices increase, i.e. interest rates decrease.

Unlike forward contracts, ***futures*** *are standardized contracts that are traded on a standardized exchange. When two parties enter into a futures contract, they enter into a contract with the clearing house.* In Table 3 we can see the differences between forwards and futures. The clearing house acts as an institutional guarantor. It assumes the credit risk of transactions and does not take on the market risk. Thus, gains and losses will be transferred to and from the clearing house to the respective parties' accounts on a daily basis. Because of this feature future contracts are more liquid than forwards and can be easily converted in cash at any time.

Unlike forwards, futures are standardized contracts that are traded on standardized exchange and when two parties enter into a futures contract, they enter into a contract with the clearing house.

Table 3 Differences: Forwards and Futures

Characteristics	Forwards	Futures
Definition	An agreement between two parties to trade a particular asset on a future date at a predefined rate.	An agreement between two parties to sell fixed assets at fixed prices in the future.
Form	Unique contract	Standard contract
Settlement	Upon maturity by delivering the commodity.	Anytime (daily), i.e. may not mature by delivery of commodity.
Liquidity	Less liquid	Highly liquid
Regulation	Self-regulated	Stock Exchange
Risk	High counterparty risk	Low counterparty risk
Institutional Guarantee	Contracting parties	Clearing House

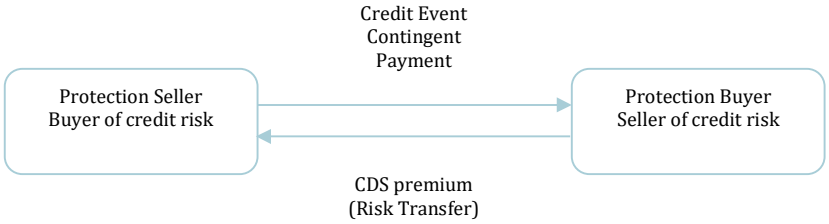
Swaps *are derivative contracts through which two parties exchange the cash flows or liabilities from two different financial instruments.* Swaps usually involve cash flows based on a notional principal amount such as a loan or bond, although the instrument can be almost anything. The principal does not typically change hands. Banks actively use credit default and total return swaps. ***A credit default swap (CDS)*** *is a financial contract whereby a buyer of a corporate or sovereign debt (in the form of bonds) or lender – bank (in the form of a loan) attempts to eliminate possible loss arising from default (or from downgrading firm's credit rating by a credit-rating agency) by the issuer of the bonds or the borrower.* Actually, with this instrument the investor or the bank "swaps" its

Swaps are derivative contracts through which two parties exchange the cash flows or liabilities from two different financial instruments.

A credit default swap (CDS) is a financial contract whereby a bank attempts to eliminate possible loss arising from default of the borrower.

credit risk with that of another investor. Figure 14 shows the basic idea behind the CDS. The protection seller is the party that receives a periodic premium from the protection buyer (bank or investor) in exchange for a contingent payment, if there is credit default event on a reference asset (a loan or a bond).

Figure 14 The structure of CDS



Source: Choudhry M. (2004), *Total return swaps – credit derivatives and synthetic funding instruments*, YieldCurve.com, 2004, p. 3

For example, if the bank has approved a loan to a risky client, it can hedge against credit risk by entering into an agreement with an insurance company. Thereby, the bank will transfer the credit risk by making premium payments to another party (insurance company). If the borrower does not repay the loan, the insurance company will pay the bank a compensation, which is usually equal to the nominal value of the loan, reduced by its value on the secondary market. Of course, if the borrower repays the loan regularly, the insurance company has no obligation to the bank.

Total Return Swap (TRS) *is a swap agreement between two parties (total return payer and total return receiver) that exchanges the total return from a financial asset between them.*[14] The total return payer is contracted to pay the total return consisted of interest payments on the underlying asset, fees, as well as any appreciation in the market value of the underlying asset. In return, the receiver performs regular fixed or, more likely, variable payments, comprised of LIBOR, plus an appropriate spread, as well as any difference in case of any fall in the price of the underlying asset (see Figure 15).

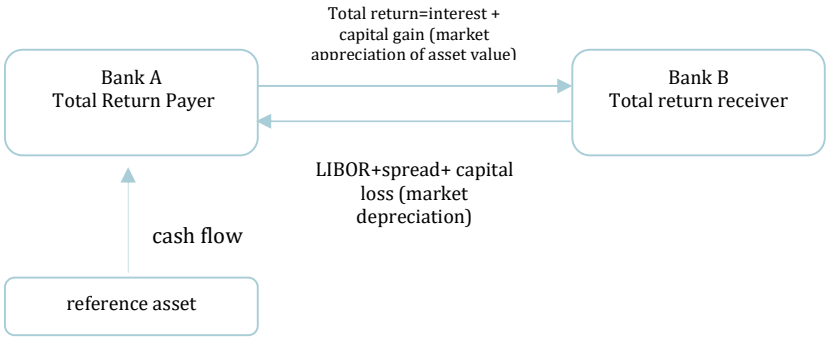
Total Return Swap (TRS) is a swap agreement between two parties that exchanges the total return from a financial asset between them.

The underlying asset or the reference asset can be a group of loans or bonds. In TRS the reference asset (the group of loans) is in ownership of the total return payer – Bank A, because it wants to maintain the relationship with its clients. Bank B is the party receiving the total return, and it collects any income generated by the asset and benefits if the price of the asset appreciates over the life of the swap. In exchange for that, the total return receiver must pay the asset owner – Bank A the set rate over the life of the swap. If the asset's price falls over the swap's life, the total return receiver will be required to pay the asset owner the amount by which the asset has fallen. In a total return swap the receiver's assumption is exposed to market risk and credit risk. TRS are especially attractive for large investors such as investment banks, mutual funds, commercial banks, pension funds, insurance companies, NGOs, and governments.

[14] Choudhry M.(2004). *Total return swaps – credit derivatives and synthetic funding instruments,* YieldCurve.com, p.2

Traditionally, TRS transactions are mostly between commercial banks, where bank A has already surpassed its balance sheet limits, while the other bank B still has an available balance sheet capacity. Bank A could shift assets off its balance sheet and earn an extra income on these assets, while Bank B would lease the assets and make regular payments to Bank A, as well as compensate for depreciation or loss of value.

Figure 15 The structure of TRS



Source: Choudhry M. (2004), *Total return swaps – credit derivatives and synthetic funding instruments*, YieldCurve.com, 2004, p. 3

Option *is a an arrangement between two parties, which gives the buyer (the owner or holder of the option) the right, but not the obligation, to buy (a call option) or sell (a put option) an underlying asset or instrument at a specified strike price prior to or on a specified date, depending on the form of the option.* The strike, or exercise price, may be set by reference to the spot price (market price) of the underlying security or commodity on the day an option is taken out, or it may be fixed at a discount or at a premium. If the buyer of an option "exercises" the option, the seller has the obligation to fulfill its obligation defined in the arrangement. The owner of an option may on-sell the option to a third party in a secondary market, in either an over-the-counter transaction or in an options exchange, depending on the option. Additionally, the ownership of an option does not generally entitle the holder to any rights associated with the underlying asset, such as voting rights or any income from the underlying asset, such as a dividend.

Option is an arrangement between two parties, which gives the buyer the right, but not the obligation, to buy (a call option) or sell (a put option) an underlying asset or instrument at a specified strike price prior to or on a specified date, depending on the form of the option.

Financial derivatives are an alternative strategy for hedging, and their purpose is to reduce potential loss, but not to maximize potential gain. In other words, if the investment in loans that a bank hedges against makes money, then the bank has also reduced its potential profit. However, if the investment in loans that bank hedges against loses money, the bank has successfully hedged, which means that it has reduced its loss.

2.6. Securitization

Securitization is a recent financial innovation, which first occurred in the U.S.A. in the 1970s. It involved pooling and repackaging home mortgages for resale as tradable securities by lenders. Since then, securitized markets have grown in their sophistication to cover a wide range of assets. Today, securitization presents a process in which a variety of illiquid assets are converted into securities, which are later sold to institutional investors, insurance companies, pension funds, hedge funds, etc.

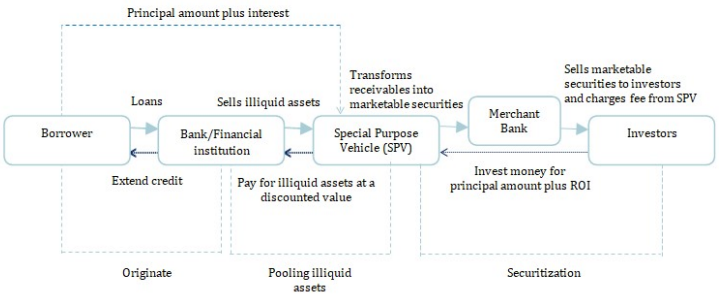
Securitization is a recent financial innovation, which involves pooling and repackaging home mortgages for resale as tradable securities by lenders.

In the case of banks, the process of securitization consists of sale of a group or classes of loans approved by banks and converted into securities. With the securitization the banks free up the asset side on their balance sheet, so that they can approve more loans to new customers. For example, let us assume that Bank X is selling mortgage loans. If a person wants to borrow money to buy a house, Bank X gives that person the cash, and the person is obliged to repay the loan with a certain amount of interest. Perhaps Bank X makes so many loans that it runs out of cash to continue making more loans. Bank X can then package its current loans and sell them to Firm X (whose activity is issuing securities), thus receiving cash that it can use to make more loans. Firm X will then sort the purchased loans into different groups called tranches. These tranches are groups of loans with similar characteristics, such as maturity, interest rate, and credit rating. Next, Firm X will issue securities that are similar to typical bonds on each tranche it creates. Individual investors then purchase these securities and receive the cash-flows from the underlying pool of receivables, minus an administrative fee that Firm X keeps for itself.

Special Purpose Vehicle (SPV) is a separate company with its own balance sheet created for the purpose of securitization of a debt.

In the case of banks, the process of securitization consists of sale of group or classes of loans approved by banks and converted into securities.

Figure 16 Process of securitization



Source: Adapted according to Mansini, R.&S, M.Grazia & Correspondence,. (2002). A multidimensional knapsack model for asset-backed securitization. *Journal of the Operational Research Society*. 53. pp. 822-832

Figure 16 shows the process of securitization. We can notice that there are three dominating phases: originating, pooling and securitization. In the *originating phase*, a bank (originator) approves loans to borrowers which can be with or without pledged collateral. In the *pooling phase*, the originator groups creates pools of assets (receivables, i.e. loans) with similar characteristics and sells off these pools of loans to a Special Purpose Vehicle (SPV). In the *phase of securitization*, the SPV transforms these pools of loans into securities and sells

Securitization passes through three phases:
- in the *originating phase*, the bank (originator) approves loans to borrowers;
- in the *pooling phase*, the originator groups or creates pools of assets (receivables, i.e. loans) with similar characteristics and sells off these pools of loans to a Special Purpose Vehicle (SPV);
- in the *phase of securitization*, the SPV transforms these pools of loans into securities and sells them to investors, who buy these instruments to benefit in the long run.

them to investors, who buy these instruments to benefit in the long run. The SPV and the merchant bank can be excluded as participants if the originating bank decides to issue marketable securities in its own name and account and sell them to investors.

There are several types of securitization according to the type of receivables such as mortgage based security (MBS), collateralized debt obligation (CDO), asset–backed securities (ABS), and future flow securitization.

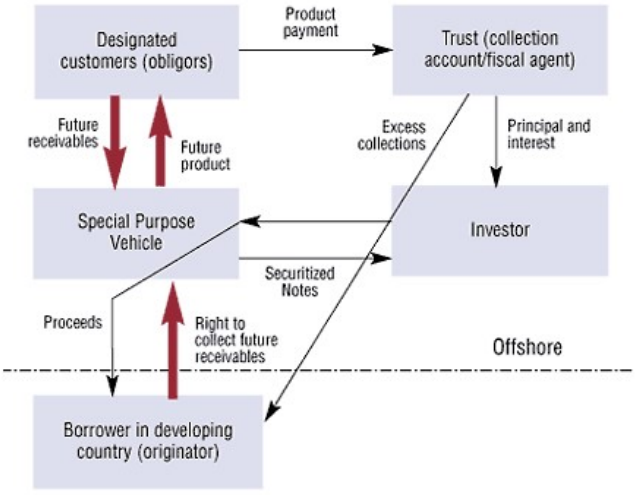
Mortgage back securities (MBS) can consist of various mortgages like property, land, house, jewelry and other valuables. MBS can be classified into commercial mortgage backed securities (CMBS) and residential mortgage backed securities (RMBS). While CMBS are backed by large commercial loans and secured with office buildings, industrial land, plants, factories, RMBS are backed by residential mortgages, generally for single-family homes. Typically, RMBS is made up of a group of home loans bought from the banks that issued them. Investors in MBS receive periodic payments similar to bond coupon payments.

Mortgage back securities (MBS) are backed up by various mortgages like property, land, house, jewelry and other valuables.

Collateralized debt obligation (CDO) presents a more complex structured finance product that is backed by a pool of loans and other assets and sold to institutional investors. A CDO is a particular type of derivative because, as its name implies, its value is derived from another underlying asset. These assets become the collateral if the loan defaults. To create a CDO, the financial institution (whose activity is issuing securities) gathers cash flow-generating assets—such as mortgages, bonds, and other types of debt—and repackages them into discrete classes or tranches, based on the level of credit risk assumed by the investor. These tranches of securities become bonds, the final investment products, the name of which reflects their specific underlying assets. CDOs are called "collateralized" because the promised repayments of the underlying assets are the collateral that gives the CDOs their value.

Collateralized debt obligation (CDO) is a structured finance product that is backed by a pool of loans and other assets and sold to institutional investors. These assets become the collateral if the loan defaults.

Figure 17 Structure of future flow securitization



Source: Ketkar, S., Ratha, D. (2001). Securitization of Future Flow Receivables: A Useful Tool for Developing Countries, *IMF Finance&Development, Vol.38, No.1.*

Asset-Backed Securities (ABS) are financial derivatives, which are supported by underlying financial assets such as credit card debts, student loans, home-equity loans, auto loans, and unlike mortgage back, securities ABS are not mortgage based.

Future flow securitization allows banks to monetize existing and predictable future cash flows. For example, in a typical future flow transaction, the borrowing entity (originator) in a developing country sells its future products (receivables) directly or indirectly to an offshore Special Purpose Vehicle (SPV), which issues the debt instrument. Designated international customers (obligors) are directed to pay for the goods they import from the originator directly into an offshore collection account, managed by a trustee. The collection agent makes principal and interest payments to lenders. Any funds left over are forwarded to the originator (see Figure 17).

Future flow securitization is characteristic for developing countries, because it offers innovative ways for raising funds during liquidity crises.

Conclusions:

In this chapter great attention was given to products and services that banks offer to their clients. To gain better understanding of the wide range of banking products and services, banking activities were first classified according to bank's balance sheet items. In short, firstly we discussed banking activities grouped according to the bank balance sheet items, i.e. activities on the active side, passive side and neutral banking activities. Neutral banking activities, or so called intermediary activities, do not appear on a bank's balance sheet, i.e. they are off-balance sheet items. We laid great emphasis on them because of their significant share in the bank's total income. Along with the trend of globalization, deregulation and entrance of non-banking financial institutions on the banking market, a great pressure has been put on the banking systems to include additional non-banking financial services and products in the offers to their clients. Slowly but surely, banks are accepting and introducing the model of universal banks, offering a variety of financial products and services to their clients.

The second part of this chapter describes the latest banking trends and how banks respond to these forces.

Deregulation, defined as liberalization of domestic and international financial markets, has led to increased efficiency and improved performance of banks, which on the other hand has intensified competition among financial banking and non-banking institutions. As banking systems started opening up with new liberalizations' legislatives, many financial institutions started pursuing international strategies, thus changing the traditional focus of banking as a mainly domestic business. The growth of global banking, intense competition and rise of other financial markets exposed banks to greater credit, currency, market, and interest rate risks. As a response banks are now using financial derivatives as instruments for hedging against some of these risks.

Additionally, the development of technology has increased knowledge intensity in the banking business, resulting in acquiring new models of operating and service delivery channels. These trends of deregulation, globalization, digitalization and hedging, implied certain changes or enlargement of banking activities, which include bancassurence, electronic banking, usage of financial derivatives and securitization.

Bancassurance means the distribution of insurance products (life and non-life insurance products) by using the bank branches or channels. It has not been stimulated only by insurance companies, but also by the banking sector, which is trying to acquire additional income.

Electronic banking as one form of e-commerce is about buying and selling information, products and services via computer networks such as the Internet and Electronic Data Interchange (EDI). It offers benefits to shareholders, bank management and customers because of lower transaction costs and quicker service, anytime and anywhere in the world. The usage of the Internet as a channel for delivery of banking services is fundamentally different from other channels that banks use, such as branch networks, telephone banking or ATMs.

Financial derivatives are an alternative strategy for hedging, and their purpose is to reduce the potential loss of banks when they face increased risks. In this chapter, the key derivatives like futures, forwards, swaps and options were briefly explained.

The chapter concludes with securitization as a most recent financial innovation, which involves pooling and repackaging of different types of assets for resale as tradable securities by lenders.

Revision questions and problems:

1. How are all banking activities divided?
2. What are off balance sheet activities?
3. Which are the traditional or core banking activities?
4. What does the passive side of a bank's balance sheet describe?
5. What does the active side of a bank's balance sheet describe?
6. What are passive banking activities?
7. How do passive banking activities create a bank's credit potential?
8. Which are the short-term passive banking activities?
9. How do you comprehend the secondary issuance of money?
10. Why are deposit services so important?
11. What do short-term interbank passive activities comprise?
12. Please explain the forms of central bank loans.
13. Please explain the types of short-term securities that central banks or other banks may issue.
14. What is a rediscount?
15. What is a relombard loan?
16. What is a loan of last resort?
17. How can banks provide the safest and most stable funds?
18. Please define the terms bond and stock.
19. What is the difference between a bond and a stock?

