

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

TERNOPIL NATIONAL ECONOMIC UNIVERSITY

Faculty of Finance and Accounting

Department of Banking Business

BANKING

Educational methodical manual



Ternopil TNEU

2019

УДК 336.7(075.8)=111
С 79

Reviewers:

- Roman Zvarych** – *Doctor of Economics, Associate Professor, Professor of the Department of International Economic Relations*
- Nataliia Sverhun** – *Chief Economist, Academic Branch of PJSC Raiffeisen Bank Aval, Ternopil*

*Recommended for publication by
The Academic Council of the Faculty of Finance and Accounting,
protocol # 2 of 28/10/2019*

Stechyshyn T., Balyant H., Kizyma A.

Banking: educational methodical manual. Ternopil: Ternopil National Economic University, 2019. 79 p.

The training manual is prepared in accordance with the program in the discipline "Banking" ("Banking"), which is included in the curriculum of training bachelors of knowledge 05 Social and Behavioral Sciences specialty 051 - Economics.

The manual describes the content of the main topics of the course, presents questions for self-control, test tasks, and proposes a number of discussion and problem questions for each topic. The guide contains a glossary of terms and economic categories as well as a list of recommended literature.

The manual is intended primarily for students of economic specialties of higher educational establishments of educational qualification level "bachelor". It can also be useful for academics, teachers, practitioners, as well as ordinary users of banking services.

УДК 336.7(075.8)=111
С 79

BANKING

Topic 1. Money...5

- What is money?...5
- History of money...5
- Forms of money...7
- Functions of money...10
- Theories of money...11
- Money supply...13

Topic 2. Financial intermediation...15

- Introduction to financial systems. The components of financial systems...15
- Role of financial intermediation...16
- Groups of financial intermediaries...18

Topic 3. The Banking system...21

- What Is a Banking System? Main Definitions...21
- Goals and Functions of Banking System...22
- Banking System in Ukraine...24
- Banking System in the USA...26

Topic 4. Central bank...29

- What is a central bank? Origin of the central bank...29
- Central bank independence and its importance...30
- Status and major areas of central banks...31
- The National Bank of Ukraine...32
- Monetary policy the tools of policy...34
- Monetary Policy Strategies...36

Topic 5. Banker/Customer Relationships...38

- What is a bank?...38
- Who are a customer and a banker?...40
- The relationship between banker and customer...41

- The Banking Code...42

Topic 6. Deposit Banking...45

- Sources of Funds in Commercial Banks...45
- What are 'Bank Deposits'...46
- Types of Accounts in a Bank...47
- Deposit Insurance...50
- Importance of deposits in banking...51
- Various non deposit sources...52

Topic 7. Lending...53

- What is lending?...53
- The canons of lending...54
- Credit scoring...56
- Lending products offered by...58

Topic 8. An outline of Bank Services...60

- Payment services...60
- E-banking...63
- Virtual banking services...64
- Mobile banking services...65
- Internet banking...67

Topics of practical classes...69

Tests...72

Comprehensive practical individual task...76

Recommended sources of information...78

Topic 1. Money

Objectives

By the end of this chapter, you should be able to money and explain where did it come from; describe the work or economic functions that money performs and discuss the importance of money; define barter and explain why it is economically inefficient; explain why some forms of commodity money are better than others; explain why representative money and credit money supplanted commodity money; define the money supply and explain how and why it is measured.

What Is Money?

Money is, perhaps, the most important invention of all time.

Money - all that is commonly accepted in payment for goods and services. Money is NOT the same as wealth or income. Wealth is the aggregate amount of asset-saving assets. Revenue is the income stream per unit of time. An example of money can be goods or fiat money.

Commodity money - these are goods that function as money and have alternative ways. - Examples: gold, silver, cigarettes, etc.

Fiat (Unsecured) money is money-serving tools but does not have other important goals. - Examples: paper money, coins.

What work does money do? It facilitates trade by making it easier to buy and sell goods compared to barter, the exchange of one nonmoney good for another.

The main definitions of money:

- **Money** – is a specific product that has the ability to be changed on any other product is the universal equivalent.
- **Money** is any item or verifiable record that is generally accepted as payment for goods and services and repayment of debts in a particular country or socio-economic context, or is easily converted to such a form.

History of money

Before the development of a medium of exchange, people would barter to obtain the goods and services they needed. The use of barter-like methods may date back to at least 100,000 years ago, though there is no evidence of a society or economy that relied primarily on barter. **Barter** involves direct exchange of one good or service for another and without any involvement of cash.

Instead, non-monetary societies operated largely along the principles of gift economics and debt. When barter did in fact occur, it was usually between either complete strangers or potential enemies. Many cultures around the world eventually developed the use of commodity money. The shekel was originally a unit of weight, and referred to a specific weight of barley, which was used as currency. The first usage of the term came from Mesopotamia circa 3000 BC. Societies in the Americas, Asia, Africa and Australia used shell money - often, the shells of the money cowry (*Cypraea moneta* L. or *C. annulus* L.). According to Herodotus, the Lydians were the first people to introduce the use of gold and silver coins. It is thought by modern scholars that these first stamped coins were minted around 650-600 BC.

The system of commodity money eventually evolved into a system of representative money. This occurred because gold and silver merchants or banks would issue receipts to their depositors - redeemable for the commodity money deposited. Eventually, these receipts became generally accepted as a means of payment and were used as money. Paper money or banknotes were first used in China during the Song Dynasty. These banknotes, known as "jiaozi", evolved from promissory notes that had been used since the 7th century. However, they did not displace commodity money, and were used alongside coins. Banknotes were first issued in Europe by Stockholms Banco in 1661, and were again also used alongside coins.

The gold standard, as monetary system where the medium of exchange are paper notes that are convertible into pre-set, fixed quantities of gold, replaced the use of gold coins as currency in the 17th-19th centuries in Europe. These gold standard notes were made legal tender, and redemption into gold coins was discouraged. By

the beginning of the 20th century almost all countries had adopted the gold standard, backing their legal tender notes with fixed amounts of gold.

After World War II, at the Bretton Woods Conference, most countries adopted fiat currencies that were fixed to the US dollar. The US dollar was in turn fixed to gold. In 1971 the US government suspended the convertibility of the US dollar to gold. After this many countries de-pegged their currencies from the US dollar, and most of the world's currencies became unbacked by anything except the governments' fiat of legal tender and the ability to convert the money into goods via payment.

Forms of money

Commodity money

Many items have been used as commodity money such as naturally scarce precious metals, conch shells, barley, beads etc., as well as many other things that are thought of as having value. Commodity money value comes from the commodity out of which it is made. The commodity itself constitutes the money, and the money is the commodity. Examples of commodities that have been used as mediums of exchange include gold, silver, copper, rice, salt, peppercorns, large stones, decorated belts, shells, alcohol, cigarettes, cannabis, candy, etc. These items were sometimes used in a metric of perceived value in conjunction to one another, in various commodity valuation or Price System economies. Use of commodity money is similar to barter, but commodity money provides a simple and automatic unit of account for the commodity which is being used as money. Although some gold coins such as the Krugerrand are considered legal tender, there is no record of their face value on either side of the coin. The rationale for this is that emphasis is laid on their direct link to the prevailing value of their fine gold content. American Eagles are imprinted with their gold content and legal tender face value.

Representative money

In 1875 economist William Stanley Jevons described what he called "representative money," i.e., money that consists of token coins, or other physical

tokens such as certificates, that can be reliably exchanged for a fixed quantity of a commodity such as gold or silver.

- Any type of money that has face value greater than its value as material substance
- The value of representative money stands in direct and fixed relation to the commodity that backs it, while not itself being composed of that commodity.

Fiat money

Fiat money or fiat currency is money which value is not derived from any intrinsic value or guarantee that it can be converted into a valuable commodity (such as gold). Instead, it has value only by government order (fiat). Usually, the government declares the fiat currency (typically notes and coins from a central bank, such as the Federal Reserve System in the U.S.) to be legal tender* making it unlawful to not accept the fiat currency as a means of repayment for all debts, public and private.

The value of fiat money is derived from the relationship between supply and demand rather than the value of the material that the money is made of.

Fiat money, if physically represented in the form of currency (paper or coins) can be accidentally damaged or destroyed. However, fiat money has an advantage over representative or commodity money, in that the same laws that created the money can also define rules for its replacement in case of damage or destruction. For example, the U.S. government will replace mutilated Federal Reserve notes (U.S. fiat money) if at least half of the physical note can be reconstructed, or if it can be otherwise proven to have been destroyed. By contrast, commodity money which has been lost or destroyed cannot be recovered.

Currency

Currency refers to physical objects generally accepted as a medium of exchange. These are usually the coins and banknotes of a particular government, which comprise the physical aspects of a nation's money supply. The other part of a nation's money supply consists of bank deposits (sometimes called deposit money), ownership of which can be transferred by means of checks, debit cards, or other

forms of money transfer. Deposit money and currency are money in the sense that both are acceptable as a means of payment.

Commercial bank money

Commercial bank money or demand deposits are claims against financial institutions that can be used for the purchase of goods and services. A demand deposit account is an account from which funds can be withdrawn at any time by check or cash withdrawal without giving the bank or financial institution any prior notice. Banks have the legal obligation to return funds held in demand deposits immediately upon demand (or 'at call'). Demand deposit withdrawals can be performed in person, via checks or bank drafts, using automatic teller machines (ATMs), or through online banking.

Commercial bank money differs from commodity and fiat money in two ways, firstly it is non-physical, as its existence is only reflected in the account ledgers of banks and other financial institutions, and secondly, there is some element of risk that the claim will not be fulfilled if the financial institution becomes insolvent.

Digital money

Digital currencies gained momentum in before the 2000 tech bubble. Flooz and Beenz were particularly advertised as an alternative form of money. While the tech bubble caused them to be short lived, many new digital currencies have reached some, albeit generally small user bases.

Most digital currencies are simply fiat currencies parleyed across a digital medium. However, protocols like Bitcoin allow money to only exist in cyberspace which allows for some classic limitations to be lifted. Never before has the sending of money across a geographical divide not required the trust of a third party which of course then is susceptible to regulatory capture. New forms of currency coming to fruition this very day allow for the free exchange of wealth across distances.

Functions of money

Money is often defined in terms of the three **functions** or **services** that it provides. Money serves as a **medium of exchange**, as a **store of value**, and as a **unit of account**.

Medium of exchange. Money's most important function is as a medium of exchange to facilitate transactions. Without money, all transactions would have to be conducted by **barter**, which involves direct exchange of one good or service for another. The difficulty with a **barter system** is that in order to obtain a particular good or service from a supplier, one has to possess a good or service of equal value, which the supplier also desires. In other words, in a barter system, exchange can take place *only* if there is a **double coincidence of wants** between two transacting parties. The likelihood of a double coincidence of wants, however, is small and makes the exchange of goods and services rather difficult. Money effectively eliminates the double coincidence of wants problem by serving as a medium of exchange that is accepted in all transactions, by all parties, regardless of whether they desire each others' goods and services.

Store of value. In order to be a medium of exchange, money must hold its value over time; that is, it must be a store of value. If money could not be stored for some period of time and still remain valuable in exchange, it would not solve the double coincidence of wants problem and therefore would not be adopted as a medium of exchange. As a store of value, money is not unique; many other stores of value exist, such as land, works of art, and even baseball cards and stamps. Money may not even be the best store of value because it depreciates with inflation. However, money is more **liquid** than most other stores of value because as a medium of exchange, it is readily accepted everywhere. Furthermore, money is an easily transported store of value that is available in a number of convenient denominations.

Unit of account. Money also functions as a unit of account, providing a *common measure of the value* of goods and services being exchanged. Knowing the value or price of a good, in terms of money, enables both the supplier and the

purchaser of the good to make decisions about how much of the good to supply and how much of the good to purchase.

Theories of money

Quantity theory of money

The quantity theory of money states that there is a direct relationship between the quantity of money in an economy and the level of prices of goods and services sold. According to QTM, if the amount of money in an economy doubles, price levels also double, causing inflation (the percentage rate at which the level of prices is rising in an economy). The consumer therefore pays twice as much for the same amount of the good or service.

This concept is usually introduced via an equation relating money and prices to other economic variables, as shown by the following setup

$$MV=PQ$$

In the above equation,

M represents the amount of money available in an economy (i.e. the money supply)

V is the velocity of money, which is how many times within a given period, on average, a unit of currency gets exchanged for goods and services

P is the overall price level in an economy

Q is the level of real output in an economy.

In other words, the quantity theory of money states that given percentages change in the money supply results in an equivalent level of inflation or deflation.

2. Keynesian economics (Keynesianism)

Keynesian economics is an economic theory based on the ideas of an English economist, John Maynard Keynes, as put forward in his book *The General Theory of Employment, Interest and Money*, published in 1936 in response to the Great Depression of the 1930s.

Keynes advocated increased government expenditures and lower taxes to stimulate demand and pull the global economy out of the Depression

Keynesian economists often argue that private sector decisions sometimes lead to inefficient macroeconomic outcomes which require active policy responses by the public sector, in particular, monetary policy actions by the central bank and fiscal policy actions by the government, in order to stabilize output over the business cycle

Keynesian economics advocates a mixed economy – predominantly private sector, but with a role for government intervention during recessions.

Keynesian economics served as the standard economic model in the developed nations during the later part of the Great Depression, World War II, and the post-war economic expansion (1945–1973), though it lost some influence following the oil shock and resulting stagflation of the 1970s. The advent of the financial crisis of 2007–08 caused resurgence in Keynesian thought, which continues as new Keynesian economics.

3. Neoclassical economics

The term was originally introduced by Thorstein Veblen in his 1900 article 'Preconceptions of Economic Science'

Neoclassical economics refers to a general approach in economics focusing on the determination of prices, outputs, and income distributions in markets through supply and demand.

These are mediated through a hypothesized maximization of income-constrained utility by individuals and of cost-constrained profits of firms employing available information and factors of production.

Neoclassical economics rests on three assumptions:

- ⦿ 1. People have rational preferences among outcomes.
- ⦿ 2. Individuals maximize utility and firms maximize profits.
- ⦿ 3. People act independently on the basis of full and relevant information.

From these three assumptions, neoclassical economists have built a structure to understand the allocation of scarce resources among alternative ends.

Market supply and demand are aggregated across firms and individuals. Their interactions determine equilibrium output and price.

The market supply and demand for each factor of production is derived analogously to those for market final output to determine equilibrium income and the income distribution.

4. Monetarist Theory (Monetarism)

Monetarism is an economic theory which focuses on the macroeconomic effects of the supply of money and central banking

Formulated by Milton Friedman, it argued that excessive expansion of the money supply will inherently lead to price inflation, and that monetary authorities should focus solely on maintaining price stability to maintain general economic health.

Friedman originally proposed a fixed monetary rule, called Friedman's k-percent rule, where the money supply would be calculated by known macroeconomic and financial factors, targeting a specific level or range of inflation.

Monetarism proposes that the growth of the money supply should be regulated to increase parallel to the potential growth of the Gross Domestic Product (GDP), and that this will stabilize prices, ensuring economic growth with low inflation.

Monetarist theory asserts that variations in the money supply have major influences on national output in the short run and on price levels over longer periods.

Money supply

Money supply is the entire stock of currency and other liquid instruments circulating in a country's economy as of a particular time.

How Money Supply is Measured

There are several standard measures of the money supply

The various types of money in the money supply are generally classified as Ms, such as:

M0, M1, M2 and M3 are divided according to the type and size of the account in which the instrument is kept. The "M"s usually range from M0 (narrowest) to M3 (broadest) but which "M"s are actually focused on in policy formulation depends on the country's central bank.

M0 and M1 include coins and notes that are in circulation and other money equivalents that can be converted easily to cash.

M2 includes M1 and, in addition, short-term time deposits in banks and certain money market funds.

M3 includes M2 in addition to long-term deposits.

It worth saying that:

- M0, M1, a narrow measure of money's function as a medium of exchange;
- M2, a broader measure that also reflects money's function as a store of value;
- M3, a still broader measure that covers items that many regard as close substitutes for money.

The Effect of Money Supply on the Economy

An increase in the supply of money typically lowers interest rates, which in turns generates more investment and puts more money in the hands of consumers, thereby stimulating spending. Businesses respond by ordering more raw materials and increasing production. The increased business activity raises the demand for labor. Opposite effects occurs when the supply of money falls or when its rate of growth declines. It leads to economic activity decreases.

What Determines the Money Supply? Central bank policy is the most important determinant of the money supply. The central bank affects the money supply by affecting its most important component, bank deposits.

Topic 2 Financial intermediation

Objectives

This chapter of the course helps users comprehend the meaning of the term 'Financial System'; its role in the country. The constituents of financial system. Financial intermediation: meaning, definition, explanation. Non-Bank Financial Institutions. Importance of financial intermediation. In this chapter we consider the problem of how to transport capital from agents who do not wish to use it directly in production to those who do. Some agents are relatively wealthy and already have all of the productive capital they need. Others accumulate capital for retirement, not production. In each case, the agents would want to lend their surplus capital to other agents, who would then use it in production. In the real world this lending takes the form of loans to individuals and businesses for the purpose of undertaking risky ventures.

Introduction to financial systems. The components of financial systems

A financial system is the system that covers financial transactions and the exchange of money between investors, lender and borrowers. A financial system can be defined at the global, regional or firm specific level.