20. Where do bank's funds come from?
21. Are credit banking activities the only active banking activities?
22. What is the difference between short-term and long-term loans?
23. What is a loan and what is a loan agreement?
24. What types of loans are there according to the basis for approval?
25. What types of loans are there according to their purpose of borrowing?
26. What types of loans are there according to the method of loan settlement?
27. Please name the types of short-term loans for corporate clients.
28. Please name the types of short-term loans for households.
29. What are the characteristics of long-term loans?
30. Please name the types of long-term loans for corporate clients.
31. What does vinculation mean?
32. What is the difference between a syndicated loan and a consortium bank?
33. Please name the types of long-term loans for corporate clients.
34. What are the similarities between mortgages and residential loans?
35. Please name the types of significant neutral banking activities.
36. Why are payment systems the most vital part of every economic and financial infrastructure?
37. What is the difference between traditional and electronic payment systems?
38. What differences are there between an automated clearing house and real-time gross settlement systems?
39. Which payment services do banks offer to their clients?
40. What is SWIFT?
41. Please explain the payment process of L/C.
42. Please describe the types of documents that are requested in L/C. What are off – balance sheet activities and why do they matter?
43. How do banks source their demand for funds?
44. Please define several passive banking activities.
45. Please define several active banking activities
46. Please name the types of loans according to the purpose of borrowing or economic use. Additionally, please do online research and provide an example of bank offerings of similar types of loans.
47. What is the difference between a working loan and a loan secured with working capital offered to legal entities?
48. When do we consider a banker's guarantee as an active banking activity and when as a neutral one?
49. Please state the difference between a credit line and an overdraft facility.
50. What is forfeiting and what is factoring?
51. What are the latest trends in banking?
52. What does deregulation in banking mean?
53. What are the joint effects of deregulation and technology development?
54. What does globalization mean?
55. Please name the factors that have driven financial globalization.

56. Who are the new financial intermediaries that are changing the banking landscape?
57. What are the differences between challenger and neobanks?
58. What does P2P stand for?
59. How can electronic banking be defined?
60. What are the benefits in open banking for customers, banks and fintech companies?
61. What are the advantages of electronic banking?
62. What is bancassurence?
63. What is the typical model of bancassurence in your country?
64. What are financial derivatives and why do banks use them?
65. What is securitization and explain the process of securitization?
66. What is the main idea behind securitization?
67. Please explain the bancassurence models and the differences between them.
68. What are the advantages for banks providing bancassurence services?
69. What is hedging, and what does a financial derivative mean?
70. What is securitization?

CHAPTER VI – OVERVIEW OF BANK RISKS

Learning objectives:

- to be able to define the term bank risk and major types of risks
- to understand credit risk and credit policy
- to understand and be able to define market risk, interest and foreign exchange risk
- to understand and be able to define liquidity risk
- to understand operational risk
- to understand and to be able to define country or sovereign risk
- to understand and be able to define solvency risk
- to understand bank risk management and its goal

1. Bank Risks

In addition to providing financial services, banks also act as "middlemen" in the transactions. What is even more important to note here is that it is this role in particular that is creating various kinds of risks to the banks. Actually, this implies that risks naturally emerge from banking activities. These risks are related to a bank's credits, liquidity, trading, revenues and costs, earnings and solvency issues.

Bank risks naturally emerge from banking activities, and these risks are related to a bank's credits, liquidity, trading, revenues and costs, earnings and solvency issues.

After detailed explanation of the banking activities, it is an imperative to analyze and study the variety of risks that banks face when conducting them. Studying risks in banking is essential because overexposure to risk can cause a bank failure and, in the worst-case scenario, instability of the banking and financial system. Therefore, banks are regulated by regulatory bodies such as the Central Bank, or other government institutions, in order to manage the risks in their activities effectively.

First of all, let us define the term risk and then we will explain the different types of risks that banks face, and the purpose of building appropriate risk management systems. ***Risk*** may be defined as a *probability of loss or probability that a danger or reverse event may cause loss, i.e. may have a direct or indirect effect over a bank's profit or own equity.* Risk may also be defined as a psychological uncertainty about the loss of a potential amount of money, or as a deviation from actual losses. The major types of risks modern banks face are: credit risk, market risk, interest rate risk, foreign exchange risk, liquidity (or funding) risk, concentration risk, operational risk, country and sovereign risk, reputational risk, regulatory risk, solvency risk, and others.

Risk is a probability of loss or probability that a danger or reverse event may cause loss, i.e. may have a direct or indirect effect over a bank's profit or equity.

The major types of risks modern banks face are: credit risk, market risk, interest rate risk, foreign exchange risk, liquidity (or funding) risk, concentration risk, operational risk, country and sovereign risk, reputational risk, regulatory risk, solvency risk, and others.

The most widely accepted classification of risks in contemporary literature is the following: financial risks, operational risks, business risks and event risks.

Financial risks can be further classified into two types of risks: core risks and speculative risks. Core risks include liquidity risk, credit risk and solvency risk, while speculative risks include foreign exchange risk and market risk.

Operational risks are risks arising from inadequate human resources, processes, systems, or internal and external fraud. Business risks arise from the environment in which banks function and include changes in regulations, political conditions or infrastructure, and the organization of financial systems.

Event risks involve all types of external events over which the bank has no control, and can seriously affect its profitability (e.g. theft, earthquake, flood, vandalism).

In recent years, banks have faced a number of challenges, which have led to an increase in the risks they take. Therefore, it is necessary to know the risks, to identify them properly, to measure, manage and control them in order to have a successful and stable banking sector. By measuring the risks, banks can identify expected losses which they are exposed during their operations, and they can take measures of protection from their realization. However, with the materialization of potential risks, banks may also realize unexpected losses. Bank capital serves as protection against these unexpected losses.

1.1. Credit Risk

Credit risk *is the risk of loss for a bank, due to the inability of its client to repay borrowed funds, in the agreed amount and / or within the agreed maturity.* According to the Basle Committee on Banking Supervision (2000) credit risk is defined as "*the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms*". In the Macedonian legislative credit risk is defined as the risk of loss for banks because of the inability of their clients to repay their liabilities in the agreed amount and/or as set by the contractual terms. To sum up, the credit risk is the risk of a loan not being repaid in part or in full within a defined time framework. Clients may default on loans, credit cards, or credit lines. Therefore, credit risk is associated with the traditional lending activities of banks, and it is considered to be the most important risk that banks face. An additional explanation of the importance of this risk is that the default of a small number of key bank customers could generate very large losses and in an extreme case could lead to a bank becoming insolvent.

Credit risk is the risk of loss for a bank, due to the inability of its client to repay borrowed funds, in the agreed amount and / or within the agreed maturity.

Credit risk is associated with traditional lending activities of banks, and it is considered to be the most important risk that banks face.

However, credit risk can also derive from holding bonds and other securities. In that manner, credit risk is the risk of a decline in the credit-standing of the issuer. Such decline does not imply default, but means that the probability of default increases.

Credit Policy

When focusing on lending activities that generate the largest part of bank revenues, banks develop rigorous and detailed work procedures as part of a credit policy that intends to manage the credit risk. It is crucial that every bank

have a detailed credit policy, a credit plan and specific activities that coordinate all off its lending operations. According to its established credit policy, a bank determines the order and conditions under which it approves placements to its clients in denars or foreign currency, as well as placements in denars with a foreign exchange clause. The credit policy sets the general framework for a complete assessment of placements, appropriate monitoring of approved placements, servicing and supervision of placements in delay, and directions for developing an appropriate structure of the credit portfolio.

The credit policy sets the general framework for a complete assessment of placements, appropriate monitoring of approved placements, servicing and supervision of placements in delay and directions for developing appropriate structure of the credit portfolio.

In general, the credit policy of a bank should only serve as a basis that will help those responsible for making the final decision accept or reject the credit application, or make an appropriate assessment of the degree of credit risk, i.e. the risk if the principal of the loan and interest are not repaid. Each loan approved by the bank contains a certain amount of credit risk, but the main purpose of this set of activities is to assess the degree of credit risk and its acceptability.

The main components of a credit policy, which are specific procedures involved in defining it, relate to the following activities:

1) determining the total credit potential of the bank;

2) designing a loan structure that the bank will maintain and the planned participation of each type of loan in the total bank credit portfolio;

3) quantification of costs and commissions of loans and the general conditions under which loan agreements are concluded;

4) determining the need for appropriate compensation requests, in terms of formation of interest-free deposits in the bank as a condition for obtaining a loan;

5) defining alternative structures of loans, that determine the framework in which the prospective debtor can accept different types of credit arrangements.

Within the general credit policy, each financial institution (bank) establishes a set of criteria for evaluating individual loan applications. These criteria, which will be discussed in more detail in the following analysis, are known in literature as the "5Cs of credit". These criteria are the main factors that affect the level of credit risk of the prospective debtor, and refer to: character, capacity, collateral, capital and conditions.

The character refers to the personal characteristics of the debtor, which can be a deciding factor in making a credit decision. Features such as ethics, honesty and integrity of personality and credit history are most important in this regard. It is emphasized that the character of the client is the most important factor, because dishonest borrowers almost always find a way to avoid the restrictions set by the bank in the loan agreement. If this factor does not meet the standards, further analysis of the other factors does not guarantee that the loan will be properly serviced.

The capacity to generate sufficient income refers to the ability of the borrower to generate sufficient income from which the approved loan is repaid. Bankers tend to compare prospective debtor's income with its expenses in order

to determine the financial capacity. However, job stability or stable cash flows is also an additional measure.

The collateral refers to the borrower's willingness to invest specific funds such as securing the loan. The collateral is assessed against its marketability, location and type of property. Fixed assets such as land, buildings, etc., or working capital may be used as collateral such as reserves, securities, etc. Although collateral reduces credit risk, it cannot be regarded as an adequate substitute for the income from which the debt would be repaid. That means that even extremely high-risk loans are not approved despite the offered collateral, because the collateral is used as a secondary security and bank protection option, following the borrower's ability to make sufficient cash flow to cover liabilities.

The Capital shows the debtor's net worth as a criterion for assessing the borrower's former financial position. In addition, it indicates the prospective debtor's seriousness about financing a certain project.

Conditions refer to conducting market analysis in the sector which the company belongs to. Favorable and stimulating economic conditions have a positive impact on the debtor's ability to repay the loans within the stipulated deadline. When conditions are favorable, the credit risk is much lower, unlike the conditions of a recession, when due to poor economic activities and poor performance lending conditions are much more restrictive.

Based on these criteria, every bank assesses the level of credit risk that each prospective debtor, be it an individual or a business, has and then makes the final decision on whether to approve the loan or not. Through this evaluation, which contains both qualitative and quantitative information, the bank forecasts the ability of the prospective debtor to pay back the debt. Based on this evaluation, banks may change the loan terms, interest rate and commission. Additionally, in developed market economies there are specialized credit rating agencies which are authorized to present an implicit forecast of the likelihood of the debtor defaulting by inputting qualitative and quantitative information for the prospective debtor, including information provided by the prospective debtor and other non-public information, and to appoint an appropriate numeric credit score. The credit score, which is a numeric evaluation of an individual's credit worthiness, is taken into consideration when banks evaluate their prospective debtors. These credit rating agencies may be national or international authorized credit bureaus, and they assess the credit standing of individuals, companies and governments.

Credit rating agencies are authorized to present an implicit forecast of the likelihood of the debtor defaulting by inputting qualitative and quantitative information for the prospective debtor, including information provided by the prospective debtor and other non-public information, and to appoint an appropriate numeric credit score.

In the Republic of North Macedonia, banks and savings houses submit data and information about their credit portfolio to the Central Bank for record keeping and continuous update of the Credit Registry. The beneficiaries of the Credit Registry include the central bank, which uses the Credit Registry for its supervisory function, and the banks and savings houses, which use the Credit Registry as a tool for assessing the creditworthiness of each new or existing client/borrower. As for the existence of a specialized credit rating body, or agency, the Macedonian Credit Bureau (MCB) is the first and only credit bureau in RNM. MCB conducts activities such as collecting, processing and exchanging data about the liabilities of individuals and legal entities in order to provide

information about their debt accumulation, or the regularity of their liability settlement. MCB is used by all banks and saving houses when deciding upon loan placements.

Low default risk assets are associated with low credit risk and low expected return, while higher expected return assets have a higher probability of default (i.e., a higher credit risk) and bank managers tend to build portfolios of assets (loans and securities) with an optimal tradeoff between return and credit risk. This is done by diversifying the degree of risk. Diversification means decreasing an unsystematic or firm specific credit risk by investing in various placements. Unsystematic credit risk is the credit risk specific to the holding of loans or bonds of a particular firm. Through diversification, banks decrease firm-specific credit risk, but they do remain exposed to systematic credit risk. This risk is associated with the possibility of an increase in the default of all firms over a given period because of economic changes or other events that have an impact on large sections of the economy/market.

So far, we have discussed how banks build credit portfolios by assessing the credit risk level of every debtor when inspecting loan applications. The evaluation of credit risk does not, however, end with an approved loan placement. This means that once approved the credit risk level of the loan may change, and therefore banks are constantly monitoring the credit risk of all loan placements. If internal data are available, credit risk can be monitored by looking at the changes in few ratios such as medium-quality loans/total assets ratio, total loans/total assets, non-performing loans/total loans, loan losses/total loans, or loan loss reserves/total assets, and total loans/total deposits. The bank can choose to lower its credit risk by lowering these ratios. All of these types of ratios can be calculated for different groups of loans the bank holds on its balance sheet. For example, a bank may look at its mortgage loan book and see what proportion of such loans it holds relative to its total assets, the amount of non-performing mortgage loans, loan losses on mortgage loans, and so on.

Evaluation of credit risk is a continuous process that does not end with loan granting. Banks are obliged to perform continuous monitoring and measuring credit risks on existing placements.

1.2. Market Risk

In general, ***market risk*** *can be explained as the risk of losses in on- and off-balance sheet positions arising from movements in market prices.* However, market risk arises when banks hold financial instruments on the trading book, or when banks hold equity as some form of collateral. That is, many banks have dramatically increased the size and activity of their trading portfolios, resulting in greater exposure to market risk. Banks are particularly engaged in short-term trading in assets, liabilities and derivative products, and market risk relates to changes in interest rates, exchange rates and other asset prices.

Market risk can be explained as the risk of losses in on- and off-balance sheet positions arising from movements in market prices.

Recent trends in banking have led to an increase in market risk due to the introduction of non-banking services, and the greater reliance of banks on income from trading securities. This process has a direct influence over the variability in bank net profits due to the relatively frequent changes in market conditions. Market risk can be analyzed as:

- Systematic market risk, which is caused by a movement in the prices of all market instruments due to changes in the macro factors;
- Unsystematic or specific market risk arises when changes in the price of one financial instrument are caused by events related to its issuer;

Market risk is when the value of investments may decline over a given period simply because of economic changes, or other events that affect large portions of the market.

Market risk is when the value of investments may decline over a given period simply because of economic changes, or other events that affect large portions of the market.

1.3. Interest Rate Risk

Interest rate is a price that a borrower pays in order to consume resources now rather than in the future. On the other hand, that is the price the lender (bank) receives to forfeit current consumption. *The exposure to **interest rate risk** for banks means the risk of loss of profit due to unexpected changes in the interest rates.* Considering that banks collect deposits on which they pay interest to depositors and grant loans on which they charge interest to borrowers, one must note that this interest rate risk is of great significance. The interest rate risk depends upon movements of market interest rates and the bank's interest rate policy. Several sources of interest rate risk have been identified:

Interest rate risk means the risk of loss of profit due to unexpected changes in the interest rates.

- Risk of maturity mismatch of rate sensitive active and rate sensitive passive, as a result of differences in the maturity of positions with a fixed interest rate, or differences in the time period until the next change of interest rate on positions with a variable interest rate;
- Yield curve risk, which arises from unforeseen changes in the yield curve and can adversely affect profitability and the bank's own funds;
- Risk of differences in the reference rates of instruments with similar characteristics (in terms of maturity or time period until the next interest rate change) is a risk of non-compliance in relation to the time period of adjustment of interest rates at which the bank pays interest and the time period of adjustment of interest rates at which the bank charges interest on various instruments with similar maturity;
- Risk arising from options embedded in rate sensitive bank positions (e.g. option for early withdrawal of time deposits, i.e. early repayment of repaid loans).

The sources of interest rate risk are:
- Risk of maturity mismatch of rate sensitive active and rate sensitive passive;
- Unforeseen changes in the yield curve;
- Risk of differences in the reference rates of instruments with similar characteristics;
- Risk arising from options embedded in rate sensitive bank positions;

The assets and liabilities of a bank are subject to interest rate risks. However, not all assets and liabilities are subject to interest rate risk in the same way. An important distinction should be made between fixed rate assets and liabilities and rate-sensitive assets and liabilities:

- Fixed rate assets and liabilities have rates that are constant throughout a certain period and their cash flows do not change unless there is a default, early withdrawal, or an unanticipated pre-payment.
- Rate-sensitive assets (RSA) and rate-sensitive liabilities (RSL) have rates that are sensitive to changes in interest rates; these assets and liabilities are either repriced or revalued, as interest rates change. Therefore, cash

flows associated with rate-sensitive contracts vary according to the changes in interest rates.

Bank's exposure to interest rate risk can be measured by using two types of indicators: 1) the difference between the amount of rate sensitive assets and rate sensitive liabilities; and 2) the ratio between the amount of rate sensitive assets and rate sensitive liabilities.

Bank's exposure to interest rate risk can be measured by using two types of indicators, i.e. the difference between the amount of rate sensitive assets and rate sensitive liabilities, and the ratio between the amount of rate sensitive assets and rate sensitive liabilities.

If the value of rate sensitive assets is greater than the amount of rate sensitive liabilities, the bank has a positive gap and is asset sensitive. The bank with a positive gap is exposed to the risk of lower interest rates, because in that case, the bank's interest income will decrease by a larger amount compared to the decreased amount in interest expenses, and this will cause a decrease in its net interest income. Conversely, if there is an increase in interest rates, the bank with a positive gap will experience an increase in its net interest income, because its interest income will increase by a larger amount compared to interest expenses.

If RSA > RSL, the bank has a positive gap and is asset sensitive.
If RSA < RSL, the bank has a negative gap and is liability sensitive.

If the value of rate sensitive liabilities exceeds the value of rate sensitive assets, the bank faces a negative gap, and is liability sensitive. Such a bank will have a negative relative gap and an interest rate coefficient of less than 1. A bank with a negative gap is exposed to the risk of rising interest rates, because, in that case, the bank's interest expenses will increase by a larger amount compared to interest rates income and this will cause a decrease in its net interest income. Conversely, if interest rates fall, the bank with a negative gap will experience an increase in its net interest income, as its interest expenses will decrease by a larger amount compared to its interest income.

The bank with a positive gap is exposed to the risk of lower interest rates.
The bank with a negative gap is exposed to the risk of rising interest rates.

If the value of rate sensitive assets and rate sensitive liabilities are equal, then the bank has a zero gap and is protected from the effects of interest rate changes. In this case, if there is a change in interest rates, both the interest expense and the interest income will be equally affected, resulting in a zero change in the net interest income.

If RSA = RSL, the bank has a zero gap and is protected from the effects of interest rate changes.

Banks are exposed to interest rate risk because they operate with unmatched balance sheets. This means that if bankers believe that interest rates will rise, they will make assets more interest-sensitive relative to liabilities, and do the opposite when interest rates' fall is expected.

1.4. Foreign Exchange Risk

Foreign exchange risk is the risk of profit loss due to negative changes in exchange rates. In other words, ***foreign exchange risk*** *can be defined as the risk of lowering or increasing the value of a bank's assets, liabilities and off-balance sheet activities denominated in foreign currency, as a result of fluctuations in the exchange rates.* Bank exposure to foreign exchange risk assumes net short or long positions in a certain currency. A bank has a net short position when its liabilities in foreign currency are bigger compared to its assets in foreign currency, and a net long position means that the foreign assets of a bank are bigger compared to its foreign liabilities.

Foreign exchange risk can be defined as the risk of lowering or increasing the value of a bank's assets, liabilities and off-balance sheet activities denominated in foreign currency, as a result of fluctuations in the exchange rates.

If a bank lends in a currency that depreciates more quickly than its home currency, it will be subject to foreign exchange risk. If we assume that a Macedonian bank has a net long assets position in dollars (e.g., a loan in dollars) of $100 million. On the liability side, the Macedonian bank has $60 million in deposits. These deposits are denominated in euros. The Macedonian bank will suffer losses if the exchange rate for dollars falls or depreciates against the Euro over this period because the value of the US$ loan assets would decrease in value by more than the Euro deposits.

The most common types of foreign exchange risks are:

- accounting, which occurs in companies that have their own organizational parts abroad and perform financial operations in foreign currencies. The units, or branch offices that are located abroad are required to submit reports (monthly, semi-annually, or annually) necessary for the consolidation of bank operations, and conversion is required from the currency of the country in which the branch office is located in the currency of the parent bank.
- transactional, refers to possible future exchange gains or losses from transactions that have been or will be performed and that are in foreign currency. In fact, this exposure occurs when the exchange rate changes from the moment of handing over the order to the collection of the same or the final execution of the transaction;
- economic, occurs as a consequence of a change in the value of exchange rates and because of that, there is a change in the amount of expected income and expenses, as well as a change in the competitive viability of the bank. The economic exposure is the risk of a change in the value net worth of the bank (measured as the present value of expected cash flows) caused by the occurrence of foreign exchange risk.

The most common types of foreign exchange risks are:
- accounting foreign exchange risk;
- transactional foreign exchange risk;
- economic foreign exchange risk.

In order to measure foreign exchange risk banks calculate measures of net exposure for each currency. Net exposure is equal to the difference between the assets and liabilities denominated in the same currency. According to the NBRNM regulations, banks are obliged to calculate the foreign exchange position separately for each foreign currency. The sum of all long foreign exchange positions in individual currencies gives the aggregate long position, while the sum of all short positions represents the aggregate short position. The larger amount between the aggregate short and the aggregate long position represents the aggregate foreign exchange position of the bank, which is a measure of the foreign exchange risk exposure. Regulatory provisions require the bank to measure its foreign exchange risk exposure and to provide an adequate level of capital to cover it. Thus, according to the regulation, the aggregate foreign exchange position of the bank must not exceed 30% of its capital.

Management of foreign exchange risk comprehends continuous balancing of positions on the active and passive side according to each currency found on the bank balance sheet. The compensation policy through transactions on the financial derivatives market is as important as the policy of balancing.

1.5. Liquidity (or Funding) Risk

Liquidity risk, just as credit and interest rate risk, is generated in the balance sheet as a mismatch between the size and maturity of assets and liabilities. Liquidity risk is often an inevitable outcome of banking operations. Since banks typically collect deposits that are short-term in nature and lend long-term, the gap between maturities leads to liquidity risk and a cost of liquidity. Liquidity funding risk presents a bank's potential inability to have funds available to repay depositors on demand and to fund loans when needed. ***Liquidity risk*** *is the risk when banks hold insufficient liquid assets on their balance sheets and are unable to meet funds' requirements.* Banks have to manage their liquidity to ensure that both predictable and unpredictable liquidity demands are met and to take into consideration the fact that immediate sale of assets at low prices could threaten the bank's returns.

Liquidity risk is when the bank is holding insufficient liquid assets on its balance sheet and is unable to meet funds' requirements.

Banks need liquidity for unexpected large outflows, when they do not receive expected inflow of funds, for fulfilling obligations when they fall due, and for undertaking new transactions. If banks cannot fulfill one or more of these needs they are exposed to liquidity risk. Therefore, banks must ensure that they have a satisfactory mix of various assets or liabilities that fulfil their liquidity needs.

Banks may expose themselves to liquidity risk as a result of other bank risks, such as credit or interest rate risk. For instance, banks face liquidity risk when their biggest or most of their debtors do not fulfill their obligations. Liquidity risk is reflected as asset deficiency, that is deficiency in banks' own equity and inability for borrowing on financial markets.

Banks expose themselves to liquidity risk when they:
- cannot fulfill unexpected large outflows;
- do not receive expected inflow of funds;
-cannot fulfill obligations when they fall due;
- cannot undertake new transactions; and
- are exposed to credit or interest rate risk.

Banks may be exposed to two types of liquidity risk:

- Predictable, or day-to-day liquidity risk, which relates to daily withdrawals. This is a normal liquidity risk because only a small percentage of a bank's deposits is withdrawn on a given day. Very few institutions ever actually run out of cash because it is relatively easy for the bank to cover any shortage of cash by borrowing funds from other banks in the interbank markets.
- Unpredictable liquidity risk leading to a liquidity crisis, which occurs when depositors demand withdrawals that are larger than usual. In this situation, banks are forced to borrow funds at an elevated interest rate, higher than the market rate that other banks are paying for similar borrowings. This is abnormal and can be due to either a lack of confidence in a particular bank, or some unexpected need for cash. A liquidity crisis ultimately disrupts a bank's ability to repay its obligations, and in the absence of an intervention from a central bank or deposit insurance, it could result in a bank run and even insolvency of the bank.

As already discussed in Chapter IV, banks can reduce their exposure to liquidity risk by increasing the proportion of funds committed to cash and readily marketable assets, such as treasury bills and other government securities, or use

longer-term liabilities to fund the bank's operations. The difficulty for banks, however, lies in that liquid assets tend to yield low returns, so if a bank holds sub-optimal levels of such assets its profits will decline. This is the trade-off between the principle of liquidity and profitability. Another measure for better liquidity management is for the banks to harmonize the maturity structure of liquidity sources and placements.

1.6. Concentration Risk

The risk of concentration *is a single direct or indirect exposure or a set of bank's exposures that may cause significant losses.* There are two types of concentration risk, according to the sources of the risk. If the concentration risk arises from uneven distribution of exposures (or loan) to its borrowers, it is called *name concentration risk*. If the concentration risk arises from uneven distribution of exposures to particular sectors, regions, industries or products, it is called *sectoral concentration risk*. Here are some examples of bank exposure to concentration risk:

- if the bank has a large credit exposure to a client, along with the persons/entities related to the client;
- if the bank makes a large investment in a particular financial instrument;
- if the bank places most of its available funds in a particular banking product;
- if the bank has an exposure to one geographical region.

The risk of concentration is a single direct or indirect exposure or a set of bank's exposures that may cause significant losses.

There are two types of concentration risk, which are based on the sources of the risk:
- concentration risk which arises from uneven distribution of exposures (or loan) to its borrowers, and
- concentration risk which arises from uneven distribution of exposures to particular sectors, regions, industries or

From the circumstances mentioned above one can notice that the risk of concentration is directly related to the materialization of the credit risk. However, the concentration risk may also impact liquidity risk because the bank may face concentration risk on the liabilities side, too. For example, if the bank has received a large deposit from one client, or from several connected customers, liquidity risk materializes as a result of deposit withdrawal.

Banks tend to define a methodology for identification, measuring, monitoring and protection from the risk of concentration of a bank exposure. This typically involves defining certain thresholds for various types of concentration exposures. Once these thresholds are set, they are managed by frequent and diligent reporting to assess concentration areas and identify elevated thresholds.

1.7. Operational Risk

Operational risk *as another important risk, which arises from failures/errors or deficiencies at either a technical level (i.e. in a bank's information systems or risk measures) or at an organizational level (i.e. in a bank's internal reporting, monitoring and control systems).* Technical operational risks abrupt the flow of bank processes and may arise in a multitude of forms, such as errors in recording transactions, deficiencies in information systems, or absence of

Operational risk arises from failures/errors or deficiencies at either a technical or organizational level.

adequate tools for measuring risks. At organizational level, an operational risk may arise in various forms such as human errors in reporting, monitoring and controlling, errors in following work procedures, etc. The Risk Management Group of the Basle Committee on Banking Supervision defines *operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.* In general terms, this is the risk associated with the possible failure of a bank's systems, controls or other management failure including human error. As shown on

In general, operational risk is the risk associated with possible failures of bank systems, controls or other management failure including human error.

Table 4, Basle Committee has identified a number of risk event types that have the potential to result in substantial losses. Due to the significance of this risk and the damage it can create in the bank Basle II accord requires banks to hold capital for covering such risks along with credit and market risk.

Table 4 Operational risk event types

Risk event types	Examples
Internal fraud	Intentional misreporting of positions, employee theft, bribes, forgery and insider trading on an employee's own account.
External fraud	External frauds are activities committed by third parties and may include theft, cheque fraud, and breaching the system security like hacking or acquiring unauthorized information.
Employment practices and workplace safety	Workers' compensation claims, violation of employee health and safety rules, organized labor activities, discrimination claims and general liability are grave operational hazards in any organization.
Clients, products and business practices	Fiduciary breaches, misuse of confidential customer information, improper trading activities on the bank's account, money laundering, and sale of unauthorized products are very common practices that lead companies to face lawsuits.
Damage to physical assets	These are losses incurred by damages caused to physical assets due to natural disasters or other events like terrorism and vandalism. Rapid and unexpected changes in climatic conditions such as earthquakes, fires and floods have been a constant cause of concern in the business world for more than a decade in recent history.
Business disruption and system failures	System failures (hardware or software), disruption in telecommunication, and power failure can all result in interrupted business and financial loss.
Execution, delivery and process management	Data entry errors, collateral management failures, incomplete legal documentation, unapproved access given to client accounts, non-client counterparty mis-performance and vendor disputes.

Source: Adopted according to Casu, B., Girardone, C., & Molyneux, P. (2006). *Introduction to Banking.* Essex: Pearson Limited, pg.272.

1.8. Country and Sovereign Risk

Country risk is especially important in international banking. **Country or sovereign risk** is the risk that the economic, social or political condition of a foreign country has an adverse effect on bank interests. Country risk is actually related to the adverse effect that deteriorating macroeconomic factors have on the returns from overseas investments. Country risk can be divided into two

Country or sovereign risk is the risk that the economic, social or political condition of a foreign country has an adverse effect on bank interests.

categories. The first category of country risk refers to risk of default by a sovereign government on its foreign currency obligations, and the risk when the ability of other entities in that country to meet foreign currency debt obligations may be affected by the direct or indirect measures or actions taken by the sovereign government. In this case, sovereign risk addresses the credit risk of national governments but not the specific default risks of other debt issuers. In other words, credit risk here relates to two key aspects: economic risk, which addresses the government's ability to repay its obligations on time, and political risk, which addresses its willingness to repay debt. In practice, these risks are interrelated, because a government that is unwilling to repay its debt often conducts economic policies that weaken its ability to do so.

Country risk is categorized as:
- risk of default by a sovereign government on its foreign currency obligations, and inability of other entities in that country to meet foreign currency debt obligations, and
- the risk when the sovereign government is not able to secure foreign exchange currency to service its foreign currency debt, and when there is a possibility that the sovereign government may constrain or prohibit non-sovereign issuers' access to foreign exchange.

The second category of sovereign risk refers to the risk when the sovereign government is not able to secure foreign exchange currency to service its foreign currency debt, and when there is a possibility that the sovereign government may constrain or prohibit non-sovereign issuers' access to foreign exchange. This risk also goes by the name of transfer risk.

International lending in the form of lending to a foreign government carries risks. Yet, a loan to a foreign government is safer than a loan to a private sector borrower. It is, however, possible that even governments will default on debt owed to a bank or a government agency. This refers to the sovereign risk in general and describes the possibility that even governments, as sovereign powers, may enforce their authority to declare debt to external lenders or modify the movements of profits, interest and capital. Such situations typically arise when foreign governments experience some sort of economic or political pressure and decide to divert resources to solve their domestic problems, instead of fulfilling its obligations. The extreme case for sovereign risk is debt repudiation, when the government simply revokes their debts and no longer recognizes their obligations to external creditors.

Assessment of country risk relies on the analysis of economic, social and political variables that relate to a particular country. Although economic factors can be measured objectively, social and political variables often involve subjective judgments. However, investors such as banks have useful tools for measuring sovereign risks, by using sovereign credit risk ratings from company agencies, such as: Standard & Poor's, Moody's, Fitch and Scope Ratings.

Assessment of country risk relies on the analysis of economic, social and political variables that relate to a particular country.
Also, investors may use sovereign credit risk ratings from company agencies, such as: Standard & Poor's, Moody's, Fitch and Scope Ratings.

Table 5 shows the sovereign credit ratings of the Republic of North Macedonia from 2004 and 2020 according to Standard and Poor's and Fitch. S&P and Fitch include long-term ratings from the highest AAA to the lowest D rating. In these international credit rating agencies, ratings are divided into two main groups based on the level of credit risk: investment grade for lower levels of credit risk, and speculative grade for higher levels of credit risk. For S&P and Fitch investment grade issues/issuers are those rated from BBB- and above, while those from BB+ and below are categorized as speculative grade.

Table 5 Sovereign credit ratings in Republic of North Macedonia

Agency	Rating	Outlook [15]	Date	Agency	Rating	Outlook	Date
Standard & Poor's	BB	Positive	Jul-04	Standard & Poor's	BB-	Stable	May-13
Standard & Poor's	BB+	Stable	Aug-05	Fitch	BB+	Stable	Oct-13
Standard & Poor's	BB+	Stable	Nov-05	Fitch	BB+	Stable	Mar-14
Fitch	BB	Positive	Nov-05	Fitch	BB+	Stable	Jul-14
Standard & Poor's	BB+	Stable	Apr-06	Fitch	BB+	Stable	Sep-14
Fitch	BB+	Stable	Jun-06	Fitch	BB+	Negative	Feb-16
Fitch	BB+	Positive	Aug-07	Fitch	BB+	Negative	Jul-16
Fitch	BB+	Stable	Nov-08	Fitch	BB	Negative	Aug-16
Standard & Poor's	BB+	Negative	Dec-08	Fitch	BB	Negative	Feb-17
Standard & Poor's	BB	Negative	Apr-09	Fitch	BB	Negative	Aug-17
Fitch	BB+	Negative	May-09	Fitch	BB	Positive	Feb-18
Standard & Poor's	BB	Stable	Sep-09	Fitch	BB	Positive	Jul-18
Fitch	BB+	Stable	Oct-10	Fitch	BB	Positive	Jan-19
Standard & Poor's	BB	Stable	Aug-11	Fitch	BB+	Stable	Jun-19
Fitch	BB+	Stable	Nov-11	Fitch	BB+	Stable	Dec-19
Fitch	BB+	Stable	Feb-12	Fitch	BB+	Negative	May-20
Fitch	BB+	Stable	Oct-12	Fitch	BB+	Negative	Nov-20

Source: theGlobalEconomy.com

1.9. Reputational Risk

Unlike previously discussed risks, reputational risk is intangible and hard to measure. ***Reputational risk*** *is the negative impact of public opinion on bank capital and profits*. It represents the risk of loss due to loss of bank's reputation. Due to unfavorable perceptions of the bank by the stakeholders with whom the bank is directly affiliated or in connection with, such as customers, employees, suppliers, regulators, government bodies or investors, a bank my face present or future potential risk in relation to existing income and capital. Therefore, bank employees and the bank management are directly responsible and ought to maintain the bank's reputation. They must follow the predefined and established code of ethics and display appropriate business behavior. This type of behavior includes maintaining confidentiality of information about depositors, users of loans and other banking services. In addition, banks must continuously evaluate stakeholders' expectations and opinions.

Reputational risk is the negative impact of public opinion on bank capital and profits.

[15] Rating Outlooks indicate the direction the rating is likely to move over a one- to two-year period. In determining an outlook, consideration is given to any changes in fundamental business conditions. Credit Watch focuses on identifiable events that cause ratings to be placed under special surveillance.
Rating Outlooks/Watches for the four agencies are the following:
- Positive means that a rating may be raised
- Negative means that a rating may be lowered
- Stable means a rating is not likely to change

1.10. Regulatory Risk

Regulatory risk *is the risk that any significant change in the legislation may cause negative effects on the profit and capital of a bank.* Banks are highly regulated and supervised institutions, and any significant change in regulation could have adverse effects on their profit and capital. In essence, banks have to regularly monitor all changes in the financial legislation and the recommendations of the Basel Committee on Banking Supervision. Banks need to assess the effects of any changes in regulations, and if they have any questions or need further explanations, they should address them to the relevant regulatory body.