The firm's financial system is the set of implemented procedures that track the financial activities of the company. Within a firm, the financial system encompasses all aspects of finances. For example, it would include accounting measures, revenue and expense schedules, wages and [balance sheet](#) verification.

On a regional scale, the financial system is the system that enables lenders and borrowers to [exchange funds](#). Regional financial systems would include banks and other financial institutions, financial markets, financial services

The global financial system is basically a broader regional system that encompasses all [financial institutions](#), borrowers and lenders within the global economy. In a global view, financial systems would include the [International](#)

Monetary Fund, central banks, World Bank and major banks that practice overseas lending. **Functions of financial systems.**

The main functions of financial systems are to:

- provide the mechanisms by which funds can be transferred from units in surplus to units with a shortage of funds in order to directly or indirectly facilitate lending and borrowing
 - enable wealth holders to adjust the composition of their portfolios
 - provide payment mechanisms
 - provide mechanisms for risk transfer

From a structural point of view a financial system can be seen in terms of the entities that compose the system. A financial system comprises financial markets, securities and financial intermediaries (figure 1).

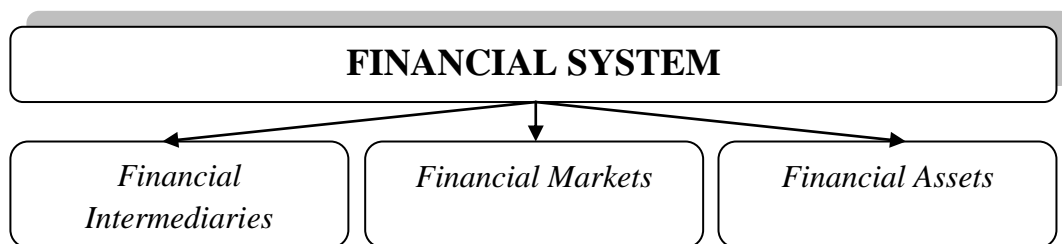


Figure 1. Structure of Financial System

Financial systems are strictly regulated because they directly influence financial markets. The stability of the financial markets plays a crucial role in the monetary protection of consumers. These financial systems are mostly handled by financial institutions which include commercial banks, central banks, public banks and cooperative banks. Cooperative banks and development banks managed by states are also listed under financial institutions that have heavily regulated financial systems.

Role of financial intermediation

Economic development is partially depends on the financial system to help mediate the transfer of money to areas of the economy that need it most. The

financial system has a number of key functions, which help facilitate these shifts in money that are important for sustainable economic growth.

1. **Savings.** The financial system allows you to place your excess money into a saving account of a bank of your choice. Keeping your money in a bank safeguards your savings and the bank you interest based on the amount you keep in your account.

2. **Loans.** Money in deposit accounts, like savings accounts is used to provide loans for a wide range of projects for people and businesses. Mortgages, car loans and student loans are financed largely by deposits in banks, saving institutions and credit unions.

3. **Investments.** The financial system also facilitates the transfer of money from investors to businesses. When businesses raise capital, they sell stocks to investors. Investors give their money to the company in exchange for ownership in the company.

4. **Government expenditure.** Governments may finance programs or deficit spending through the financial system by issuing bonds to raise money. Investors may buy government bonds to own a part of government debt, and collect interest payments from the government. In turn, government has money it needs to continue to function.

5. **Resource allocation.** Because of the cost of obtaining information, individual savers are not in the position to evaluate whether particular borrowers or projects are worthwhile. The institutions and professionals of the financial system develop expertise which enables them to better decide who receives loans.

6. **Business growth.** Businesses may expand their operations or finance growth by issuing debt instruments called bonds. Bonds are bought and sold through the financial system. Bond markets allow businesses to access investor capital to finance their growth, while bond investors have an opportunity to profit from helping finance business expansion.

7. **Savings mobilization.** Savings mobilization is the most fundamental function of capital markets. Individual savers typically cannot fund borrower needs

completely. Financial markets pool the saving of households and make the funds available for investment. The scale of this exercise lowers transaction costs. Borrowers go directly to financial markets rather than individual savers, which is clearly more cost efficient.

Groups of financial intermediaries

Financial intermediaries - a set of financial institutions (banks, insurance companies, credit unions, pension funds, etc.), whose functions consist of accumulation of funds of citizens and legal entities and their further provision on a commercial basis to the disposal of borrowers.

Financial intermediaries are economic agents who specialize in the activities of buying and selling (at the same time) financial contracts (loans and deposits) and securities (bonds and stocks).

Objective necessity of financial mediation is due to the lack of coincidence in time and space of opportunities of economic entities with temporarily free funds to benefit from placing them on the money market with the capabilities of other economic actors who need additional financial resources for their development and seek to attract the necessary amount of cash on favorable terms.

In the American economic literature it is customary to classify financial intermediaries into three main groups: deposit institutions; contractual savings institutions and investment intermediaries (figure 2).

Deposit Institutions - Commercial and savings banks, other savings and loans institutions - attract funds for deposits and provide loans to clients and participants.

Treasury savings institutions – state pension funds, non-state pension funds, life insurance companies - carry out long-term accumulation

Investment intermediaries - Various investment funds (investment companies) - collect funds from individual investors (clients) and place these funds in various financial assets from purpose of profit.

Also Leasing companies, factoring companies, brokerage and dealerships, insurance companies, pension funds, financial companies, pawnshops, credit unions referred to financial intermediaries.

Let's consider in more detail the activities of non-bank lending institutions.

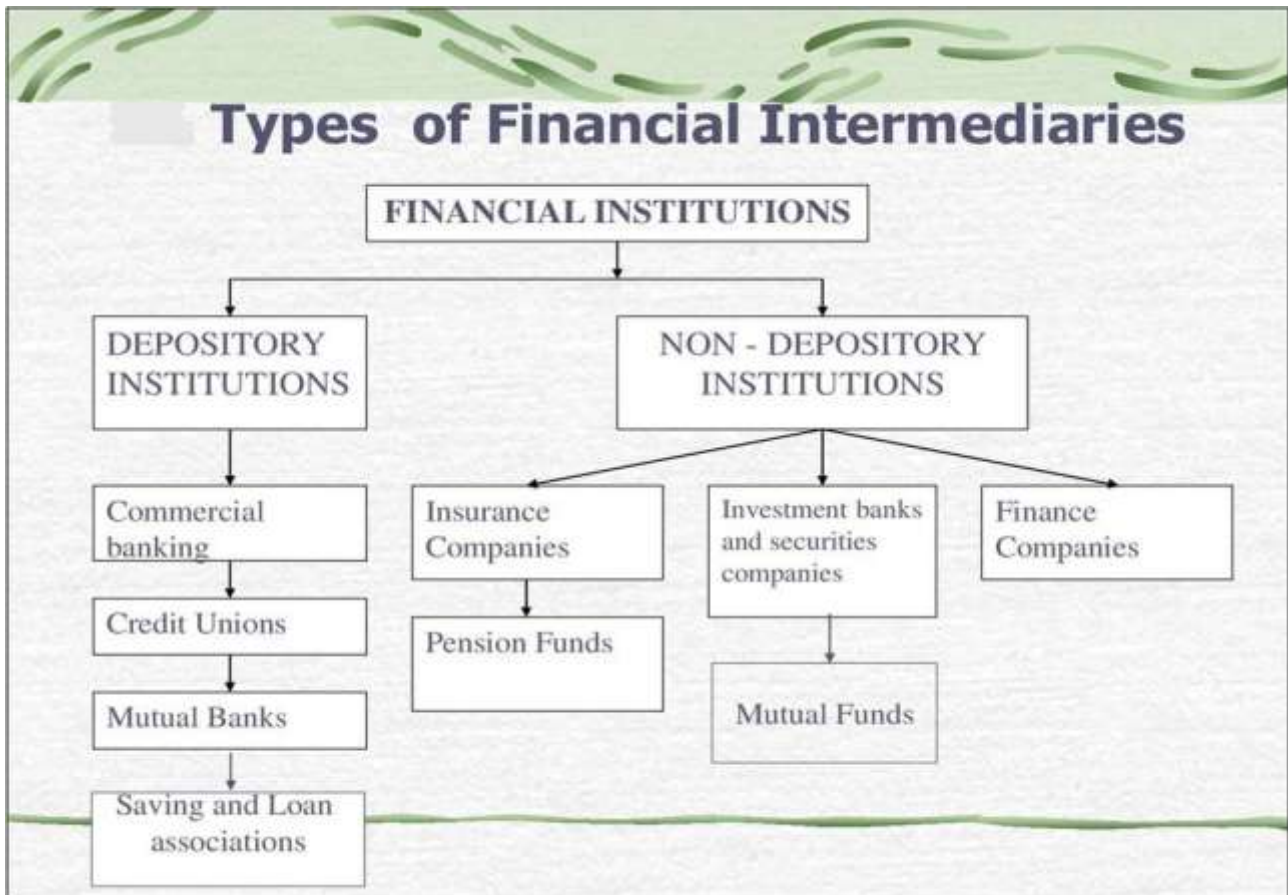


Figure 2. Types of Financial Intermediaries

Credit Union is a non-profit organization founded by individuals on a cooperative basis in order to assist their members through their mutual lending. Principles of credit unions are quite simple: Some members of the organization, protecting their funds from inflation, place them on deposit accounts, others - use these funds on a lending basis. The activities of credit unions are aimed not at the profit, but in improving the well-being of their members. One can say that some members of the organization are lending to others.