Regulatory risk is the risk that any significant change in legislation may cause negative effects on the profit and capital of a bank.

The regulatory environment in the Republic of North Macedonia is conservative and requires a high degree of capitalization, thus providing a significant stability in the operations of banks. Additionally, according to the Banking Law it is necessary for the bank to have a person or service responsible for monitoring the bank's compliance with regulations.

1.11. Solvency Risk

Bank's solvency risk *is a bank's inability to meet maturing obligations due to its negative net worth of stockholders' equity, i.e. when the market value of its liabilities is higher than the market value of its assets.* Solvency risk is the same as capital risk or risk of failure. This should not be treated as a separate risk because all risks such as excessive credit risk, interest rate risk, operational or liquidity risk can potentially affect bank capital. Therefore, materialization of bank risks can lead to banks having insufficient capital to cover its losses and eventually result in bank insolvency and liquidation. On the other hand, bank capital serves as protection against losses from unexpected materialization of the risks to which banks are exposed when conducting their operations.

Solvency risk is a bank's inability to meet maturing obligations due to its negative net worth of stockholders' equity, i.e. when the market value of its liabilities is higher than the market value of its assets.

Capital or solvency risk depends on asset quality (credit portfolio and trading portfolio) and the overall risk profile of banks (level of exposure to all bank risks). We can conclude that the amount of capital a bank holds is positively related to the level of risk, that is, the more risk taken, the greater the amount of capital required. Adequate capitalization of banks is necessary to maintain the trust of depositors and creditors in banks.

Capital or solvency risk depends on asset quality (credit portfolio and trading portfolio) and the overall risk profile of the bank (level of exposure to all bank risks).

In view of the fact that banks play a key role in the development of every economy, and that their security and stability are necessary to ensure development and stability in any economy, the Basle Committee on Banking Supervision has initiated the development of standards for capital adequacy, for the purpose of strengthening a bank's capital and lowering exposure to solvency or capital risk. Namely, the basic task of capital adequacy is to define the level of capital required to cover any risk so that bank solvency remains at an acceptable level. Capital adequacy is measured as the ratio between capital and risk weighted assets (RWA, i.e. total assets weighted with ponders for credit, market and operational risk) of the bank, and its amount is determined by the credit ability of the bank, i.e. its ability to generate additional business. To summarize, the level of capital serves the bank as protection against unexpected losses

resulting from the materialization of the risks to which banks are exposed in their operations. It also maintains appropriate reputation of banks in front of the public, and credit rating agencies may award them a higher rating, which would result in banks paying lower interest rates to their creditors. Finally, the level of capital allows banks to have a higher credit exposure, without having to provide additional capital.

2. Introduction to Risk Management

Just as with any other uncertain event during bank operations, risks carry the probability of causing reductions in a bank's profits. Bank risks are inevitable and they naturally emerge from banking activities. Therefore, they must be evaluated, controlled and monitored, so as not to threaten the banking business. Every bank, depending on its risk appetite, may accept a greater or lesser risk. However, the level of risk taken must be in accordance with a bank's ability to absorb potential losses and to provide acceptable rate of return. In this context, the precise identification, measurement and management of risks, as well as successful balancing between return and risk, are the most important aspects of the bank's financial management in terms of achieving high operating performance.

Bank risks are inevitable and they naturally emerge from banking activities. Because of that they must be evaluated, controlled and monitored so as not to threaten the banking business.

Banks distinguish between expected and unexpected losses. Expected losses are those that are known to occur with a high degree of certainty (for example, an expected rate of default in the credit portfolio or credit card portfolio), and banks make certain reserves for them. When it comes to unexpected losses (for example, recession or falling interest rates) banks may rely only on their capital, which is used to protect and absorb that loss.

Bank risk management has two basic goals. The first goal is avoiding a bank's insolvency, and the second goal is aimed at maximizing the rate of return on equity, including risk adjustment. However, if bank risks have a high probability of occurring, they will have a negative effect on bank profitability because real losses would lower the rate of return on equity below the expected level.

Bank risk management has two basic goals:
-the first goal is avoiding bank's insolvency, and
- the second goal is aimed at maximizing the rate of return on equity including risk adjustment.

The purpose of risk management is not to minimize risks but to optimize relations between returns and risks. It is a process in which managers identify, evaluate, monitor and control the risks related to the business activities of banks. Risk management is defined as a bank's insurance from risks, and in this regard risk management means performing a set of activities such as:

- identification of risk exposure for all categories of assets following by evaluation of potential losses;
- risk assessment, which includes measuring and analyzing past losses, for the purpose of estimating the future behavior of the variables;
- risk control, which implicates reducing or eliminating the risk;
- risk financing, which means securing reserves; and
- development of administrative techniques and usage of professional knowledge and expertise from this area.

The purpose of risk management is not to minimize risks but to optimize tradeoffs between returns and risks.

Bank risk management focuses primarily on credit and interest rate risk, and solvency risk depends on them and is a definite risk for the bank. Interest and foreign exchange risk are integral components of market risk, while liquidity risk is a specific bank risk through which modern banks can ultimately manage the financial markets, provided that the bank has a high credibility and good solvency.

The responsibility for maintaining a sustainable banking system presupposes partnership between the key participants that manage different types of risks. First and foremost, the quality of the bank's management, with particular emphasis on risk management, is the key to maintaining stability and security both at the level of individual banks and at the level of the overall banking system. Therefore, a risk management partnership should include the following participants:

The responsibility for maintaining a sustainable banking system presupposes partnership between the key participants that manage different types of risks:
1. Authorized and regulatory bodies and banking supervisory bodies.
2. Institutional participants.
3. The public and customers.

1. Authorized and regulatory bodies and banking supervisory bodies. The main goal of these participants is to provide support in the development of risk management, to improve and control the legal environment where the risk management process is taking place. By creating a sustainable environment, these participants play a key role in helping other participants in the risk management process.

2. Institutional participants:

- Shareholders have power and responsibilities. Therefore, those who are elected as professional managers have the responsibility to manage a bank, while taking into account the long-term success of the bank and protection of their legitimate interests;
- The Bank Supervisory Board determines the strategic directions, selects the management board, and defines the operational policy. Its most important task is to ensures effective functioning of the bank;
- The Board of Directors/Management Board implements the policy of the supervisory board and undertakes risk management activities. The management must be "competent and applicable" which means not only adhering to ethical rules of conduct, but also have a thorough knowledge of bank risks;
- Internal audit is an extended arm of the supervisory board in risk management. Internal audit traditionally performs an independent assessment of the bank's compliance with legal and accounting regulations and information technology. The internal audit sector has an important role for the governing bodies as it identifies and addresses risk areas;
- External auditors. They are independent, and therefore have a significant role in risk management.

3. The public and customers participate in the financial market and carry a certain responsibility for their own investment decisions based on published financial information. For example, the public has the role of a risk manager if it includes the financial media and financial analysts such as stockbrokers and rating agencies.

Risk management in banking is a relatively new discipline in bank management and has its roots in insurance, which is not about minimizing risks successfully but about compensating the cost from the damaged occurred. Bank risk management is a complex system and process, which combines creating risk measurement structure, monitoring and mitigating risk- taking activities, creating appropriate environment for optimal risk taking and establishing adequate framework of internal risk policy and controls.

Conclusions:

Having thoroughly explained banking activities in the previous chapter, this chapter focuses on analysis and study of the variety of risks that banks face when conducting banking activities. It is essential to study risks in banking because overexposure to risk can cause bank failure and, in the worst case scenario, instability of the banking and financial system. Therefore, banks are regulated by regulatory bodies like the Central Bank or other government institutions in order to manage the risks in their activities. The following major types of risks that modern banks face today are discussed in detail in this chapter: credit risk, market risk, interest rate risk, foreign exchange risk, liquidity (or funding) risk, concentration risk, operational risk, country and sovereign risk, reputational risk, regulatory risk, and solvency risk.

Credit risk is the risk of loss for the bank, due to the inability of its client to repay borrowed funds, in the agreed amount and / or within the agreed maturity, and is therefore associated with the traditional lending activity of banks. By focusing on the lending activity that generates the largest part of bank revenues, banks develop strict and detailed work procedures as part of a credit policy that intends to manage the credit risk.

Recent trends in banking have led to an increase in market risk due to the introduction of non-banking services and the greater reliance of banks on income from trading securities. This process has a direct influence over the variability in banks' net profits due to the relatively frequent changes in market conditions.

Foreign exchange risk means the risk of lowering or increasing the value of a bank's assets, liabilities and off-balance sheet activities denominated in foreign currency. This risk is a result of fluctuations in the exchange rates. Bank exposure to foreign exchange risk assumes net short or long positions in certain currency.

Since banks collect deposits on short term and lend on long term, liquidity risk is an inevitable outcome of this banking operation. The gap between maturities leads to liquidity risk and a cost of liquidity. Liquidity funding risk presents a bank's potential inability to have funds available to repay depositors on demand and to fund loans when needed.

Operational risk arises from failures/errors or deficiencies at either a technical level (i.e. in a bank's information systems or risk measures) or at an organizational level (i.e. in a bank's internal reporting, monitoring and control systems).

Country or sovereign risk is a risk when the economic, social or political condition of a foreign country may have an adverse effect over a bank's interests. Actually, country risk relates to the adverse effect that deteriorating macroeconomic factors have over the returns from overseas investments.

Finally, this chapter analyzes a bank's solvency risk, which means a bank's inability to meet maturing obligations due to its negative net worth of stockholders' equity, i.e. when the market value of its liabilities is higher than the market value of its assets. Solvency risk is the same as capital risk, or risk of failure. Solvency risk arises when bank risks are materialized and this situation may result in having insufficient capital for the bank to cover its losses.

Risk management in banking is a relatively new discipline and when implemented in banks it presents a complex system comprised of risk measurement structure, monitoring and mitigating risk-taking activities, appropriate environment for optimal risk taking and adequate framework of internal risk policy and controls.

Revision questions and problems:

1. Why is it imperative to study bank risks?
2. What is a risk?
3. What are the major types of risks?
4. Which is the most widely accepted classification of risks in contemporary literature?
5. Please define credit risk.
6. What is a credit policy?
7. What are the main components of credit policy?
8. What are the 5Cs of credit?
9. What are credit rating agencies?
10. What is diversification?
11. What is market risk?
12. What is systematic and what is unsystematic market risk?
13. What is interest rate risk and what are the sources of interest rate risks?
14. How can a bank's exposure to interest rate risk be measured?
15. If a bank has a positive gap what kind of risk is it exposed to?
16. What is foreign exchange risk?
17. What are the most common types of foreign exchange risks?
18. What is liquidity risk?
19. How do banks expose themselves to liquidity risk?
20. What are the types of liquidity risk?
21. What is operational risk?
22. Which operational risk event types have been identified by the Basle Committee on Banking Supervision?
23. What is a country or sovereign risk?
24. How are country risks categorized?
25. What is a reputational risk?
26. What is a regulatory risk?

27. What are the goals of bank risk management?
28. What is the purpose of bank risk management?

CHAPTER VII – ISLAMIC BANKING

Learning objectives:

- to be able to understand and describe the principles of Islamic Banking
- to be able to describe the three phases' development of contemporary Islamic banks
- to be able to understand and describe equity-based contracts
- to be able to understand and describe debt-based contracts
- to understand how Islamic banking products and services are designed

1. Historical Development of Islamic Banking

The origin of Islamic banking dates back to the beginning of Islam in the seventh century, using many of the same principles that are still used in contemporary Islamic banking. Historical books written in the early years of Islam indicated that during the 1st century of Islam (AD 600) some forms of banking activities already existed, and they were similar to modern banking transactions. The cities of Mecca and Medina prospered through local businesses and international trade, and interest based loans were the major source for financial needs. However, after the emergence of Islam, the Quranic verses prohibited operating with interest and consumption of certain commodities. The basic and most important characteristics of Islamic finance are its freedom from Riba[16], Gharar[17], Maysir[18], and avoidance of trade with unlawful goods and services. In addition, Islamic finance was characterized by the principles of justice and equity.

From a practical perspective, the principles of Islamic finance and economics have been designed to promote charity and helping others through kindness. By removing sentiments of selfishness and self-centeredness, which can create social antipathy, distrust, and resentment, it is aimed at achieving betterment of mankind. In the Middle Ages, trade and business activities in the Muslim world also relied on Islamic banking principles. These banking principles spread throughout Spain, the Mediterranean, and the Baltic states, arguably providing some of the basis for western banking principles. From the 1960's to the 1970's, Islamic banking resurfaced in the modern world. It operates in accordance with the Islamic Shariah law. The main Islamic principle of Islamic

The origin of Islamic banking dates back to the beginning of Islam in the seventh century, using many principles that are still used in contemporary Islamic banking.

The basic and most important characteristics of Islamic finance are:
- prohibiting Riba, Gharar, and Maysir;
- avoidance of trade in unlawful goods and services;
- following the principles of justice and equity.

Islamic banking is an alternative to conventional banking, and operates in accordance with the Islamic shariah law.

[16] Riba is the Arabic word for interest, and in Islamic finance it refers to unreasonably high interest rates charged on loans or deposits.
[17] Gharar is an Arabic word that is associated with uncertainty, deception, and risk. It is used to describe "the sale of what is not yet present". Gharar is a significant concept in Islamic finance, and in conventional finance this is present in derivative transactions such as forwards, futures and options, as well as in short selling and other forms of speculation (because of the uncertainty involved in the future delivery of the underlying asset).
[18] Maysir means gambling and in Islamic finance it is related to speculation, conventional insurance and derivatives.

banks is to have a business model which avoids taking riba, or profiting from interest or usury. Islamic banking includes the sharing of profit and loss, and the prohibition of interest payments between borrowers and lenders. The banks profit through equity participation with the borrower, rather than through receiving interest payments.

There is not much evidence about Islamic banking until the 1900s, so in this chapter we will discuss the three phases development of modern Islamic banks since the beginning of the 20th century (Alharbi, 2015).

In Islamic banking:
- banks operate in accordance with the Islamic Shariah law;
- banks have a business model which avoids taking riba, or generating profit from interest or usury;
- banks profit through equity participation with the borrower;

The first phase began in the early 1900's when interest free Banking was just an idea. This period featured a massive expansion of the interest based banking system after the industrial revolution in the early period of 19th century. However, Muslim scholars from that period argued against this kind of banking and called for an alternative financial mechanism within the Shari'ah norms. It was not until 1950's when a local Islamic bank, which is the first modern Islamic financial institution, established in Pakistan, that developed an interest free bank based on trust financing or Mudarabah[19] and agency or Wakala, which will be explained further down.

The development of modern Islamic banks began in the 20th century, and it has gone through three phases:
- The first phase began in the early 1900s, when interest free Banking was just an idea.
- The second phase (1963-1976) is characterized by the emergence and establishment of Islamic Banks in the Islamic society that operated without interest;
- The third phase refers to the spread of Islamic banks starting from 1977 to the present day.

The **second phase** is characterized by the emergence and establishment of Islamic Banks in the period between 1963 and 1976. In 1963, in Egypt, Local savings banks were established which met the demand for Shari'ah compliant banking. These banks became the pillars for the continued development of the Islamic Financial system (Academy, 2014), and they were the first banks in the Islamic society that operated without interest An additional feature of this period is the institutional involvement of the Islamic Research Academy, and the Islamic Countries conference. At the Karachi conference in 1970, delegates from Egypt proposed that an international Islamic bank be established, and the delegates from Pakistan proposed that an international union for Islamic banks be founded. The first international Islamic Bank was established in 1977 – the Islamic Development Bank (IDB), and it played a significant role in the development and growth of Islamic banking and finance industries.

The third phase refers to the spread of Islamic banks, starting from 1977 to the present day. During this phase, the number of Islamic banks around the world boomed, and many of the banks established in the early 1970's and 1980's are still in operation today (Abdeen & Shook 1984, p. 167; Shehata 2006,p.18). In addition,, many conventional banks have established Islamic windows, i.e. branches or separate departments, but not a separate legal entity, that offer Shariah compatible banking products and services. Examples of such conventional banks are Chase Manhattan, Citibank (Bahrain), the Hong Kong and Shanghai Banking Corporation (HSBC), Union Bank of Switzerland (UBS), American Express Bank Ltd., American Bank, BNP-Paribas, Kleinwort Benson, Morgan Stanly, Goldman and Standard Chartered. Other conventional banks have fully converted to Islamic banking. The number of jurisdictions with a systemically important Islamic banking sector increased marginally from 2018

Many conventional banks have established Islamic windows, i.e. branches or separate departments, but not a separate legal entity, that offer Shariah compatible banking products and services.

[19] Mudarabah means "Sharing the profit and loss with venture capital", which is a partnership or trust financing contract (similar to western equivalent of General and Limited Partnership) where one partner (rabb-ul-mal or "silent partner"/financier), gives money to another partner (mudarib or "working partner") for investing in a commercial enterprise.

to 2019. According to the IMF (2019), Islamic banking takes place in more than 60 countries, and the industry is now systemically important in 13 jurisdictions. Around 85% of the global Islamic financial assets are from the Islamic banking sector. The Gulf Cooperation Council (GCC) region still accounts for the largest share of the global Islamic banking assets, followed by the Middle East and South Asia region, and the South-East Asian region.

When offering financial services and products to their clients Islamic banks choose an appropriate and relevant contract, which might be equity based or debt based.

2. Principles of Islamic Banking

Principles of Islamic Banking, or the principles of Islamic Finance and Economics in general, are consistent with the principles of Islamic Law or Shariah. Therefore, contemporary Islamic banks provide a variety of services and products based on the following principles:

- Charging interest on loans and paying interest on deposits is prohibited, i.e. all forms of riba are prohibited.
- Financing or investing in businesses that are involved in forbidden activities or commodities, such as selling alcohol, gambling etc. are prohibited.
- Charging extra fees or provisions for late payments of loans or other fixed payment transactions is prohibited, unless those fees or penalties are donated to a charity by the creditor or by the client.
- Maysir is prohibited in the Islamic banking industry, because it is related to creating wealth from chance, rather than from productive activity. Maysir includes speculative activities, conventional insurance and derivatives.

Maysir is related to speculative activities, conventional insurance and derivatives and is prohibited, because it means creating wealth from chance, rather than from productive activities.

- Gharar is prohibited as it is associated with uncertainty, deception, and risk. It is used to describe "the sale of what is not yet present". Gharar is a significant concept in Islamic finance, and in conventional finance this is found within derivative transactions, such as forwards, futures and options, as well as in short selling and other forms of speculation (because of the uncertainty involved in the future delivery of the underlying asset). Islamic finance supporters (Mervyn K. Lewis&Latifa M. Algaoud, 2011) believe these involve excessive risk and may foster uncertainty and fraudulent behavior, which are found in derivative instruments used by conventional banking.

Gharar is prohibited as is associated with uncertainty, deception, and risk. It is used to describe "the sale of what is not yet present".

- Engaging in transactions lacking "`material finality` are prohibited. All transactions must be "directly linked to a real underlying economic transaction", which excludes "options and most other derivatives"(El-Hawary, Grais, & Iqbal., 2014) .
- Islamic banks are to collect zakat from customers' bank accounts. Zakat is the compulsory giving of a set proportion of one's wealth to charity. It is regarded as a type of worship and of self-purification and it represents the third Pillar of Islam.

Zakat is the compulsory giving of a set proportion of one's wealth to charity.

- A board of Shariah experts supervise and advise all Islamic banks in order to ensure that all activities are in line with the Islamic Principles. However, interpretations of the Shariah may vary across countries. For

instance, according to Humayon Dar (2011) the interpretation of the Shariah is stricter in Turkey or in Arab countries than in Malaysia, the interpretation of which is in turn stricter than that of the Islamic Republic of Iran.

- Participants in transactions share a symmetrical risk and return, and no one benefits from them, which is actually the most important principle of Islamic banking. Contrary to this, in conventional banking, this risk is, in principle, borne by the entrepreneur.

Islamic banks have the same purpose as conventional "western" banks, but they operate in accordance with the rules of the Shariah law. Some proponents, like Nizam Yaquby, believe that Islamic banking has more far-reaching purposes than conventional banking, and declare that the "guiding principles" for Islamic finance include: "fairness, justice, equality, transparency, and the pursuit of social harmony".

3. Products and Services in Islamic Banking

Islamic financial institutions, especially Islamic banks offer many products and services to meet the needs of customers and to maintain competitiveness along with conventional banks. However, when designing a successful Islamic financial product, Islamic banks follow their own banking principles, as discussed above. For example, an Islamic bank does not normally lend money except interest-free loans, which are termed as Qard Hasanah (Benevolent Loans). To replace interest, the ideal mode of financing under the Islamic banking system is "Financing on Profit & Loss Sharing" (PLS) basis. This means that Islamic banks choose an appropriate and relevant contract when offering financial services and products to their clients. There are two types of such contracts, equity based and debt based.

Equity based financing, or profit and loss sharing mode of contract, is equitable in character in that both parties are willing to put up the capital and work to share the future profit or loss. These partnerships can come in the form of musharakah or mudarabah, and are called the "real and ideal" modes of Islamic finance, as Islam calls for sharing of rewards and losses by all who contribute capital to a commercial enterprise (Usmani, 1998).

Musharaka or joint venture is a partnership between the bank and the client (or between more than two parties), whereby each partner contributes a specific amount of capital (in monetary or tangible assets) in a manner that gives each one the right to deal in the assets of the partnership, on condition that profit is distributed among the partners according to the partnership agreement, and losses are to be borne by the partners in accordance with each partner's contribution. Typically, a musharakah contract is used in home or project financing bank products.

Mudaraba is a form of partnership in profit whereby one party (rab-al-maal) provides capital, in cash or tangible assets, and the other party provides management skill or labour (mudarib). Mudaraba is derived from the phrase al-darb fil al-ard found in the Quran, which means to make a journey (Academy,

Equity based financing, or profit and loss sharing mode of contract, is equitable because both parties are willing to put up the capital and work to share the future profit or loss.

Equity based contracts include musharakah or mudarabah.

In a Musharaka contract:
- there is a partnership between the bank and the client;
- each partner contributes a specific amount of capital;
- profit is distributed among the partners according to the partnership agreement and losses are to be borne by the partners in accordance with the contribution of each partner.

2014). It is called like this because a worker puts a lot of effort in the course of doing business, and making journeys is an inevitable and indispensable part of this hard work. In this contract, which is based on trust, there are only two parties. The Mudaraba contract can be restricted or unrestricted. If it is restricted, the capital provider can restrict the actions of the mudarib in respect of time, place, investment activities, etc. If it is unrestricted, then the Mudarib is permitted to do what entrepreneurs do in their fields of activity. The profit sharing is agreed upon when the contract is concluded, and losses, if any, are borne only by the capital provider. The mudarib is not liable for any loss unless there is negligence or misconduct on the Mudarib's part. Typically, the mudaraba contract is used in savings or project financing bank products.

In a Mudaraba contract:
- there is a partnership in profit whereby one party (rab-al-maal) provides capital, in cash or tangible assets, and the other party provides management skill or labour (mudarib);
- if it is restricted the actions of mudarib are restricted;
- if it is unrestricted the mudarib does everything in its field;
- the profit sharing is agreed upon, and if any losses incur they are borne only by the capital provider, except when there is negligence or misconduct on the Mudarib's part.

When financing involves the purchase or lease of an asset for any defined purpose, it creates a debt over the buyer and lessee and that is why it is referred to as debt financing or asset based financing. Upon entering into debt-based financing, the customer is under an obligation to make the payment according to the agreed terms and schedules. According to Curtis (2012) debt like instruments include mark up (murabaha), leasing (Ijara), cash advances for the purchase of agricultural produce (salam), and cash advances for the manufacture of assets (istisna'). These contracts are contracts of exchange and involve buying and hiring goods or assets and services on a fixed-return basis.

Debt-like instruments include: mark up (murabaha), leasing (Ijara), cash advances for the purchase of agricultural produce (salam), and cash advances for the manufacture of assets (istisna').

Mark up or murabaha means profit or gain. It is the process of selling a commodity at a purchasing price with agreed profit markup. This markup may be a percentage of the selling price or a lump sum amount. In this type of contract, the customer approaches the bank and applies for financing residential space through Murabaha. After assessing the creditworthiness of the customer and approving the application, the Bank purchases the real estate and takes the possession thereof. After getting the possession of the purchased house, the Bank sells it to the customer through a Murabaha Sale Contract at the purchased price plus additional gain or mark up. The difference between these two prices is the bank's profit. Thus the customer takes over the house and pays the bank according to the agreed terms and conditions. Murabahah differs from conventional banking products such as residential mortgages, since the bank is compensated in the form of profit, rather than interest.

Mark up or murabaha is a process of selling a commodity at a purchasing price with agreed profit markup, which may be a percentage of the selling price or a lump sum amount.

The term **Ijarah** means renting something, and presents a contract under which a specified permissible benefit in the form of a plant, office automation, or motor vehicle is obtained for a specified period, in return for a specified payment. In terms of residential mortgages this is a form of leasing contract in which the ownership of the leased property is transferred to the lessee at the end of the lease term, or at any time during the lease term when the Lessee (Customer) wishes to purchase the leased asset.

The term Ijarah means renitng something, and refers to a contract under which a specified permissible benefit in the form of a plant, office automation, residential space, or motor vehicle is obtained for a specified period, in return for a specified payment.

Istisna and Salam contracts are "forward contracts", where the bank makes an immediate payment for goods in the future, i.e. goods that are not yet manufactured, built, or harvested. Istisna contracts are used for manufacturing, processing, or construction, while salam contracts can be used for any goods, except gold, silver, or currencies based on these metals. On the other hand, a salam contract is detailed and cannot be cancelled unilaterally. In addition, the

Istisna and Bia Salam contracts are "forward contracts", but unlike Istisna contracts, which are used for manufacturing, processing, or construction, salam contracts can be used for any goods, except gold, silver, or currencies based on these metals.

full price must be paid in advance, and the time of delivery must be specified, while istisna contracts are more customized and the restrictions mentioned previously do not apply here.

The word Istisna means to manufacture, construct, or build something. Therefore, an Istisna contract is a contract of sale of specified items, which are to be manufactured or constructed with an obligation on the part of the seller (San'e) to deliver them to the buyer (Mustasne) upon completion. In the Istisna contract, there are two parallel agreements, one between the bank and the customer, and the other one between the bank and the real estate developer, or constructing company. The Bank assesses the customer's creditworthiness, analyses the real estate market condition, evaluates the price of the materials of subject property, and eventually approves the request. Under the Parallel Istisna contract, the Bank as Mustasne pays the Istisna price to the contractor i.e. San'e, as per agreed upon the terms in the agreement. Payment is usually linked to the progress of construction. A consultant is appointed, either at the contractor's or customer's expense, to supervise the construction works. The Bank delivers the property under the first Istisna contact to the client (mustasne) on the relevant delivery date. Afterwards, the customer pays the Istisna purchase price to the Bank as per agreed upon the terms in the contract in the form of equated monthly installment (EMI).

An Istisna contract is a contract of sale of specified items, which are to be manufactured or constructed with an obligation on the part of the seller to deliver them to the buyer upon completion.

Typically, Islamic banks get involved in corporate financing through Salam, and seek a binding promise to purchase from a third party (the Ultimate Buyer). The Bank's client (Al Muslam Ilaihe) seeks finance from the Islamic Bank (Al Muslim / Rab-al-Salam), which acts as a purchaser and makes an advanced payment to the client, i.e. the Islamic bank concludes the contract with the client to purchase certain goods to be produced or procured as agreed upon specifications. At the same time, the Islamic bank receives a binding promise for purchase from a third party (or ultimate buyer) in order to sell the goods purchased from the client. On the agreed upon delivery date the customer delivers the Salam goods to the Islamic bank which in turn, based on the promise to purchase, sells these goods to the ultimate buyer. In this process profit is also realized through the difference in price between the two contracts (Academy, 2014).

Salam contracts are used in corporate financing, in which a Bank's client seeks finance from the Islamic Bank, which acts as a purchaser and makes an advanced payment to the client, for purchasing certain goods to be produced or procured as per agreed upon specifications. At the same time, the Islamic bank receives a binding promise for purchase from a third party (or ultimate buyer) in order to sell the goods purchased from the client.

Concerning products and services related to a client's checking account, such as a current account, an overdraft facility or a credit card, Islamic banks might use **Qard** contracts, which by definition mean interest-free loans given by depositors to the bank. In these circumstances, banks utilize the money lent by clients as creditors, but banks act as debtors and are obliged to return the principals on demand or as per the contract. Qard contracts are for the benefit of the individuals and the society at large.

In Qard contracts, which by definition mean interest-free loans given by depositors to the bank, the clients are creditors, and banks act as debtors.

Modern Islamic banks are well positioned into the free interest system and offer competitive products. What is typical of them is their value-orientated ethos, by which Islamic banks carry on the code of moral values and conduct, and therefore operate for the purpose of harmonious co-existence.

Conclusions:

This chapter describes the historical development of Islamic banks and their main characteristics. Historical books written in the early years of Islam indicated that during the 1st century of Islam (AD 600), some forms of banking activities existed that were similar to modern banking transactions. However, after the emergence of Islam, the Quranic verses prohibited operating with interest and consumption of certain commodities. In the Middle Ages, trade and business activities in the Muslim world also relied on Islamic banking principles. These banking principles spread throughout Spain, the Mediterranean, and the Baltic states, arguably providing some of the basis for western banking principles. Islamic banks operate according to the Sharia Law, and they provide a variety of services and products, based on several principles, such as prohibition of: charging interest on loans and paying interest on deposits; financing or investing in businesses that are involved in forbidden activities or commodities; charging extra fees or provisions for late payments of loans or other fixed payment transactions; speculative activities, conventional insurance and derivatives, or maysir; gharar or "the sale of what is not yet present"; and engaging in transactions lacking "`material finality`. All Islamic Banks are supervised and advised by a board of Shariah experts in order to ensure that all activities are in line with the Islamic Principles.

Islamic banks have the same purpose as conventional "western" banks, but they operate in accordance with the rules of Shariah law. They offer many products and services to meet the needs of customers and to maintain competitiveness along with conventional banks. However, when designing their products, Islamic banks choose an appropriate and relevant contract, which can be equity based or debt based.

Equity based financing, or profit and loss sharing mode of contract, can come in the form of musharakah or mudarabah, which are called the "real and ideal" modes of Islamic finance, as Islam calls for sharing of rewards and losses by all who contribute capital to a commercial enterprise. Debt based financing involves the purchase or lease of an asset for any defined purpose. Debt-like instruments are mark up (murabaha), leasing (Ijara), cash advances for the purchase of agricultural produce (salam), and cash advances for the manufacture of assets (istisna'). These contracts are contracts of exchange and involve buying and hiring goods or assets and services on a fixed-return basis.

Revision questions and problems:

1. What are the basic and most important principles of Islamic Finance?
2. What are the three phases of modern Islamic banks' development, starting from the 20th century?
3. What are the principles that contemporary Islamic banks follow when providing a variety of services and products?
4. What does the board of Shariah experts do?
5. Define equity based and debt based contracts in Islamic banks.

6. Please explain the musharakah and mudarabah contracts.
7. What is the difference between an Istisna and a Salam contract?
8. Please explain the Ijara contract.
9. Do some online research to find out more about conventional banks that offer Islamic banking products through Islamic windows.
10. Do some online research to find out more about Islamic banking products offered through Islamic banks.

CHAPTER VIII– INTERNATIONAL BANKING

Learning objectives:

- to be able to describe the introduction of international banking
- to understand and be able to describe the development of international banking
- to understand the factors that contribute to the development of international banks
- to be able to describe the types of entry mode of foreign banks
- to understand and define the benefits and risks that host countries have from foreign banks

1. History of International Banking

The roots of international banking date back over 4,000 years, when various civilizations used letters of credit and bills of exchange issued across sovereign boundaries to finance trade. The history of banks with physical presence outside their home country is more recent, widely acknowledged as starting in the 15th century when Florentine bankers (notably the Medici family) established subsidiaries or foreign branches in other jurisdictions to help finance trade, scientific, military, artistic, and other endeavors. From the 14th to the 16th century, Florence was regarded as the scientific and cultural capital of the Western world, and the birthplace of the Renaissance and modern European art. It has been argued that commercial and artistic developments were inextricably linked by a change in social attitudes that emphasized the creation of wealth and conspicuous consumption. This not only prompted the development of regional banking business but also encouraged international activity because financing requirements could not be met locally.

International banking development occurred in two phases:
1. Colonial banking;
2. Modern international banking.

The development of international banking can be viewed as occurring in two distinct phases (Casu, Girardone, & Molyneux, 2006).

The first phase commenced with the rise of colonialism during the nineteenth century and continued into the twentieth century and is called colonial banking. British banks opened branches in their Australian, Caribbean and North American colonies in the 1830's. Further expansion took place starting from the 1850's onwards, and by the end of the century British banks had operations in South Africa, Latin America, India and parts of Asia as well as in the Middle East and some European countries. Other colonial powers also expanded their banking activities in the later part of the nineteenth century, particularly Belgian, French and German banks that set up operations in Latin America, Africa and China as well as in London. One noticeable difference between British banks and their European counterparts was that the former established 'colonial banks', otherwise known as 'British overseas banks' or 'Anglo foreign banks' that

Key points in the development of colonial banking are:
- British banks opened their branches in Australian, Caribbean and North American colonies in the 1830's;
- Between the 1850's and the 1900's British banks expanded in South Africa, Latin America, India and parts of Asia as well as in the Middle East and some European countries;
- By the end of 19th century Belgian, French and German banks had set up operations in Latin America, Africa and China as well as in London;
- Japanese and Canadian Banks were developing international activities at the end of 19th and the beginning of 20th century.

only provided services outside Britain. In contrast, the European banks undertook both domestic and foreign activity, often via the acquisition of banks or through the establishment of subsidiaries. In other words, European bank expansion overseas was more similar to the type of activity conducted nowadays – domestic banks acquiring foreign operations or setting up subsidiaries through which business could be undertaken, whereas British banks were specifically set up to do banking only in their colonies. It should be noted that various Japanese and Canadian banks also developed international activities in the later part of the nineteenth and early twentieth century.

The second phase of international bank expansion was linked to the growth of US multinational firms and the changing financial regulatory landscape from the late 1950's and early 1960's onwards. This is called modern international banking. The expansion of banks overseas during the first half of the twentieth century was somewhat limited due to the decline of the British and other colonial empires, economic uncertainty brought about by the world wars, and the changing political landscape in many countries that sought to establish their own banking systems by restricting (even nationalizing) foreign banks. It was not until the emergence of the United States as a major economic power and the growth of their multinational companies that the second wave of international banking activity took place. This occurred from the late 1950's and early 1960's onwards, when US banks began to expand overseas to meet the financial requirements of multinational firms, as well as to take advantage of cheaper financing outside the home market. In any event, US banks flocked to London and, to a lesser extent, other major financial centres (e.g., Paris) during the 1960's. This was the birth of the Eurocurrency markets – markets where wholesale foreign currency deposits and lending takes place. US banks continued to dominate international banking during the 1970's, although in the late 1970's and throughout the 1980's Japanese banks emerged as major international lenders (reflecting the growth of Japanese multinational companies over the period). The 1990's witnessed a decline in the relative importance of Japanese banks on the international scene due to problems in their home market, and their position was replaced by European banks that have expanded their international operations as a result of various factors (including the creation of the European Union's single market).

Key points in the development of modern international banking:
- it began in the 1950's with the expansion of US banks in order to satisfy the financial requirements of multinational firms, as well as to take advantage of cheaper financing outside the home market;
- Birth of Eurocurrency markets;
- US banks dominated in international banking in the 1960's and1970's;
-During the 1970's and 1980's Japanese banks emerged as major international lenders;
- In the 1990's European banks expanded their international operations.