Sufficiently developed and active in crisis are **pawnshops**. They carry out the issuance of credit resources on a pledge of items of personal use or other movable

property as well as carry out their storage and, if necessary, carry out commercial transactions for the sale of pledged property on a commercial basis. A specific feature of pawnshops is that they work exclusively with individuals, which prevents excessive increase of financial assets.

Financial intermediaries of the contract type. These include insurance companies and pension funds. From the point of view of financial intermediation, these companies combine the fact that they receive a large number of one-time or periodic cash receipts from their customers, and payments to customers are delayed in time. Therefore, the intermediary accumulates large amounts of funds and, in order to preserve and multiply them, can place these funds on the financial market.

Investment companies and investment funds attract investors' funds by selling shares. Collected funds they invest in pre-determined directions (may buy stocks, bonds, securities of companies in a certain sector, industry, or, conversely, a wide range of industries, government securities, derivatives).

Venture Fund oriented to work with innovative enterprises and projects. Venture funds can invest in both securities and in the shares of enterprises with high or relatively high risk in anticipation of extremely high profits. As a rule, 70-80% of projects do not bring returns, but profits from the rest of 20-30% pay off all losses.

Topic 3. The Banking system

Objectives

This chapter deals with issues of meaning and definitions of banking. The importance of main universal principles of banking is also discussed. We will investigate the evolution of Banking System, its main definitions; functions of Banking System. We will then move on to discussion of main types of banking systems are known in the world such as one-tier and two-tier banking system. Then we briefly sketch the structure of the Federal Reserve System.

What Is a Banking System? Main Definitions.

Banking System is the structural network of institutions that offers financial services within a county.

The members of the banking system are

- national central bank that issue currency and set monetary policy;
- commercial banks that take deposits and make loans;
- specialized in financial sphere banking institutions (e.g. investment banks

which specialize in capital market issues and trading).

There are approaches to the definition of «banking system»

- The institutional approach.
- The legal approach.
- The organizational-economic approach.

The institutional approach

Within this approach the banking system is defined as a set of interconnected banks. For example, according to scientists, «the banking system is an extensive network of commercial banks, which is controlled by a single structure - the central bank». Non-banking financial institutions are added to the banking system.

The legal approach

The main provisions of the approach set out in legal acts. According to the current legislation in Ukraine, namely the Law of Ukraine «On Banks and Banking» the banking system in Ukraine consists of the National Bank of Ukraine and other

banks and branches of foreign banks established and operating in Ukraine in accordance with this Law and other laws of Ukraine.

The organizational-economic approach declines that the banking system is a collection of all banks in the country, which interact with each other subordinated to the established norms and rules of banking, in order to ensure the possibility of effective monetary and credit regulation of the economy, credit-settlement service of economic turnover, as well as stable activity of banking institutions.

The main conditions to existing (being) of banking are:

- a sufficient number of active banks and credit institutions in the country. The system should be seen as one that is constantly evolving and changing quantitatively and qualitatively;
- the absence of unnecessary elements in the system, especially banks that have not started to perform banking transactions in a timely manner, not have properly executed license for banking operations;
- the presence of the central bank, which is the main coordinator of credit institutions and effectively serves as the management of monetary and financial processes in the economy;
- the existence of the commercial banks, covering all areas (spheres) of the national economy and foreign economic relations, carrying out a wide range of banking and financial services to businesses and individuals.

Goals and Functions of Banking System

The main purpose of the development of banking system is to ensure stable functioning of the banking system, which is possible subject to effective implementation of the priority objectives of the subsystems. To achieve this goal the scientists differentiate them into long-term; medium-term and short-term purposes (figure 3).

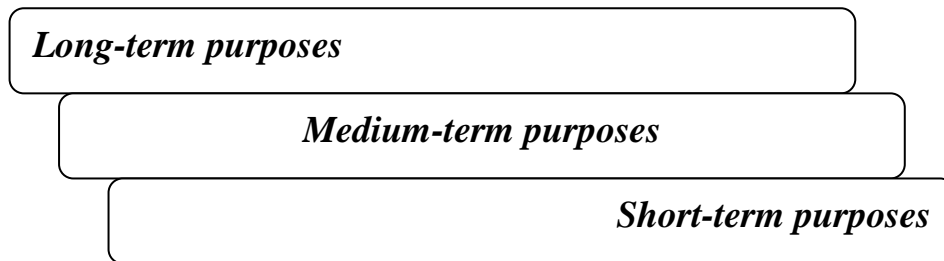


Figure 3. Purposes of Banking System

- *Long-term purposes:* ensuring the stable functioning and developing of the banking system according to internal criteria of financial stability and needs of sustainable development of socio-economic system.
- *Medium-term purposes:* creation of financial-resistant, highly developed and efficient banking system with progressive structure of assets, capital, liabilities, competitive in international markets.
- *Short-terms purposes:* ensuring the financial stability and efficiency activity of banks, increasing their capitalization, liquidity and solvency.

Functions of Banking System.

Emissions (monetary) function.

The main aim of this function is create money and regulate the money supply. Because emissions (monetary) function banking system provides:

- fulfillment of needs of the economy in money;
- Increasing monetization of the economy as increase of demand for money;
- Maintaining the commodity-monetary balance and stability of money.

Transformational function (mediation).

Transformational function is that banks are mobilizing available funds of some entities and transferring them to others, are able to change (transform) the magnitude and terms of cash capital and financial risks. Due to a transformational function the banking system provides free redistribution of funds between sectors, industries and regions.

Transformational function is based on the performance by the banking system two additional functions: accumulative (accumulation of funds of depositors and creditors) and investment (lending to the economy).

Stabilization function.

- Stabilization function ensures the sustainability of banking and money market.
- Stabilization function of the banking system is provided by the adoption of laws and regulations governing the activities of all its parts, and the creation of appropriate mechanisms for the control and supervision of compliance with current legislation as well as of banks.

Banks have two important economic functions.

- First, they operate a payments system, and a modern economy cannot function well without an efficient payments system.
- The second key function of banks is financial intermediation, lending or investing the money we deposit with them or credit they themselves create to business enterprises, households, and governments.

Banking System in Ukraine

The banking system of Ukraine was founded after the adoption by the Verkhovna Rada of Ukraine in March 1991, the Law of Ukraine on «Banks and Banking».

An independent Ukrainian banking system began to form naturally during 1991 as the disintegration of the Soviet state gathered momentum. The Ukrainian portion of the USSR State Bank, of necessity made credit allocation decisions when the all Union bank failed to prepare a credit plan early in 1991. In March 1991, the republic adopted a law on "Banks and Banking" which provided for the establishment of the National Bank of Ukraine from the Ukrainian Republican division of the State Bank of the USSR. By the summer of 1991, the instructions of the Soviet State bank were no longer binding on Ukraine. In December, 1991 the USSR State Bank was formally

liquidated and the National Bank of Ukraine was unequivocally the effective central banking authority.

A two tiered banking system was envisaged under law, wherein the National Bank would act as a central bank and all other banks would be responsible for commercial banking transactions. The benefits of two tired banking system are depicted in the figure 4.