Following the history of international banking development one can note that by increasing the international trade in goods and financial services more and more banking institutions become international. The term international in a broader sense does not comprise only the actions taken by a bank in order to establish its branches or subsidiaries across borders, but it also includes international banking activities, or services such as a letter of credit, Lombard loans, international payment services, etc.

2. Factors Affecting the Development of International Banking

Factors that have contributed to the development of international banking are:
1) Factor price differentials and trade barriers;
2) Ownership advantages;
3) Diversification of earnings;
4) Usage of excess managerial capacity;
5) Firm-specific advantages;
6) Location advantages;
7) Testing the market;
8) Follow the leader;
9) Following the customer;
10) Adding to overall firm performance;
11) Managerial motives;
12) Deregulation.

The internationalization of the banking sector has been spurred by the liberalization of financial markets worldwide. Developed and developing countries alike now increasingly allow banks to be foreign-owned and allow foreign entry on a national treatment basis. Several factors have influenced this trend, which does seem to stop nowadays. Across the economics literature on the determinants of foreign direct investment (FDI) there are studies on the strategic behavior of firms as well as empirical evidence about the performance and efficiency advantages of international companies. Therefore, many of the theories relating to overseas expansion of non-financial firms can be applied when searching the reasons for the internationalization of the banking sector:

1. Factor price differentials and trade barriers. The theoretical and empirical literature on the determinants of FDI focuses on two main motives for overseas expansion – factor price differentials, and trade barriers that inhibit exports. In the case of banking, evidence would seem to suggest that horizontal FDI is likely to be a much more important motive for cross-border activity than vertical FDI. For instance, the strategic reasons for banks to establish multinational operations are most likely to be based on advantages associated with 'internalizing' informational advantages as opposed to trading at arm's length. Because it is difficult to find efficient markets for long-distance transactions in some areas of banking (such as retail banking, lending to small firms, specific credits to companies operating in different regulatory and economic environments) investment overseas is likely to be an important feature of the industry.

2. Ownership advantages. Typically, foreign banks have several disadvantages when operating oversees. Drawbacks such as the demand of the local markets and legal framework, and costs associated with operating at a distance (management, regulatory and other costs) can be overcome by using the ownership advantages. Foreign banks may compensate disadvantages with technological expertise, marketing know-how, production efficiency, managerial expertise, innovative product capability, and so on, but only if they are easily and effectively transferable throughout the bank.

3. Diversification of earnings. Diversification of bank earnings and risk reduction can be brought about by expansion into foreign markets. Banks (and other firms) may construct portfolios of array of investments by looking for low correlations between the price movements of the stock in order to maximize diversification benefits and yield a given expected return and risk. This is a way to avoid all of the bank's investments being exposed to the same adverse shocks. Therefore, banks diversify their earnings and reduce their risk by doing a similar business activity in different countries, and by expanding into new areas (such as insurance, mutual funds, investment management, investment banking, and so on), both at home and abroad.

4. Usage of excess managerial capacity. Another theory of foreign investment refers to the desire of companies to use up excess managerial

capacity. For instance, if a bank has a highly specialized management team it may not get the best use of this team if it only focuses on business in one particular geographical market. Therefore, banks can extend their scale of operations by expanding overseas and into new markets, thus utilizing their managerial resources more efficiently.

5. Firm-specific advantages. Some banks have advantages (e.g. financial, based on distribution and production expertise or selling experience) that make foreign expansion more amenable. Size often confers such advantages as large banks typically have a wide array of financing sources, may benefit from scale and scope economies and have more expert management and systems that make foreign expansion easier. They also are more likely to have the relevant financial resources to undertake large-scale overseas activity.

6. Location advantages, which may relate to a variety of production, distribution and selling attributes of the product or service in question. For instance, banks like to group together in financial centers (as in London, New York and Tokyo) to benefit from the close proximity of the foreign exchange market and other Eurocurrency activities.

7. Foreign expansion can be motivated by the desire to establish a presence in order to test the market. Information can be obtained by making experimental foreign investment, and over time banks can decide on whether to expand or contract their activities.

8. Strategy - Follow the leader. When a large bank undertakes investment in a foreign market it may well encourage others to follow. There is anecdotal evidence that various multinational firms (including large banks) emulate their competitors' cross-border strategies regarding investment decisions in major markets.

9. Customer-following strategies are common in banking – big firms need big banks in order to meet their growing financing needs. The capital markets, of course, can meet certain financing requirements of large firms – especially when markets are buoyant. When capital markets become less accommodating companies turn to their banks. In other words, when companies become larger and industries more concentrated, the banking industry follows suit.

10. The most obvious reason justifying foreign expansion is that it adds to overall firm performance and shareholder value. That is, returns generated from cross-border operations will add to group returns, boosting profits and ultimately increasing the bank stock price for its shareholders. Given that a major strategic objective of banks is to generate sufficient risk-adjusted returns to their owners, one would expect that there is evidence to suggest that foreign operations add value in some way. Cross-border expansion can therefore be expected to add value to the bank by improving operating costs and/or increasing market power in setting prices.

11. International banking activity may, also be motivated by managerial motives rather than the objective of maximizing profits and shareholder value. Entrenched managers may make international investment decisions based on their own preferences for pay, power, job security, risk

aversion, and so on. In other words, managers may seek to expand internationally so they control larger firms, implicating that salaries and benefits are higher in bigger firms/banks. Managers may wish to expand in order to make their companies less prone to hostile takeovers, or they may believe that geographical diversification helps improve their own managerial prospects, but this may not necessarily be the same as increasing the share price or profits of the bank.

12. One major factor has motivated the growth of international banking activity and that has been deregulation aimed at fostering more competitive, innovative and open markets. The deregulation of many over-protected banking markets has had the effect of encouraging foreign bank entry and this, in theory at least, should boost competition and encourage domestic banks to become more efficient. For example, one of the main objectives of the EU's Single Market Programme has been to reduce barriers to trade in banking and financial services across all member countries in order to encourage foreign bank expansion.

3. Entry Mode of Foreign Banks in Domestic Banking Systems

The majority of foreign direct investment in the banking industry is directed towards developing countries and transition economies. As shown by the Global Financial Stability Report published in 2007 by the IMF, foreign-bank participation in the banking systems of emerging (or transition) countries increased significantly between 1995 and 2005, albeit at different rates in different areas (Cull and Martinez Peria, 2010). For example, in 2008, the proportion of assets held by foreign banks exceeded 90% in Central and Eastern Europe (UNCTAD, 2010). A good example is the Czech Republic, where the vast majority of banks are owned by foreign financial institutions. In the case of Asia and Latin America, the more relaxed entry restrictions introduced in the mid-1990's (as a 'post-crisis' effect) also appear to have promoted foreign-bank entry (Cull and Martinez Peria, 2007).

However, when undertaking business in foreign markets banks have a number of choices regarding the entry mode of their activities. In order to enter a foreign market, banks must choose both a particular location and a specific organizational form. The choice of entry mode depends on a broad range of considerations on the side of the bank and on the side of the indigenous banking market. On the side of the bank one can include the amount of investment the bank wishes to undertake, bank size, experience in internationalization, and distance from host country. On the other side, when deciding where and how to make an entry in the indigenous banking market, banks consider regulatory framework of the targeted location, level of economy development, tax issues, country risk and other factors. Typically, foreign banks enter domestic markets as a subsidiary, branch or simple representative office. Their operating and financial autonomy from the parent bank makes a distinction between them. However, empirically there are four typical types of bank entry on domestic

The choice of entry mode depends on numerous factors on the side of the bank:
- the amount of investment the bank wishes to undertake;
- bank size;
- experience in internationalization; and
- distance from host country.

markets: correspondent banking, a representative office, a branch office and a subsidiary.

Correspondent banking is the lowest level of exposure to the foreign market. This simply involves using a bank located in the overseas market to provide services to a foreign bank. In these circumstances, banks use correspondent banks to do business in markets where they have no physical presence and as such, these types of services are widely used by smaller banks. The correspondent banking services offered via a correspondent banking relationship relate mainly to the offer of payment and other transaction services as well as various trade credit facilities. Foreign banks have a minimal exposure to foreign markets and little gains when entering via correspondent banking relationships.

Correspondent banking:
- is the lowest level of exposure to foreign market;
-the foreign bank is using a correspondent bank located in the overseas market;
- is typical for smaller banks, due to the fact they have no physical presence;
- concentrates on payment and trade credit facilities.

Banks can obtain slightly greater exposure to a foreign market via a **representative office**. They are a less expensive option available to banks seeking to enter foreign markets, requiring only two or three employees. In addition, representative offices have no capital of their own and no legal independence, and they operate under the control of the parent company. Due to this, representative offices are usually small and they cannot provide banking business, i.e. they cannot take deposits or make loans. Representative offices are used to prospect for new business and they usually only act as marketing offices for parent banks. Typically, a bank will set up a representative office in risky markets as the cost of running such small offices is negligible, and they can easily be closed if commercial prospects are not good.

A representative office:
- is a less expensive option;
-has no capital of its own and no legal personality, i.e. it operates under the control of the parent company;
- cannot take deposits or make loans;
- usually acts as a marketing office for its parent bank.

Establishing a **branch office** usually indicates a higher level of commitment to the foreign market compared with the representative office. A branch is a key part of the parent bank and acts as a legal and functional part of the parent's head office. In many respects, a foreign branch is similar to a domestic branch, although the former is likely to have more autonomy in making commercial decisions tailored to the specific features of the foreign market. After all, a branch is not a form of entrance independent from the parent firm, even if its operating regulations (accounts, statement of income, etc.) imply some degree of autonomy. Branches can perform all the functions that are allowed by the banking authorities of the host country, namely taking loans and making deposits, as well as selling other types of products and services. Branches are the most common form of foreign bank expansion as the costs are lower than those of establishing a wholly owned subsidiary, and they enable banks to conduct a full range of business activity.

A branch office:
- indicates a higher level of commitment to the foreign market;
- acts as a legal and functional part of the parent's head office;
- cannot take deposits or make loans;
- has more autonomy in making commercial decisions than the domestic branch;
- can perform all the functions allowed by the banking authorities.

Unlike a branch, a **subsidiary** is a legally autonomous entity, which can take legal action and has its own capital. It is organized and regulated according to the laws of the host country. Whereas branches expose the whole capital of the parent bank to risk from overseas activity, the risk exposure of a subsidiary is limited by its own capital exposure. One main advantage of having a subsidiary is that it generally signals a stronger commitment to do business in a country compared with the other forms of entry and reflects the foreign companies' more positive assessment of future prospects for the market. In addition, subsidiaries

A subsidiary:
- is a legally autonomous entity;
- can take legal action, and has its own capital;
- the risk exposure of a subsidiary is limited by its own capital exposure;
- signals a stronger commitment to do business in a country;
- is usually allowed to undertake a broad range of banking business according to the regulations of the host country.

are usually allowed to undertake a broad range of banking business subject to the rules and regulations of the host country.

Much of the foreign bank activity undertaken in domestic banking systems relates to banking relationships with large multinational companies from the parent country. However, one should always be aware that international banking also includes retail and other commercial banking business in foreign markets, and that these activities barely differ from domestic retail operations.

4. The Increasing Role of Foreign Banks in Domestic Banking Systems

For many years, the main feature of international banking was the role of banks as providers of services to multinational companies. Albeit many banks have expanded overseas, their customer provision now spans the full spectrum of services, ranging from niche retail banking products to wholesale investment and commercial banking activity.

While the entry of a foreign bank into a new market can bring along benefits it may also bring costs for the host country. On the one hand, the entry of a foreign bank enhances competition, which improves the efficiency of the domestic banking system. Moreover, foreign banks can contribute to an improvement of the availability and the quality of financial services. In addition, foreign banks can enhance the access of the host country to international capital markets. On the other hand, domestic banks will have to compete with large international banks and in order to become competitive, domestic banks might have to make investments and adapt their business model, which could in turn entail increased risk-taking. Moreover, foreign banks might simply displace local lending, thereby tightening firms' overall access to credit. Most of the existing research differentiates the effects for developed and developing countries, as the entry of foreign banks affects those country groups differently. This is so because the market conditions for foreign banks may differ, e.g. state-owned banks might still play a more important role in developing countries.

Many authors agree that the presence of foreign banks and the increase therein can be beneficial for the host market in several ways. First, foreign bank presence tends to lower the cost of financial intermediation and increases its quality. Second, it increases access to financial services for (certain types of) firms and households. Third, it enhances the financial and economic performance of borrowers. All these benefits result from the increase in competition, products, technology and know-how spillovers, and acceleration of domestic reforms. Furthermore, international banks that are diversified can more easily absorb shocks occurring in the host markets and therefore can be a more stable source of capital. The magnitude of these benefits, however, depends on the characteristics of the local market and of the foreign banks themselves: in some cases, benefits are large, while in others they are only marginal. In this context, foreign banks actually act as catalysts for the financial and economic development of the host country.

Benefits for the host market from the presence of foreign banks:
1. A foreign bank's presence tends to lower the cost of financial intermediation and increases its quality.
2. It increases access to financial services for firms and households.
3. It enhances the financial and economic performance of borrowers.
An additional benefit is that foreignbanks can more easily absorb shocks occurring in the host markets and be a more stable source of capital.

Risks for the host market from the presence of foreign banks:
- foreign banks tend to select only the best customers, leaving domestic banks with non-creditworthy clients;
- lower profitability of domestic banks;
- decreased supply of loans from domestic banks;
- spill over of shock from parent country which affects credit supply on host country.

At the same time, foreign bank presence can involve costs and risks for the host country. That is, if foreign banks tend to select only the best customers, domestic banks can be left with a worsening credit portfolio, which can hurt their profitability and willingness to lend. In addition, foreign banks can be a channel through which shocks in one country, e.g., the home market, are spilled over, thus affecting the credit supply in the host country. Therefore, foreign banks may also introduce financial instability.

Conclusions:

The history of banks having a physical presence outside their home country is widely acknowledged as starting in the fifteenth century when Florentine bankers established subsidiaries or foreign branches in other jurisdictions to help finance trade, scientific, military, artistic and other endeavors. The development of international banking can be viewed as occurring in two distinct phases, colonial and modern banking. As the history of international banking development shows, more and more banking institutions become international because of the increase in the international trade in goods and financial services. The factors that have contributed to the development of international banking are: factor price differentials and trade barriers; ownership advantages; diversification of earnings; usage of excess managerial capacity; firm-specific advantages; location advantages; testing the market; following the leader; following the customer; adding to overall firm performance; managerial motives; and deregulation.

When undertaking business in foreign markets banks have a number of choices regarding the entry mode of their activities. Namely, in order to enter a foreign market, banks must choose both a particular location and a specific organizational form. Empirically, there are four typical types of bank entry in domestic markets: correspondent banking, a representative office, a branch office, and a subsidiary.

The last part of this chapter includes a brief discussion about the role of foreign banks in domestic banking markets. Many authors agree that the presence of foreign banks and increase therein can be beneficial for the host market in several ways. First, foreign bank presence tends to lower the cost of financial intermediation and increases its quality. Second, it increases access to financial services for (certain types of) firms and households. Third, it enhances the financial and economic performance of borrowers. However, foreign bank presence can involve costs and risks for the host country. This means that if foreign banks tend to select only the best customers, domestic banks are left with a worsening credit portfolio, which can hurt their profitability and willingness to lend. In addition, foreign banks can be a channel through which shocks in one country, e.g., the home market, are spilled over, this affecting the credit supply in host country. Therefore, foreign banks may also introduce financial instability.

Revision questions and problems:

1. What are the phases of international banking development?
2. How did international banking develop in the colonial phase?
3. What is the difference between British and European banks when conducting their activities?
4. Which factors have contributed to the development of international banking?
5. Which factors have an influence over the choice of entry mode in a foreign country?
6. Please explain the four types of entry modes of foreign banks.
7. Please do some research and find out which entry mode do foreign banks in your country use?
8. What are the benefits of foreign banks entering host countries?
9. What are the risks of foreign banks entering host countries?

CHAPTER IX – BANK FAILURES AND BANKING CRISES

Learning objectives:

- to understand and to be able to explain the terms bank failure, bank run, bank panic and banking crisis
- to be able to explain the determinants of bank failure
- to understand consequences that banking crisis have on national and global economy
- to understand the importance and the difficulty of conducting successful management of banking crisis
- to be able to explain the policy actions for successful management of banking crisis
- to understand goals of bank restructuring
- to understand and to be able to explain the different approaches to bank restructuring

1. Definition of Bank Failures

In the 1980's and 1990's the number of banks in crisis rapidly grew compared to the period after the WWII. Following the deregulation and globalization of the financial sector, a large number of banks started bankruptcy proceedings. Intensifying competition in the banking market directly influenced the decrease of interest rate spread and banks' profitability. Widening the portfolio of services with non-banking core activities additionally increased the risks that banks faced. Deregulation and globalization are seen as systematic risks of inappropriate distribution of risks towards banks. Bank management bodies were not capable enough of quantification and proper control of increased banking risks. These banking risks include: credit risk (loans and other assets turn bad and cease to perform), liquidity risk (withdrawals of money/deposit exceed the available funds), interest rate risk (rising interest rates reduce the value of bonds held by the bank and force the bank to pay relatively more on its deposits than it receives on its loans), and many more. Banks face problems when they have too many liabilities coming due but do not have enough cash (or other assets that can be easily turned into cash) to satisfy those liabilities. This may occur if many depositors want to withdraw deposits at the same time (depositor run from the bank – or bank run), or if the bank's borrowers want their money (approved by loans), but the bank does not have enough cash on hand. The resulting situation is that the bank becomes illiquid. It is important to note that illiquidity and insolvency are two different things. A bank can be solvent but illiquid (it can have enough capital but not enough liquidity). Nevertheless, insolvency and illiquidity often come hand in hand. When there is a decline in asset values, the depositors and other banks' borrowers start feeling uneasy and demand their money. The following paragraphs provide definitions of bank failure, bank run, banking panic, and banking crisis, so that the reader can gain a

An increased number of banks in crisis during the '80s and '90s due to the latest trends in banking:
- deregulation and globalization of the financial sector;
- intensifying competition in the banking market;
- widening the portfolio of services with non-banking core activities;
-increased risks that banks face.