Two tiers: allowing flexible market solutions for end customers

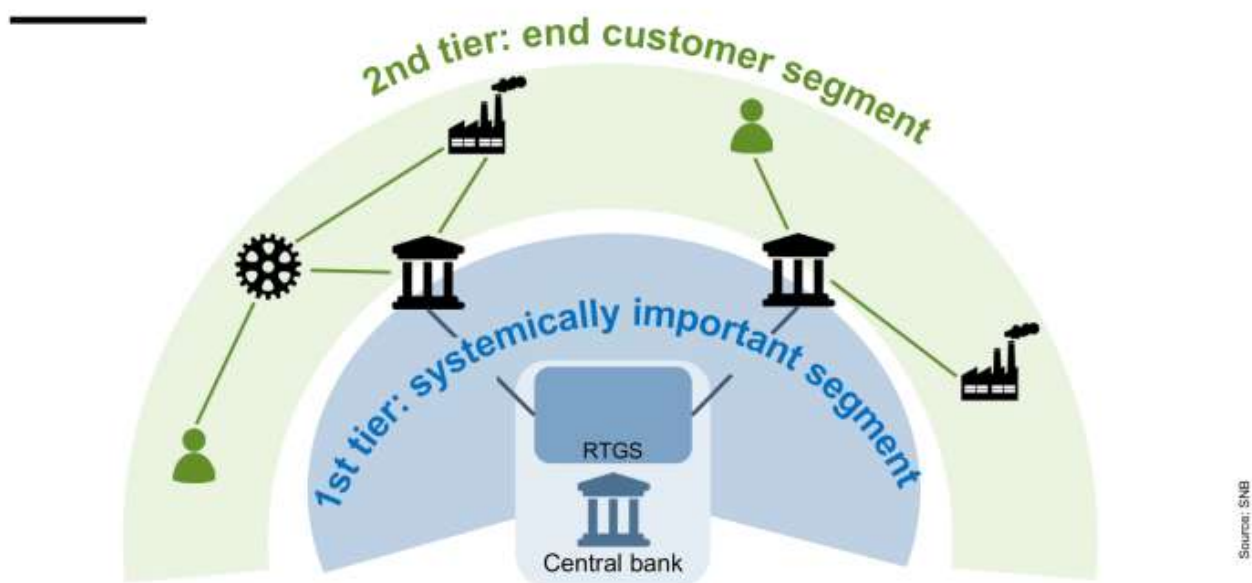


Figure 4. Benefits of two tired banking system

The first level is represented by the National Bank of Ukraine. The NBU carries out monetary policy and provides stability of the national monetary unit; determines exchange rate of the national currency; refinances commercial banks providing for their liquidity; responsible for licensing of commercial banks, and the oversight of their activities.

According to the Ukrainian Constitution, the main goal of NBU is to maintain the stability of the national currency.

The second (lower) level is represented by commercial banks conducting their activities on financial markets.

The commercial banks of different types and forms perform a wide range of edit, insurance and payment character, and also carry out various financial functions

concerning any enterprise in economics for the purpose of profit earning. The range of commercial banks activities includes: receiving deposits of enterprises, institutions and households, crediting of economic entities and households, investments in securities, formation of cash balance and reserves, as well as other assets, cash and settlement servicing of the economy, foreign exchange operations and other services to natural persons and legal bodies.

A commercial bank carries out its banking activities under a **banking license** issued by the NBU.

Banks in Ukraine by types of transactions can function as a **universal** or **specialized**.

Banking System in the USA

In 1863 the federal government of the United States started a system of nationally chartered banks that were required to back their notes with federal government securities. In 1913 this system was superseded by the Federal Reserve System (FRS). The structure of FRS is pictured on figure 5.

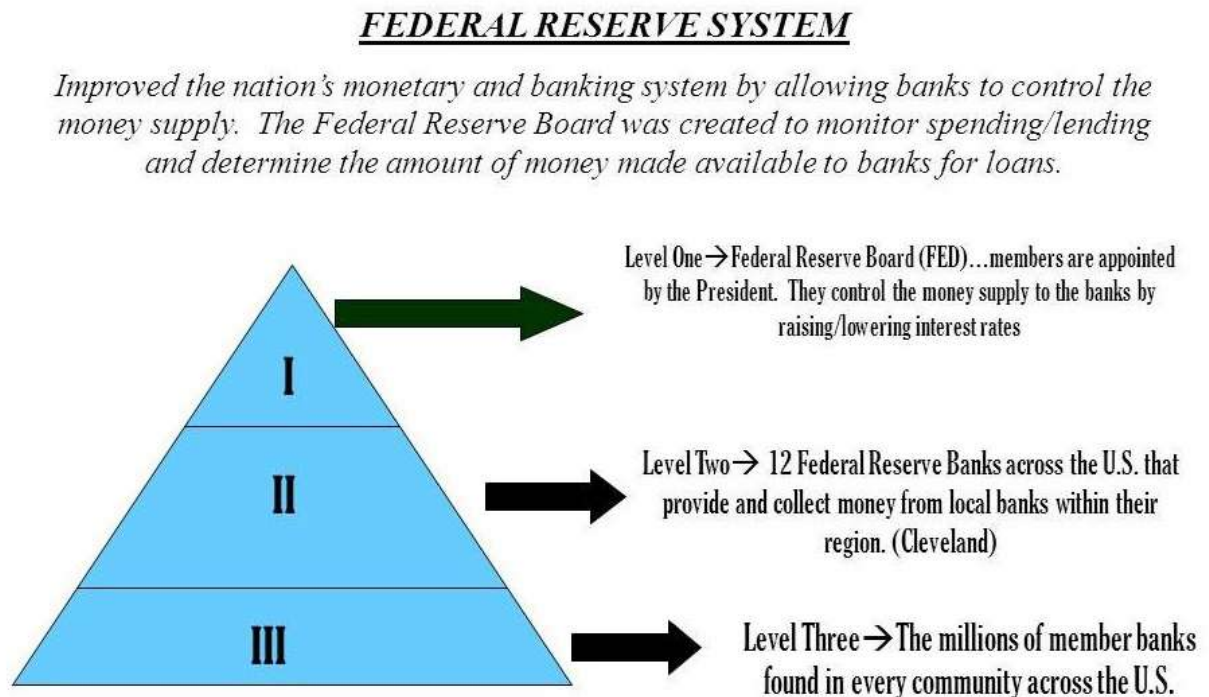


Figure 5. The structure of Federal Reserve System

The Federal Reserve System is the central bank of the United States. It regulates monetary policy and supervises the nation's banking system. The Fed includes the central Board of Governors and 12 regional Federal Reserve Banks.

Among the Fed's main duties is its responsibility to make sure the money supply doesn't grow too quickly or too slowly. It uses monetary policy to control that growth. The Fed can change reserve requirements, which are the percentages of deposits that banks must retain. It can also change the interest rate, called the discount rate, paid by member banks when they borrow money. Or it can buy or sell Treasury securities to increase or decrease the money supply.

The Fed's other duties include regulating banks and protecting the credit rights of consumers. It maintains the financial system's stability, and it provides the U.S. government with financial services. The Fed works independently from the government, which uses fiscal policy to regulate economic conditions.

The United States has a dual banking system in which banks supervised by the federal government and banks supervised by the states operate side by side. To open a National Bank one needs a charter from the federal government and to open a state bank a charter from a state. All national banks must, and state banks may (though few do), become Federal Reserve member banks and be regulated by the Federal Reserve. Nearly all banks are members of the Federal Deposit Insurance Corporation (FDIC), which insures their deposits up to \$100,000 and also regulates them. About one-third of all U.S. banks are national banks. They hold about 60 percent of all deposits. Frequently, when a bank fails, the FDIC, instead of paying off depositors, merges the failing bank with another bank. In that case even deposits over \$100,000 are protected. Traditionally branch banking has been tightly regulated. Most states limited or altogether prohibited branching, and banks could not open branches in other states. As a result, the United States, unlike most industrialized countries, has a great number of small banks.

Commercial banks compete with other institutions that offer some of the same services. Savings and loan associations, savings banks (also called mutual savings banks), and credit unions compete with banks for deposits of households and non-

profit institutions. Their accounts are also insured up to \$100,000 by government agencies. Savings and loan associations and savings banks invest most of their funds in mortgages and compete with commercial banks in this market. Along with credit unions and finance companies, they also compete with banks for consumer loans and are now allowed to make business loans within certain limits.

Money market funds also compete with banks. They invest in very short-term, extremely safe securities and generally allow their customers to write large checks against their accounts.

10 top commercial banks of the USA: Bank of America First Interstate; Citicorp Continental Illinois; Chase Manhattan Chemical N.Y.; Manufacturers Hanover First Chicago; J.E Morgan Security Pacific.

TOPIC 4. CENTRAL BANK

Objectives

In this chapter we will define 'central bank' and explain the importance of central banking; explain when and how a country can do without a central bank; define central bank independence and explain its importance; explain why independent central bankers prefer lower inflation rates than government officials do. Furthermore we will explain the definition 'monetary policy' and study monetary policy tools as well as monetary policy targets and goals.

What is a central bank? Origin of the central bank

In every country, there is one bank which acts as the leader of the money market - supervising, controlling and regulating the activities of Commercial Banks and other financial institutions. It acts as a banker of issue and is in close touch with the government, as banker, agent and adviser to the latter. Such a bank is known as the Central Bank of the country.

The main aim of a central bank is to maintain monetary and economic stability of a country.

In different countries, the bank called differently using the following definitions, in addition to the central as national; it is called state, reserve, or a short name - The Bank of Japan, Bank of France. The word "Reserve" is also often included, such as the Reserve Bank of India, Reserve Bank of Australia, Reserve Bank of New Zealand, the South African Reserve Bank, and Federal Reserve System. Other central banks are known as monetary authorities such as the Saudi Arabian Monetary Authority, Hong Kong Monetary Authority, Monetary Authority of Singapore, Maldives Monetary Authority and Cayman Islands Monetary Authority. There is an instance where native language was used to name the central bank: in the Philippines the Filipino name Bangko Central Pilipinas is used even in English.

The creation of central banks was in two ways.

The first way (you can call evolution) - the gradual transformation of the country issuing bank in the central bank.

The second way (you can call the directive) - a central bank based on a special law which provides special status of the newly established bank since its inception.

A country can do without a central bank if it is on fixed exchange rates, such as the gold standard, or otherwise gives up discretionary monetary policy, as when countries dollarize or adopt a foreign currency as their own. In such cases, other institutions fulfill central banking functions: government departments regulate financial institutions, commercial banks safeguard the government's deposits, a currency board administers the fixed exchange rate mechanism, clearinghouses established by banks clear checks, and so forth.

Central bank independence and its importance

Central bank independence is a measure of how free from government influence central bankers are. Independence is important because researchers have found that the more independent a central bank is, the lower the inflation it allows without injuring growth and employment goals. The independence of the central bank is considered as a guarantee of its effective work, which is a bank duty of cautious monetary policy aimed at ensuring the stability of the national currency and oriented towards the future.

The main features of central bank independence as described in a central bank's charter:

First, a bank is viewed as more independent if the chief executive is appointed by the central bank board rather than by the prime minister or minister of finance, is not subject to dismissal, and has a long term of office. These aspects help insulate the central bank from political pressures.

Second, independence is higher the greater the extent to which policy decisions are made independently of government involvement.

Third, a central bank is more independent if its charter states that price stability is the sole or primary goal of monetary policy.

Fourth, independence is greater if there are limitations on the government's ability to borrow from the central bank.

Status and major areas of central banks

The economic and legal status as well as organizational and legal forms of creation and activity of modern central banks can be different. The place and role of central banks are determined by the rules of national law, which are mostly in the form of laws.

These legal acts determine the organizational and legal structure of the central bank, its functions, the procedure for appointing a bank's management, its relationship with the state and the national banking system.

Central banks may have different forms of ownership:

- state (e.g. German Federal Bank, Bank of England);
- shareholder, with participation of the state in the formation of capital (for example, the Bank of Japan);
- Shareholder - without state participation in capital formation (e.g. Federal Reserve Bank of the USA).

Central Bank and Commercial Bank – Differences:

- Central Bank does not work for profits though it might secure profits. While Commercial Banks aim at securing maximum profit for their shareholders, the Central Bank aims at controlling the banking system and supporting the economic policy of the government.
- Central Bank is generally an organ of the government and forms part of the govt. machinery. Commercial Banks may be owned by the govt. or are privately owned.
- The Organization and Management of the Central Bank is fully controlled by the Government.

The central bank functions are:

- Firstly, **the central bank is the emission centre**. Central banks control and manipulate the money supply: issuing currency and setting interest rates on loans and

bonds. (Typically, central banks raise interest rates to slow growth and avoid inflation; they lower them to drive growth, industrial activity and consumer spending.) This way they manage monetary policy to guide the economy and achieve economic goals such as full employment.

- Secondly, **the central bank is the bank of government**. It does not provide the general banking services to individual citizens and business firms. They also provide loans and services for nation's banks and its government, and manage foreign exchange reserves.

- Thirdly, **the central bank is the bank of the banks**. They regulate member banks through capital requirements, reserve requirements (which dictate how many banks can give a loan to customers and how much capital they should keep on hand) and deposit guarantees, among other tools. The central bank also has supervisory powers to ensure that banks and other financial institutions do not behave recklessly or fraudulently.

- Finally, **a central bank also acts as a lender of last resort** to the banking sector during times of financial crisis. It emergency lends to distressed commercial banks and other institutions, and sometimes even a government. By purchasing government debt obligations, for example, the central bank provides a politically attractive alternative to taxation when a government needs to increase its revenue.

The National Bank of Ukraine

National Bank of Ukraine is the central bank of Ukraine, a special central body of the government management. Its legal status, tasks, functions, powers and organization principles are determined by the Constitution of Ukraine, the Law "On the National Bank of Ukraine "and other laws of Ukraine.

National Bank has the following functions:

- determines and implements monetary policy;
- monopoly issue the national currency of Ukraine and organizes its circulation;
- organizes a system of refinancing;

- sets the rules of conducting banking transactions accounting and reporting, protect information, funds and property;
- determine the system, procedure and forms of payment, including between banks;
- provides banking regulation and supervision;
- maintain the State Register of Banks, to license banking and operations in accordance with the law;
- represents Ukraine in other central banks, international banks and other credit institutions where cooperation is carried out in the central banks;
- Carries out currency regulation, determines the order of operations with foreign currency, organize and carries out foreign exchange control banks and other financial institutions.

The main goals of central bank activity:

- High employment
- Price stability
- Economic growth

Further goals of monetary policy are stability of interest rates, of the financial market, and of the foreign exchange market. Goals frequently cannot be separated from each other and often conflict. Costs must therefore be carefully weighed before policy implementation.

The governing bodies of the National Bank of Ukraine are: the Council of the National Bank and the Board of the National Bank.

The Council of the National Bank consists of 9 members. There is the head of the council among them. The President of Ukraine shall appoint 4 members of the Council of National Bank by appropriate decree. Verkhovna Rada of Ukraine appoints others 4 members of the Council of the National Bank through the adoption relevant Regulation.

Members of the Council of the National Bank are appointed for seven years. National Bank Chairman heads the Board of National Bank. He is elected to the post for five years.

Monetary policy. The tools of monetary policy

Monetary policy is the process by which monetary authority of a country controls the supply of money, often targeting a way of interest for the purpose of promoting economic growth and stability.

Monetary policy is maintained through actions such as modifying the interest rate, buying or selling government bonds, and changing the amount of money banks are required to keep in the vault (bank reserves).

The Goals of Monetary Policy

- Price Stability
- High Employment
- Economic Growth
- Financial Market Stability
- Interest Rate Stability
- Exchange Rate Stability

Monetary policy regulates the supply of money; the cost and availability of credit in the economy; deals with both the lending and borrowing rates of interest for commercial banks; maintains price stability, full employment and economic growth. The forms of monetary policy are shown in the figure 6.

<p>Expansionary policy Increases the total supply of money in the economy rapidly</p>	<p>Contractionary policy Decreases the total money supply, or increases it slowly</p>
<p>Expansionary policy is used to combat unemployment in a recession by lowering Interest Rates .</p>	<p>Contractionary policy involves raising interest rates to combat inflation.</p>

Figure 6. Forms of Monetary Policy

The main monetary policy instruments available to central bank are:

- ~ open market operations
- ~ bank reserve requirements
- ~ interest-rate policy
- ~ re-lending and re-discount (including using the term repurchase market);
- ~ credit policy (often coordinated with trade policy)

An open market operation is an instruments of monetary policy which involves buying or selling of government securities from or to the public and banks. This mechanism influences the reserve position of the banks, yield on government securities and cost of bank credit. The central bank sells government securities to contract the flow of credit and buys government securities to increase credit flow. Open market operation makes bank rate policy effective and maintains stability in government securities market. These operations are a central bank the most important stabilizing instruments.

Through open market operations, a central bank influences the money supply in an economy directly. Each time it buys securities, exchanging money for the security, it raises the money supply.

Another significant power that Central bank holds is the ability to establish ***reserve requirement*** for other banks.

The liability requirement is that a percentage of liability is being held as cash or deposited with the Central bank or other agency; limits are set on the money supply.

Deposits requirement. All banks are required to hold a minimum percentage of deposits as reserve. Changes in required reserve ratios can have an important influence on the money supply. Changes in reserve requirements are made sparingly because they present too large change in monetary policy.

Capital Requirement. All banks are required to hold a certain percentage of their assets as capital. A rate may be established by the Central bank or banking supervisor.

Capital Adequacy. Capital adequacy is important, it is defined and regulated by the Bank for International Settlements, and central bank in practice generally apply strict rules.

Discount Rate Policy. Discount rate is the interest rate at which the central bank stands ready to lend reserves to commercial banks. There are the three key interest rates for the banks: the interest rate on the main refinancing operations; the rate on the deposit facility, which banks may use to make overnight deposits; the rate on the marginal lending facility, which offers overnight credit to banks.

Bank Rate is a tool, which central bank uses for short-term purposes. Funds are provided either through lending directly or rediscounting or buying money market instruments like commercial bills and treasury bills. Increase in Bank Rate increases the cost of borrowing by commercial banks which results into the reduction in credit volume to the banks and hence declines the supply of money. This any revision in the Bank rate indicates could mean more or less interest on your deposits and also an increase or decrease in your EMI.