Illiquidity and insolvency are two different things. A bank can be solvent but illiquid (it can have enough capital but not enough liquidity).

better insight into the kind of situations banks may face when they begin to get into difficulties.

A bank failure occurs when a bank is forced by regulators either to close or to merge with another banking institution, because it is unable to service its debts.

Bank failure is a situation in which a bank is unable to service its debts. This may occur when too many of a bank's loans default or, more rarely, when a bank has too few accounts providing it with cash flow. Actually, a bank failure occurs when a bank is forced by regulators either to close or to merge with another banking institution. A bank failure may cause great turmoil in the financial system, which is called a bank run. Therefore, many national banking structures have state agencies that have insured bank accounts up to a certain amount in order to reduce the pressure for bank runs, and to keep the stability and confidence in the national financial system.

A bank run occurs when many clients withdraw their deposits from a bank, which destabilizes the bank to the point where it runs out of cash and thus faces sudden bankruptcy.

Bank run (also known as a run on the bank) occurs when many clients withdraw their deposits from a bank, because they believe the bank may cease to function in the near future. In other words, it is when in a fractional-reserve banking system (where banks normally only keep a small proportion of their assets as cash) numerous customers withdraw cash from deposit accounts in a financial institution at the same time because they believe that the financial institution is, or might become, insolvent. They keep the cash or transfer it into other assets, such as government bonds, precious metals or gemstones. All of this can destabilize the bank to the point where it runs out of cash and thus faces sudden bankruptcy. To combat a bank run, a bank may limit how much cash each customer may withdraw, suspend withdrawals altogether, or promptly acquire more cash from other banks or from the central bank, besides other measures.

Banking panic or bank panic is a financial crisis that occurs when many banks suffer runs at the same time.

Banking panic or bank panic is a financial crisis that occurs when many banks suffer runs at the same time, as people suddenly try to convert their threatened deposits into cash or try to get out of their domestic banking system altogether.

A banking crisis occurs when all or almost all of the banking capital in a country is wiped out, leading to a long economic recession.

Banking crisis occurs when all or almost all of the banking capital in a country is wiped out. The resulting chain of bankruptcies can cause a long economic recession as domestic businesses and consumers are starved of capital since the domestic banking system has shut down. Banking crises can be very damaging because they tend to lead affected economies into deep recessions, and rapidly spread to other countries, which do not have apparent vulnerabilities.

2. Determinants of Bank Failure

The determinants of bank failure are divided in the following categories:
1.Macroeconomic circumstances;
2.Microeconomic factors which are under governments' (or central banks') direct control or influence; and
3.Microeconomic factors regarding the internal issues of a bank.

If some banks fail because they have become insolvent and cannot repay their deposits, these bank failures increase the uncertainty facing all depositors, who lack the information needed to determine whether their banks (and their deposits) are safe or not, thus facing the problem of asymmetric information. Additionally, asymmetric information may cause increase in moral hazard, which in turn represents the possibility of taking risk (to a greater extent than usual) and knowing that any damages suffered by it will be transferred to someone else. The damage that bank failures may create in economy is enormous and therefore, one must be aware of the factors that determine its appearance:

1. Macroeconomic circumstances. Macroeconomic instability acts as the principal source of banking instability or distress. For example, a decrease in asset prices (loan portfolio or securities) in real estates, a sudden and sharp increase in interest rates, a fall in the exchange rate, or a recession. Macroeconomic factors are interrelated, and bank management and bank supervisors have to ensure that banks are resilient to these kinds of shocks, within reasonable bonds of probability.

2. Microeconomic factors which are under governments' (or a monetary authority) direct control or influence.

a) One of the microeconomic factors that can cause a bank failure is supervision. This factor can never stand alone as the sole cause of bank failure, because initially there must be some weakness or defect in the bank that the supervisory has missed. If supervision standards are very tight and eliminate every chance of a bank failure, banks will be uncompetitive and will not be able to provide efficient financial intermediation in the economy.

b) The second microeconomic factor refers to the inadequate infrastructure in accounting or auditing, which may disguise or delay realization of problems in illiquidity or insolvency.

c) Liberalization or deregulation in the financial sector can encourage unreasonable or hurried behavior by banks, guided by the motive to increase their profitability. This factor should be taken as an argument against deregulation, but as a reason why bank managers and regulators have to understand the possible consequences, particularly the adverse effects of liberalization.

d) Government interference in bank businesses takes the form of pressure or directives to lend to a particular customer, typically at preferential interest rates, or to maintain or extend uneconomic branch networks, which in turn could lead to a liquidity or solvency crisis.

e) The problem of moral hazard arises when systemically significant banks engage in excessive risk-taking because they believe they will make a profit and will be bailed out by the government in case of failure. Banks are tempted into behavior that exacerbates their position. In addition, the depositors may not make a distinction between "good" and "bad" banks, and by doing so they may prolong the survival of the particular banks, but they may magnify the crisis once it breaks.

f) Inadequate legal or regulatory framework leads to circumstances in which the bank lacks transparency to depositors and other counterparties, or even to shareholders. In these circumstances market forces will not be able to determine the bank's position, and the problems can develop and multiply to an extent that otherwise might not have been possible.

Microeconomic factors which are under governments' (or a monetary authority) direct control or influence are:
- supervision;
- inadequate infrastructure in accounting or auditing;
- liberalization or deregulation in the financial sector;
- government interference;
- the problem of moral hazard
- an inadequate legal or regulatory framework.

3. Microeconomic factors regarding internal issues of a bank.

a) **Banking strategies and operations**. The problems of a bank may be caused by poor strategies, which are initially thought to be brilliant, or disastrous, once the problems have occurred. The extent to which supervisory bodies should interfere in the market economy is a debatable question. The poor banking strategies being translated into banking activities and operations, might in turn

The microeconomic factors regarding internal issues of a bank are:
- Banking strategies and operations; and
- Fraud, corruption or poor management.

result with poor credit risk assessment, interest rate or exchange rate exposures, insufficiently diversified loan portfolios, lending to connected enterprises, excessive maturity and currency mismatches, introducing new (beyond the law) banking activities and services, or practicing unauthorized trading or position–taking. These negative effects are all connected with failure of internal controls.
b) Fraud, corruption or poor management. Employees, management or outsiders may be prone to corruption or capable of bank fraud, and there are many possible channels for fraud, for example through computer systems. Poor management or inadequate knowledge of banking activities can generate high risk exposure, which can lead to a bank crisis.

Macroeconomic and microeconomic factors regarding internal issues in a bank are interrelated. From this perspective, microeconomic factors are the origins of the failure of an individual bank, while the macroeconomic factors can induce systematic crisis in the banking system. In general, microeconomic factors can affect on worsening or improvement of the liquidity position of banks, while the moment of their entering in bank crises depends on worsening of the macroeconomic factors.

3. Fundamentals of Banking Crisis

In a banking crisis, a country's corporate and financial sector experiences a large number of defaults, and financial institutions and corporations face great difficulties repaying contracts on time. Banking crises are not a new economic phenomenon, but they are not the only source of financial crises. On the contrary, many authors describe banking crises as the second stage in the progression of financial crises, i.e. banking crises arise when there is a mismanagement of financial liberalization or innovation, asset price booms and busts, or a general increase in uncertainty caused by failures of major financial institutions. However, banking crises exist when two conditions are met:
1. There are signs of significant financial distress in the banking system (if a systematic significant bank runs, in case there are significant losses in the whole banking system or liquidation of banks will occur
2. There are significant intervention measures in the banking policy as a response to the great losses in the whole banking system.

Banking crises exist when:
1. There are signs of significant financial distress such systematic significant bank runs;
2. There are significant intervention measures in the banking policy as a response to the great losses in the whole banking system.

As a result of the increased uncertainty about the health of the banking system in general, there are many bank runs, both good and bad, which force banks to sell off their assets to raise the necessary funds. As a result of this "fire sale" of assets, their prices may decline so much in value that the banks become insolvent, although they would be able to survive under normal circumstances. Furthermore, the failure of one bank can lead to runs on other banks, which can cause them to fail, and the resulting contagion can then lead to multiple bank failures and a full-fledged bank panic. With fewer banks operating, information about the creditworthiness of borrowers disappears. Adverse selection and moral hazard problems become severe in the credit markets, and the economy spirals down further. Firms decline their liquidity, they run out of cash flows and start becoming insolvent, which has an indirect influence over non repayment of

loans, i.e increase in non-performing loans, which in turn results in exhausting the banking system capital. This situation may be accompanied by depressed asset prices (such as equity and real estate prices), sharp increases in real interest rates, and a slowdown or reversal in capital flows.

An overall banking crisis has a range of short-term and long-term negative repercussions on the economy, domestically and globally, which reduce the economic output and growth. On a national level, investment suffers, i.e. declines. For instance, when banks lack liquidity to invest, businesses that depend upon loans struggle to raise the capital required to execute their operations. Consequently, these businesses cannot produce the required capital for optimal operating, so sales decline and prices rise. This drives down the overall economic system, both in the short term and long term, as companies struggle to succeed. The decrease in liquidity and investment has a direct influence over increase in unemployment, reduction in governmental tax revenues as well as in investor and consumer confidence. There is a distinctive cyclical nature to these adverse effects, as each are interconnected in a way that creates a domino effect across the domestic economic system.

Banking crisis have repercussions on a national and global level.
On a national level:
- investments suffer;
- businesses struggle for capital;
- sales decline and prices rise;
- the overall economic system drives down;
- increase in unemployment;
-reduced tax revenues;
- reduced investor and customer confidence.

Regarding the global consequences of a banking crisis, the global dependency upon foreign trade in modern markets exacerbates the domestic consequences. In other words, imports and exports play an increasingly large role in the health of most developed economies, and as a result of a banking crisis in one country/region economies which are not involved in the irresponsible investing practices executed by the banks in these specific regions may be destroyed.

On a global level, dependency upon foreign trade in modern markets exacerbates the consequences on a national level.

The domestic reduction of the capital for businesses, income for consumers and tax revenue for governments ultimately results in a reduction of trade and economic activity for other economies.

4. Management of Banking Crisis

Managing a banking crisis is one of the most difficult tasks to confront a policymaker. Often measures must be decided quickly, sometimes in the eye of a crisis. Almost inevitably, decisions will be guided by imperfect information. This is an intrinsic problem because the very business of banking is built on the possession of information not available to others. Policymakers design bank restructuring programs that have the task of minimizing the immediate damage to the domestic economy while putting in place a more robust banking system in the medium term. This job is made all the more difficult when bank restructuring has to be carried out in an adverse macroeconomic situation. And restructuring almost always has to take place in such circumstances, because macroeconomic shocks often provide the trigger for the onset of banking crises. Management of banking crises can comprehend a series of policy actions related to the containment and stabilization of a banking system, restructuring programs and dealing with “bad” assets.

When managing banking crisis policymakers design bank restructuring programs that have the task of minimizing the immediate damage to the domestic economy.

Management of banking crises comprehends a series of policy actions related to the containment and stabilization of banking systems, restructuring programs and dealing with “bad” assets.

4.1. Containment And Stabilization of The Banking System

Containment measures focus on ensuring that banks can meet maturing liabilities and deposit withdrawals. The main goal of this measure is to restore or not allow break of confidence in the banking sector. When a banking crisis occurs creditors may no longer be able to distinguish viable from nonviable banks, and confidence in the overall financial system (and often the currency) is undermined, resulting in a liquidity crisis. One should bear in mind that liquidity provision allows time to diagnose the problems and implement comprehensive strategy emergency liquidity assistance (ELA), which is the main instrument used to restore confidence and the first line of defense. If this proves insufficient to quell panic, other extraordinary measures may also be needed, such as systemic liquidity provision (financial support to financial institutions or markets), government guarantees, and administrative measures (Dobler, Moretti, & Piris, 2020).

The main goal of this measure is to restore or not allow break of confidence in the banking sector.

The first line of defense is the emergency liquidity assistance (ELA) used to restore confidence.

ELA is used by central banks in order to provide liquidity in the event of a specific shock affecting one or a few individual financial institutions. ELA has two principal objectives: to mitigate the risk that temporary illiquidity leads to insolvency and to avoid contagion. It may be required when one or a few individual financial institutions are unable to maintain or roll over funding (whether retail or wholesale).

ELA is used by central banks in order to mitigate the risk of temporary illiquidity, which leads to insolvency, and to avoid contagion.

Government guarantees on bank liabilities (deposits) are widely used to increase the deposit insurance coverage limits on preexisting schemes. Government asset guarantees may be used on a pool of assets that remain on the banks' balance sheets by reducing uncertainty about banks' solvency. As opposite to government asset purchases, in this case, banks retain ownership of the asset leaving the upside (if recovery values exceed the expected value) with the bank.

If ELA proves insufficient to quell panic, other extraordinary measures may be applied such as systemic liquidity provision (financial support to financial institutions or markets), government guarantees, and administrative measures.

Governments can guarantee bank liabilities and bank assets. Guarantees on deposits are widely used to increase the deposit insurance coverage limits on preexisting schemes. Government asset guarantees may be used on a pool of assets that remain on the banks' balance sheets (in the banks' ownership) by reducing uncertainty about banks' solvency.

As administrative measures, legal authorities may impose deposit restrictions or control on capital outflows as a last resort to stop runs. In a bank run, depositors concerned over losing access to their funds swap longer duration assets for more liquid ones. They may convert deposits into physical cash or other nonbank assets, move funds away from banks perceived as weak, and convert local currency holdings into other currencies, or move funds abroad, putting pressure on banks' liquidity positions, the currency, and the balance of payments. Deposit restrictions must be aimed at minimizing negative economic impacts, because they interfere with payments and economic activity, and cause significant disruption, loss of depositor/investor confidence, and economic damage. To the extent possible, restrictions should be designed to allow depositors to use cash and bank deposits for day-to-day transactions, with restrictions preventing the transfer of financial savings outside of the banking system or the country. Restrictions on external transfers may be needed to protect the liquidity of the banking system and contain balance-of-payment pressures in certain circumstances.

As administrative measures/restrictions, legal authorities may impose deposit restrictions or control on capital outflows as a last resort to stop runs.

Administrative restrictions should be removed as soon as conditions allow. Decisions on when to gradually relax administrative measures should be driven by conditions—based on an assessment of the variables which would

confirm the effectiveness of the measures introduced to improve the macro financial impact. For example, if bank deposits start to increase and reliance on central bank funding declines, this may suggest that deposit withdrawal restrictions can be eased, while capital flow measures can be lifted if exchange rate pressures ease and bonds can be issued successfully in international capital markets.

4.2. Bank Restructuring

Once containment measures have stabilized liquidity, the authorities should focus on ensuring that each banking institution is viable on a forward-looking basis, i.e. is able to meet capital, liquidity, and other regulatory requirements. After conducting comprehensive evaluation of the banking system, the crisis management continues with effective bank restructuring.

Although there is no single recipe, there are some common ingredients for successful crisis management when bank restructuring:

a) governments must be willing to recognize the scale of the problem as soon as possible;

b) governments should support supervisory authorities that want to close insolvent banks;

c) governments should be willing to commit substantial fiscal resources to the banking system;

d) transparent actions with regards to non-performing loans (NPLs) should be adopted at an early stage; and

e) improved regulatory and supervisory frameworks are often necessary.

Many senior officials involved in restructuring banks emphasize the importance of a political consensus for dealing effectively with banking crises. A plan to deal with a widespread banking crisis will need to be bold and comprehensive if it is to carry conviction. A series of piecemeal steps – often taken at the last moment without any sure grasp of the true magnitude of the problems – may not have a credible effect on expectations, and thus may prolong the difficulties. A plan should be transparent and action should not be delayed unduly.

The success of crisis management and bank restructuring depends, ultimately, on a favorable macroeconomic environment and the wherewithal of the authorities to make hard (often politically unpopular) decisions regarding banking system restructuring.

The success of crisis management and bank restructuring depends, ultimately, on a favorable macroeconomic environment, and on the wherewithal of the authorities to make hard (often politically unpopular) decisions regarding banking system restructuring.

Bank restructuring seeks to achieve many goals, such as:

- preventing bank runs,
- avoiding a credit crunch,
- improving the efficiency of the financial intermediation process, and
- attracting new equity into the banking industry to economize on claims on the public finances.

An essential step in any bank restructuring program is to measure correctly the amount of non-performing loans. Some legal regulations use quantitative criteria, such as the number of days loan repayments are overdue,

Essential steps in any bank restructuring program include the following:
- measuring correctly the amount of non-performing loans;
- valuation of collateral.

others rely on qualitative norms such as the clients' financial status, or on management judgement about future loan repayments. Non-performing loans can remain so until either the loan is written off or until principal and interest payments are received. Proper recognition and proper provisioning for NPL are essential for crisis management and prevention.

Another area of concern during bank restructuring is the valuation of collateral. In theory, most bank loans are pledged with collateral (typically real estate) and this should provide means to the restructuring agency. In practice, collateral is often worth considerably less than book value and can only be recovered if bankruptcy procedures operate efficiently. As aggregate demand weakens during banking crises collateral values (such as property prices) drop steeply. Moreover, a large number of simultaneous 'fire-sales' may force the value of collateral to drop even further. This raises the question of how long a restructuring agency should hold the assets of distressed banks. Finally, the value of the collateral depends also on the credibility of the legal process to enforce repayments. Realizing assets value has taken years in Eastern Europe, Latin America and East Asia, although recent legislative changes should improve this.

Governments, central banks and external agencies have dealt with banking crises in a number of ways, often according to the circumstances. Therefore, there are different approaches to restructuring:

- Government capital injection.
- Management of "bad"assets.
- Ownership changes.

Empirically, there are different approaches to restructuring:
- Government capital injection;
- Management of "bad" assets;
- Ownership changes.

The diversity of these possible approaches to restructuring creates the risk that partial action will be taken in an uncoordinated fashion. Because, there is no universally accepted way to carry out a successful restructuring exercise it is imperative that three main principles should be followed:

1) Ensure that parties that have benefited from risk taking bear a large portion of the cost;

2) Take action to prevent problem institutions from extending credit to high-risk borrowers; and

3) Muster the political will to make bank restructuring a priority by allocating public funds while avoiding inflation increase.

Government Capital Injections

A direct way of helping troubled banks is by providing capital injections by government agencies. Such injections are usually not offered to all banks. In theory, it is necessary to draw a three-way distinction between those banks strong enough not to require government capital, those viable only with a capital injection, and those unlikely to survive even with substantial assistance. Only banks in the middle category should then be eligible. Making this three-way distinction operational, however, is far from simple. The use of simple numerical criteria (subject of course to auditing to ensure realistic valuations done on a reasonably comparable basis) seems to be the most transparent approach. For example, in Sweden a computer based forecasting model was used to predict a

The key issue with this approach is which banks should be offered governmental capital injections.
Therefore, it is necessary for legal authorities to make a distinction between banks strong enough not to require government capital, those viable only with a capital injection, and those unlikely to survive even with substantial assistance.

bank's financial development over the next three-to-five years, which formed the basis for this classification. However, many subjective elements (notably, for instance, the quality of management) could also be taken into consideration.

Capital injections can take several forms. There are arguments for the government injecting pure equity such as Tier 1 capital. This will enable the government to ensure the bank undertakes genuine operational restructuring; it does not impose any repayment burden on a weak bank. Finally, the government will share fully in the increased value created as the bank recovers. However, governments often inject some form of Tier 2 capital such as subordinated bonds. This may be because they find it inappropriate for the government to have a controlling role in the bank; or it may be because it costs the government less. Preference shares, equity warrants or options could also be issued to allow the government to share in any subsequent post-crisis recovery in the value of the bank. As they explicitly rank behind deposits and other credits, such instruments do not reduce the ability of the bank to attract funds from private sources.

Capital injections can be in the form of Tier 1 capital (that is pure equity) or Tier 2 capital (such as subordinated bonds).

Another issue arising from the government capital injection is what the government uses to pay for the shares or bank-issued liabilities it acquires. Capital injections usually take the form of government bonds. This raises tactical issues of the kind of bonds best employed. While zero-coupon bonds mean the government does not need to provide immediate cash, it does not help banks to meet interest payments on deposits. They may also tempt governments to postpone the repayment of the bonds. Tradable bonds make it easier for banks to fund lending to the private sector by selling the bonds, which may help avoid a credit crunch. However, they carry the risk that banks may resume the risky lending to the same (often connected) borrowers who caused them to get into previous difficulties. A compromise might be to use bonds that can only be sold after a set period. (Of course, in some emerging markets there is not an active bond market on which to trade them.) In some jurisdictions, offering a coupon slightly lower than the standard government bond would encourage banks to hold onto the bonds by making the face value (counted as capital) greater than the market value. However, large departures from market values have to be avoided if the accuracy of banks' financial statements is not to be compromised. While government bonds are generally fixed-rate instruments, it could be argued that floating rate bonds would provide a better match with banks' assets.

The government may use governmental bonds for paying the shares or bank-issued liabilities it acquires.
Another solution is for capital injections to be conducted by another government agency, which may ask for a loan from the monetary authority.

Capital injections can also be carried out by separate government agencies, and so they do not appear directly in the government budget. For example, in Mexico, the deposit insurance agency (FOBAPROA) purchased subordinated debt instruments convertible to capital either if the bank's capital deteriorated further or after five years. This gives an incentive to banks receiving aid both to halt any further deterioration in their capital and to repay these loans before the five-year period elapses. FOBAPROA funded this by a loan from the central bank that in turn required banks to place extra deposits with it. Five banks received this type of support during 1995 and were able to repurchase the subordinated debt within two years. Capital injections are usually highly conditional.

Managing "Bad" Assets

One especially significant question in a restructuring programme is whether to separate the management of bad debts from the originating bank. The case for leaving the loans with the originating bank is that the bank knows the borrower (it also allows the credit relationship to be rehabilitated if the loan is eventually repaid). This is more relevant for loans to enterprises (which are non-homogenous and for which bank-client information flows are more important) than for real estate loans.

The key issue in this approach is whether to separate the management of bad debts (NPLs) from the originating bank.

However, there is also a case for not moving all NPLs away from the bank. It is desirable for the bank to maintain some experience with work-out procedures; this was one reason why in Sweden small NPLs were generally left with the bank. It is also unfair to the better managed banks if the distressed banks end up with no NPLs. In the Swedish case, the authorities aimed to leave the problem banks with a ratio of bad loans to assets similar to that of the other banks.

The arguments for not moving NPLs away from the bank are:
- the bank has to maintain some experience with work-out procedures;
- the bank knows the borrower
- it is unfair to the better managed banks if the distressed banks end up with no NPLs.

The arguments for "carving out" the bad loans is that the originating bank may be less objective and may even continue lending to delinquent debtors. Furthermore, a bank preoccupied with managing bad debts may become very risk-averse, with little time or inclination for new lending. It is easier to give separate transparent goals if different people are charged with the ongoing banking operations and the resolution of bad loans. Moving bad assets off the balance sheet would also facilitate finding another bank to buy the troubled bank without complicated guarantee arrangements covering the NPLs.

The arguments for moving NPLs away from the bank are:
- the originating bank may be less objective and may even continue lending to delinquent debtors;
- a bank preoccupied with managing bad debts may become very risk-averse;
- it is easier to find another bank to buy the troubled bank without complicated guarantee arrangements covering the NPLs.

Another possibility is for a government agency to buy the NPLs from the bank but the bank to keep managing them and the two to share any value recovered. However, it is hard to devise such arrangements in a manner that gives the selling bank a strong incentive to pursue the borrowers very diligently. Another choice is whether to centralize the ownership of the bad assets. In that manner a decentralised approach can be adopted, where each troubled bank is being split into a "good bank" and a "bad bank". This approach is probably best when only one or a few banks are in serious difficulty. For example, in Hungary, the bad banks issued bonds, guaranteed by the government, which were bought by the good banks.

"Bad" assets can also be managed in a manner where a government agency would buy the NPLs from the bank but the bank would keep managing them and the two of them would share any value recovered.

It may also be preferable for industrial loans because the preservation of bank-client relationships can be desirable if the experience and familiarity of the loan officer with the borrower outweighs the risk that the problem is being left with someone who may have been responsible for it. When adopting such an approach it is important that the "bad bank" does not end up with all the "bad staff" as well as the "bad assets".

Another possibility for "bad" asset management is whether to centralize or not the ownership of the bad assets.

When there are a large number of banks in difficulty, and where the assets acquired have a certain degree of homogeneity (e.g. real estate), a single entity may use economies of scale and make the best use of scarce managerial talent. In these circumstances, a centralized Asset Management Corporation (AMC) may be better placed to negotiate restructuring agreements with large delinquent borrowers than would a large number of small banks. It is generally

The decentralized approach is used when one or a few banks are in difficulty and the troubled bank is split into a "good bank" and a "bad bank".

thought that the AMC should be independent of the central bank and the finance ministry, although operationally it may use its premises or ancillary services. The AMC usually has its own board and reports to the cabinet and/or legislature. It is important that the AMC operate in a very transparent and objective manner. While some staff will come from banks in order to bring their experience with loan problems, many will come from outside the domestic banking system. They may be organized into project groups managing a specific cluster of connected assets. The AMC should be structured with appropriate incentives so that management and staff seek a fairly quick resolution, rather than unnecessarily prolonging the life of the AMC to protect their own jobs. A further category of incentive may be needed to induce key staff to stay when the AMC is nearing the end of its operations.

The centralized approach is used when large number of banks is in difficulty and centralized Asset Management Corporation (AMC) is established.

Ownership Changes

Changes of bank ownership may happen by mergers and takeovers, which are also considered the least costly way of restructuring the banking system. However, these fusions of banks (or consolidation) may be desirable or happening even without the impetus of a crisis. In other words, if the economy is "overbanked" and some banks are inefficient consolidations happen. Mergers alone can remedy isolated problems in small banks. A large well-capitalised bank can readily absorb any NPLs thus acquired; and the quality of management can improve as well. It is arguable whether merging two weak banks can create a strong single bank. While there may be synergies or cost reductions from eliminating overlapping branches, the immediate practical difficulties in merging cultures, linking computer systems, dismissing excess staff and so forth can be formidable. It may therefore be unrealistic to expect mergers to produce the quick cost reductions needed in a crisis. Although in normal times takeovers are likely to be delayed or blocked due to concerns about market concentration, they can be waved through in a crisis.

Changes of bank ownership may happen even without the impetus of a crisis.

Ownership changes in the form of mergers or takeovers imply:
- cost reductions from eliminating overlapping branches;
- difficulties in merging cultures;
- linking computer systems;
- dismissing excess staff;
- achieving higher level of economies of scope and scale;
- increase in pure capital;
- improved quality of management.

However, in cases where problems are more widespread, potential buyers of banks in trouble may be harder to attract. In such cases, the authorities often first "clean" weaker banks' balance sheets by moving the NPLs into a separate bad bank or AMC. While this can improve the long-run viability of the new bank, it is likely to make this exercise considerably more expensive for the government. It may still be more cost-effective than taking the bank into public ownership as a private buyer may pay more than the net assets of the bank for its "franchise value" or customer network. However, forcing a healthy bank to bear a heavy burden of bad loans may be counterproductive in restoring a willingness to lend, particularly if such action is taken when the banking system as a whole faces difficulties. In addition, the search for a healthy bank prepared to accept a weak bank under such conditions may delay necessary restructuring.

In cases where problems are more widespread and the approach used for restructuring is changes in ownership:
- the authorities often first "clean" weaker banks' balance sheets by moving the NPLs into a separate bad bank or AMC.
- the government exposes itself to a more expensive solution;
- healthy banks may restrain themselves from lending;
- the search for a suitable healthy bank may delay the restructuring process.

As a response to the difficulty of finding enough large and healthy domestic banks that would fuse with the problematic bank, governments tend to invite foreign banks to take over domestic problematic banks. This may have other benefits, too. Foreign banks are less likely to engage in connected lending.

They may improve the quality and availability of financial services in the domestic market by increasing competition and applying new skills and technology. They may have faster and cheaper access to international capital markets and liquid funds (via parent banks). The additional oversight by foreign supervisors may make them sounder. Nevertheless, some emerging economies may be too small to have a purely domestic banking system adequately diversified.

Governments often face domestic pressure to keep foreign banks out. Political sensitivities may be particularly acute if it is thought that local banks are being sold too cheaply, or if taxpayers' money has already been used to support them. The entry of foreign banks will also intensify competition (especially if they use their deep pockets to subsidize early losses), and may cause some domestic banks to fail. On the other hand, governments may be reluctant to have banking systems dominated by banks from a single country, in case problems in that country lead to the subsidiaries cutting back their operations. For this reason, they may seek to "diversify" foreign owners.

Even if they are welcome, foreign banks may be reluctant to enter. For instance, they may not be allowed to maintain majority ownership, or they may find the risks too great, especially when balance sheet data are not credible, or they may have concerns about the operational aspects. Furthermore, some foreign banks may believe that waiting will enable them to buy the troubled banks even more cheaply at a later date. In any event, having suffered heavy losses, many global banks may wish to reduce their emerging markets' exposure. Notwithstanding these impediments, in practice, rules have been relaxed and foreign banks have increased their presence in most economies.

There are several benefits of fusion between foreign and domestic problematic banks:
- foreign banks are less likely to engage in connected lending;
- foreign banks improve the quality and availability of financial services in the domestic market;
- foreign banks have faster and cheaper access to international capital markets and liquid funds;
- The additional oversight by foreign supervisors may make them sounder.

When bank restructuring happens via foreign banks entering the domestic market, several issues may arise such as:
- the government may face domestic pressure to keep foreign banks out;
- the government is reluctant to allow the entry of foreign banks from a single country;
- reluctance of foreign banks to enter the domestic market.

Prolonged Public Ownership

The final mechanism is for the state, or one of its agencies, to take over the banks in trouble temporarily. Most industrial countries have found themselves obliged to do this; in some cases, initial reluctance to nationalize banks delayed effective action. The challenge during these temporary state takeovers is to run the banks on commercial lines and sustain efforts to collect on bad loans. The danger is that banks remain in public hands for many years, either because the authorities do not find potential buyers/satisfactory terms of purchase, or because favored borrowers/ employees lobby for continued public ownership. As a countervailing weight to such political considerations, the United States requires the Federal Deposit Insurance Corporation (FDIC) to reprivatize any problem bank it acquires under recent "bridge bank" legislation within two years. Japan's RCO is not generally allowed to retain more than 50% of a bank's equity for more than one year (although this period can be extended for a further two years).

Many countries have a number of state-owned banks (SOBs), either established to achieve certain goals or nationalized for political reasons long ago. When these are in financial difficulties, privatization is often an important element of a longer-run bank restructuring program. This is particularly

The final mechanism, or changes in ownership, is for the state, or one of its agencies, to take over the banks in trouble temporarily.

The government may sell the whole bank to a single buyer or gradually sell it to different buyers.

Temporarily taking over banks in problems means that banks are in public hand for a definite period, with the aim to collect on bad loans and to maintain banks' activities on the market.

desirable where state ownership has been the primary cause of banking difficulties. The government may divest itself of a bank either in one go or gradually.

In case of a SOB, when banking difficulties derive from the state ownership, privatization is an important element of a restructuring program.

Conclusions:

During the 80s and 90s large number of banks in crises has emerged due to latest trends in banking, deregulation and globalization of financial sector; intensifying competition in banking market; widening the portfolio of services with non-banking core activities; and increased risks that banks faced. Due to the damage that bank crisis may create in economy, this chapter is focused on defining and explaining situations that banks may face when in difficulties such as bank failure, bank run, banking panic and banking crisis. A bank failure occurs when a bank is forced by regulators either to close or to merge with another banking institution, because is unable to service its debts. On the other hand, bank run occurs when many clients withdraw their deposits from a bank, which destabilizes the bank to the point where it runs out of cash and thus faces sudden bankruptcy. Banking panic or bank panic occurs when many banks suffer runs at the same time, while banking crisis is one where all or almost all of the banking capital in a country is wiped out and leads to long economic recession. Determinants of bank failures can be grouped in the following categories: macroeconomic circumstances; microeconomic factors which are under the governments (or central banks) direct control or influence; and microeconomic factors regarding internal issues of a bank. Microeconomic factors are the origins of the failure of an individual bank, while the macroeconomic factors can induce systematic crisis in the banking system. In general, microeconomic factors can affect on worsening or improvement of the liquidity position of banks, while the moment of their entering in bank crises depends on worsening of the macroeconomic factors.

Banking crisis as economic phenomenon exist when there are signs of significant financial distress, and when there are significant intervention measures in the banking policy as a response to the great losses in the whole banking system. Banking crisis have consequences on national level and even exacerbated on global level and therefore the management of a banking crisis is one of the most difficult tasks to confront a policymaker. Management of banking crises comprehends a series of policy actions related to the containment and stabilization of the banking system, restructuring programs and dealing with "bad" assets.

The main goal of the measure of containment and stabilization of the banking system is to restore or not allow break of confidence in the banking sector. After conducting a comprehensive evaluation of the banking system, crisis management continues with effective bank restructuring. Empirically, there are different approaches to bank restructuring, such as government capital injection, management of "bad" assets, and ownership changes. The essential steps in any bank restructuring program are: measuring correctly the amount of non-performing loans and valuation of collateral.

The key issue that arises with the approach of capital injection is which banks to be offered governmental capital injections. Therefore, it is necessary for legal authorities to make a distinction between banks strong enough not to require government capital, those viable only with a capital injection and those unlikely to survive even with substantial assistance. Capital injections can be in the form of Tier 1 capital (that is pure equity) or Tier 2 capital (such as subordinated bonds).

Considering the second approach of managing the "bad" assets the key issue is whether to separate the management of bad debts (NPLs) from the originating bank, or to centralize or not the ownership of the bad assets.

The last section of this chapter overviews the third approach of changes in ownership of banks that are in difficulties. Ownership changes may occur in the form of domestic mergers and takeovers. Banks in difficulties may be fused with domestic private or state banks, or one of their agencies, which can take over the banks in trouble temporarily.

Based on empirical evidence there is not a universal recipe for successfully dealing with banking crises and bank restructuring. Therefore, it is imperative that governments are willing to recognize the scale of the problem as soon as possible, support supervisory authorities that want to close insolvent banks; are willing to commit substantial fiscal resources to the banking system; take transparent actions with regards to non-performing loans (NPLs) at an early stage; and improve regulatory and supervisory frameworks.

Revision questions and problems:

1. Which trends caused a large number of bank crises during the 1980's and 1990's?
2. Please explain the terms bank failure, bank run, banking panic and banking crisis.
3. Which groups of factors determine bank failures?
4. What microeconomic factors are under governments' (or a monetary authority) direct control or influence?
5. What are the conditions for determining the existence of a banking crisis?
6. What repercussions do banking crises have both on a national and global level?
7. What series of policy actions does the management of banking crises comprehend?
8. What is the main goal of the measure of containment and stabilization of the banking system?
9. What is ELA, and if ELA does not achieve its aim, what may legal authorities use for the purpose of containment and stabilization of the banking system?
10. What are Government guarantees on bank liabilities and Government guarantees on bank assets?
11. What are the goals of bank restructuring?

12. What are the principles of carrying out successful restructuring?
13. What are the essential steps in any bank-restructuring program?
14. What is the key issue in government capital injections?
15. What kinds of capital injections are there?
16. What options do empirically governmental authorities use to manage the NPLs?
17. What is AMC?
18. What are the arguments for and against moving away the NPLs from the bank's balance sheet?
19. When may changes in the ownership of banks happen?
20. What might happen when banks' problems are more widespread and the approach used for restructuring is changes in ownership?
21. What are the benefits of fusion between foreign and domestic problematic banks?
22. Why should foreign banks be reluctant to enter a domestic market?
23. What does 'temporarily taking over banks with problems by government's mean?
24. How can governments privatize SOB when in they are in difficulties?

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