Monetary policy strategies

It is suggested that there are two types of monetary policy strategies: Monetary Targeting and Inflation Targeting

Monetary Targeting

To achieve price stability, you need to have some benchmark that tells you how stable prices are. Two such targets are widely used: monetary aggregates and the inflation rate.

In monetary targeting, the central bank announces that it will target an annual growth rate in a particular monetary aggregate (like M1 or M2). Once the rate is set, the Central Bank is responsible for hitting this target.

This policy is transparent, flexible and accountable. It sends a strong signal of the Central Bank's policy objective and inflation expectations should adjust. However, it does require that the target (M1 for example) and the goal variable (inflation) have a strong relationship.

Inflation Targeting

The biggest weakness of monetary targeting is that there may not be a strong relationship between the monetary target and inflation. So why not directly target inflation?

With inflation target, the central bank makes a public announcement of the inflation target. This is an attempt to revise inflation expectations. Then the central bank makes an institutional commitment to price stability (and the inflation target) as a long-run goal.

Policy decisions (to hit the inflation target) are made using as much information as is available. The process by which the central bank reached a policy is made transparent through open communication with the public. If the central bank fails to hit its objective, it is held accountable.

Inflation targeting has been successfully used to achieve long-run price stability in Canada, New Zealand, and the UK.

However, the process by which long-run stability was achieved involved significant short-term pain.

Advantages

- Does not rely on one variable to achieve the target
- Transparent and policymakers are accountable for their actions.
- Better insulated from time-inconsistency problem.

Disadvantages

- Delayed signaling → inflation rates are known ex-post, oftentimes with long lags. Need to know current rate to know the stance of the central bank's target.
- Too inflexible, potentially leading to disruptive output fluctuations
- During the transition period, there is low economic growth → how long until we reach the long run?

Topic 5. Banker/Customer Relationships

Objectives

In this chapter we will start by discussing what a bank is. We will then move on to consider when a person becomes a bank customer and referring to some of the relevant case law for guidance. The next topic is the banker/customer relationship when we will examine the duties of both the banker and the customer. The topic concludes with an overview of the Banking Code, an area you may already be familiar with through your current employment.

What is a bank?

A bank is a financial institution licensed to receive deposits and make loans. Banks may also provide financial services, such as wealth management, currency exchange and safe deposit boxes.

In particular, most of the definitions are from legislation that has the purpose of regulating and supervising banks rather than regulating the actual business of banking.

There are two types of banks: commercial/retail banks and investment banks. In most countries, banks are regulated by the national government or [central bank](#) (figure 7).



Figure 7. Types of Banks

Retail banks are probably the banks you're most familiar with: Your checking and savings accounts are held at a retail bank, which focuses on consumers (or the general public) as customers. These banks give you credit cards, offer loans, and they're the ones with numerous branch locations in populated areas.

Commercial banks focus on business customers. Businesses need checking and savings accounts just like individuals do. But they also need more complex services, and the dollar amounts (or the number of transactions) can be much larger. They might need to accept payments from customers, rely heavily on lines of credit to manage cash flow, and they might use letters of credit to do business overseas.

Investment banks help businesses work in financial markets. If a business wants to go public or sell debt to investors, they'll often use an investment bank.

Credit unions are similar to banks, but they are not-for-profit organizations owned by their customers (most banks are owned by investors). Credit unions offer products and services more or less identical to most retail and commercial banks. The main difference is that credit union members share some characteristic in common (where they live, their occupation, or organizations they belong to, for example).

Online banks operate entirely online – there are no physical branch locations available to visit with a teller or personal banker. Many brick-and-mortar banks also offer online services, such as the ability to view accounts and pay bills online, but internet-only banks are different: they often offer competitive rates on savings accounts and they're especially likely to offer free checking.

Mutual banks are similar to credit unions because they are owned by members (or customers) instead of outside investors.

Savings and loans are less prevalent than they used to be, but they are still important. This type of bank was important in making home ownership mainstream, using deposits from customers to fund home loans. The name savings and loan refers to the core activity they perform: take savings from one customer and make loans to another.

Non-bank lenders are increasingly popular sources for loans. Technically, they're not banks, but your experience as a borrower might be similar: you'd apply for a loan and repay as if you were working with a bank.

Any persons wishing to set up as a bank must firstly seek the permission of the FSA (the Financial Services Authority) which requires completion of an application pack under what is known as Part IV Permission procedures. The vetting procedures are very stringent and are designed to ensure that the consumer is protected from unscrupulous businesses setting themselves up as deposit takers. The FSA still requires a minimum capital structure, now defined as €5 million.

Who are a customer and a banker?

The relationship between the banker and customer is very important. Both serve the society to grow and the economy to expand. Before we discuss the relationship between the banker and the customer, it seems necessary that the two terms banker and customer are made clear.

What is the meaning of Banker?

A banker is a dealer in capital or more properly a dealer in money. He is an intermediate party between the borrower and the lender. He borrows from one party and lends to another. In general banking has been defined as "Accepting for the purpose of lending or investment of deposits of money from the public, repayable on demand or otherwise and withdrawals by check, draft, order or otherwise.

What is the meaning of a Customer?

A customer is a person who maintains an account with the bank, without taking into consideration the duration and frequency of operation of his account.

To constitute a customer of the bank

- ~ -One should have an account with the bank.
- ~ -One should deal with the bank in its nature of regular banking business.
- ~ -One should deal with the bank without consideration of the duration and frequency of operation of his account.

The relationship between banker and customer

The relationship between a banker and his customer should be based upon mutual trust but recent experience has shown that very often it is not so that the relations between banker and customer are so important to regulate.

When does the banker - customer relationship start?

- The banker-customer relationship commences at the point of opening the account.
- Other relationship commences when a customer acquires a credit facility from a bank.

The banker/customer relationship is deemed to begin:

- ~ as regards an account holder – as soon as the bank opens an account for someone (with the intention that the relationship be permanent);
- ~ as regards any other banking service – as soon as the bank agrees to provide that service.

The relationship between the banker and customer is very important. It is generally studied under the following two heads: General Relationship and Special Relationship.

The general relationship between Banker and Customer are categorized into three:

- Relationship as debtor and creditor.
- Banker as a trustee.
- Banker as an agent.

Relationship as Debtor and Creditor

The true relationship between banker and customer is primarily of a debtor and creditor. When customer deposits money with a bank, the bank then is the debtor and the customer is the creditor.

On the opening of an account the banker assumes the position of a debtor. A depositor remains a creditor of his banker so long as his account carries a credit balance.

Relationship with the customer is reserved as soon as the customer account is overdrawn. Banker becomes creditor of the customer who has taken a loan from the banker and continues in that capacity until the loan is repaid.

The customer expects from the bank that:

- His money will be kept safe by the bank;
- It will be returned on demand within business hours;
- The money will be intact and safe and will give some things by the way of return (interest).

Banker as a Trustee

Formally a banker is a debtor of his customer in report of the deposit made by the letter but in certain circumstances he act as trustee also. A trustee hold holds money or asset and performs certain functions for the benefit of some other person called the beneficiary. For example; If the customer deposits securities or other valuable with the banker for the safe custody, the letter acts as a trustee of his customer.

Banker as an Agent

A banker acts as an agent of his customer and performs a number of agency functions for the conveniences of his customer. For example: he buys or sells securities on behalf of his customer, collects cheques on his behalf and makes payment of various dues of his customer.

The Banking Code

The **Banking Code** was a voluntary code of practice agreed by banks in certain countries. The code typically described how banks dealt with accepting deposits and withdrawals and with customer disputes on transactions. Banking codes have in most countries been replaced by government imposed financial regulation governing banking practices.

The Banking Code was introduced in 1991, with the present code being updated in 2003, 2005 and March 2008. The Code will continue to be updated and amended on an ongoing basis.

The Banking Code Standards Board (BCSB) was formed in 1999, with the aim of monitoring compliance with the Banking Code. A further role of the BCSB is to interpret and develop such codes. The BCSB has the power to discipline those organizations that are in breach of the codes by a range of means, including the “naming and shaming” of these organizations. The BCSB’s ultimate sanction is expulsion.

The BCSB also has a role to play in providing consumers with information about which organizations are registered and what their obligations are under the Code.

The Banking Code applies to the following products and services:

- ~ current accounts, including basic bank accounts;
- ~ cards and PINs;
- ~ overdrafts and loans;
- ~ savings and deposit accounts, including ISAs and cash deposit Child Trust Funds;
- ~ payment services, including foreign exchange.

The Code does not apply to the following products and services:

- ~ mortgages;
- ~ investments;
- ~ insurance;
- ~ premium bonds;
- ~ currency accounts.

In providing the agreed level of service, the subscribers to the Code promise that they will: **treat you fairly and reasonably when providing you with products and services covered in this Code.**

The key commitments are:

- ~ making sure that advertising and promotional literature is clear and not misleading and that clear information is given about products and services

- ~ giving clear information about accounts and services, how they work, their terms and conditions and the interest rates which may apply
- ~ helping you to use your account or service by sending regular statements (where appropriate) and keeping you informed about changes to the interest rates, charges or terms and conditions
- ~ helping you to switch your current account between financial institutions that subscribe to this Code
- ~ lending responsibly
- ~ dealing quickly and sympathetically with things that go wrong and consider all cases of financial difficulty sympathetically and positively
- ~ treating all personal information as private and confidential, and providing secure and reliable banking and payment systems
- ~ publicizing this Code, having copies available and making sure that staff are trained to put it into practice.

The areas covered by the Banking Code are: helping you to choose products and services that meet your needs; interest rates; charges; terms and conditions; changing your account; advertising and marketing; running your account; cards and PINs; your personal information; protecting your accounts; lending; financial difficulties – how we can help; complaints; monitoring; getting help.

Topic 6. Deposit Banking

Objectives

In this chapter we will start by discussing what are 'Bank Deposits'? Description of deposit accounts: current deposit accounts; savings accounts; time deposit accounts; call deposit accounts. Federal Deposit Insurance Corporation. Deposit Interest Rate. Importance of deposits in banking. Deposit Mobilization. Consequences of failing to mobilize deposits in the economy. The Importance of Bank Deposits in the Money Supply.

Sources of Funds in Commercial Banks

Commercial bank uses various categories of sources to raise the funds. The major source of commercial bank funds are summarized as follows:

Capital (Equity): Primary and Secondary capital; Paid-up capital; Reserve fund

Deposit: Current deposits; saving deposits; fixed deposits.

Borrowings: From central bank; from interbank market ((a) Interbank deposit, (b) Call money market, (c) Repurchase agreement); from international financial institution

Capital: The bank capital represents the net worth of the bank or its value to investors. A bank's capital can be thought of as the margin to which creditors are covered if a bank liquidates its assets. Loan-loss reserves or loan-loss provisions are amounts set aside by banks to allow for any loss in the value of the loans they have offered.

Capital can be classified as:

- **Primary capital:** primary capital result from issuing common or preferred stock as primary or secondary.
- **Secondary capital:** Secondary capital results from issuing subordinated notes and bonds.

Capital can also be categorized by the following:

Paid-up / share Capital is the part of subscribed capital which has been called-up and paid, while subscribed capital is the part of the Authorized capital which has

been issued and taken up by the public including shares issued to and paid by sponsor. It indicates the contribution made by the shareholders of the bank.

Reserve fund is the amount accumulated over the years out of undistributed profit. It actually belongs to the shareholders. The accumulation of such retained reserves is an essential condition for financial soundness, stability and growth of the bank to fulfill special roles assigned to them from time to time. Besides, such reserves provide a cushion for meeting unforeseen contingencies. In the event of heavy losses the bank can draw upon its Reserve Fund. The reserve fund operates as an additional security to the bank's customers.

What are 'Bank Deposits'?

Bank deposits consist of money placed into banking institutions for safekeeping. These deposits are made to deposit accounts such as savings accounts, checking accounts and money market accounts. The account holder has the right to withdraw deposited funds, as set forth in the terms and conditions governing the account agreement.

The deposit itself is a liability owed by the bank to the depositor, and the word refers to this liability rather than to the actual funds that have been deposited. When someone opens a bank account and makes cash deposit, he surrenders legal title to the cash, and it becomes an asset of the bank. In turn, the account is a liability to the bank.

Bank Account

- ~ It is a financial account created by bank for its customer.
- ~ The financial transactions which have occurred within a given period of time on bank account are reported to the customer on bank statement and balance of the account at any point in time is the financial position of the customer with the institutions.
- ~ A fund that a customer has entrusted to a bank and from which customer can make withdrawals.

Accounts opened with the purpose of holding credit balances are referred as deposit accounts. All banks have their own names for various accounts which they open for customers.

Types of Accounts in a Bank

There are several different types of deposit accounts including: current accounts, savings accounts, fixed deposits, recurring deposits and certificates of deposit (CDs).

Current accounts are usually for businessmen and daily transactions. It doesn't serve a purpose of saving your investments. The transaction facility to this account is so flexible that you can make innumerable transactions in a day. Hence, the banks don't pay any interest on your invested amount but it charges certain service charges on such accounts.

An account generally opened by business people for convenience. Money can be withdrawn and deposited at any time. Withdrawal is possible only by means of cheques. Banker generally does not allow any interest on this account. Two basic privileges which customers can enjoy are: overdraft facilities and other facilities like collection of cheques, transfer of money and rendering agency and general utility services.

<i>Pros of current accounts:</i>	<i>Cons of current accounts:</i>
Easy, fast access to your funds	Usually low interest rates
Fast, easy and charge-free transfers of funds for bill payments	Special services may incur heavy charges
Package accounts provide additional money-saving benefits	Security of electronic transfer and card payments can be compromised
Overdraft facilities	Paperwork and terms and conditions can be confusing and time-consuming
Electronic payment facilities	Large corporate businesses may pay large fees on transactions
Cheque book facility for cashless payments	Losing a card can restrict access to funds
Specialized accounts for different customer groups; increasing the likelihood of good-value services	Chance of fraud when using internet banking.
Management of regular payments	
Online, electronic management of money available	
Access to money abroad without the need to exchange cash.	

Savings Accounts are the most popular kind of individual accounts for personal purpose of saving your investments and getting interest rates. Savings account provides cheque facility along with flexibility for deposit and withdrawal of funds from your account.

The main features of savings accounts are: meant for Small Savers primarily; restrictions on withdrawals; minimum balance varies with different banks; In Ukraine it is from 500 to 1000 UAH; interest on deposit; no overdraft facility. It can be sanctioned though; ATM cards available, net banking and mobile banking facility available.

<i>Pros of saving accounts:</i>	<i>Cons of saving accounts:</i>
Saving account encourages savings habit among salary earners and others who have fixed income.	Low Returns
It enables the depositor to earn income by way of saving bank interest.	Withdrawal Limitations
It shows income of a salaried and other person earned during the year.	Minimum Balance Requirements
Saving account passbook acts as an identity and residential proof of the account holder.	Missed Opportunities.
It provides a facility such as Electronic fund transfer (EFT) to other people's accounts.	
It helps to do online shopping via facility like internet banking.	
It aids to keep records of all online transactions carried on by the account holder.	
The bank offers number of services to the saving account holders.	

Fixed deposit. When a fixed sum of money is deposited in bank for a definite period, it is called fixed deposit. The period may range from 30 days to any length period of time.

Fixed deposit (FD) is a financial instrument where a sum of money given to a bank, financial institution or company whereby the receiving entity pays interest at a specified percentage for the time duration of the deposit. The rate of interest paid for fixed deposit varies according to amount, period and from bank to bank. At the end of the time period of the deposit the amount that is originally given is returned to the investor.

Fixed deposit features: repayable after the specific time period; emergency closure; penalty; interest payable; possibility of monthly payment; nomination facility.

<i>Pros of fixed deposit:</i>	<i>Cons of fixed deposit:</i>
Fixed deposit encourages savings habit for a longer period of time.	Protection against inflation.
Fixed deposit account enables the depositor to earn a high interest rate.	Withdrawing funds
Safety of your future	The risk factor
Risk free	Income tax.
The bank can lend such funds for short term loans to businessmen.	

Recurring deposits. These are special kind of Term Deposits which are suitable for people who do not have lump sum amount of savings, but are ready to save a small amount every month. These accounts gain interest on the amount available in your account. This account is specially designed for the working public who don't want to invest a large amount at one instance.

Recurring deposits features: the main objective of recurring deposit account is to develop regular savings habit among the public; the period of deposit is minimum six months and maximum ten years; no withdrawals are allowed. However, the bank may allow closing the account before the maturity period; the bank provides the loan facility.

<i>Pros of recurring deposits:</i>	<i>Cons of recurring deposits:</i>
Recurring deposit encourages regular savings habit among the people.	You cannot withdraw the money anytime you wish
Recurring deposit account holder can get a loan facility.	You cannot change the amount you like to invest monthly once decided.
The bank can utilize such funds for lending to businessmen.	It has a comparatively lower rate of interest.
The bank may also invest such funds in profitable areas.	
No TDS (Tax Deducted at Source) is applicable on recurring deposits.	

A certificate of deposit (CD) is a savings certificate with a fixed maturity date, specified fixed interest rate and can be issued in any denomination aside from minimum investment requirements.

A CD restricts access to the funds until the maturity date of the investment. CDs are generally issued by commercial banks and are insured by the FDIC up to \$250,000 per individual.

A certificate of deposit is a promissory note issued by a bank. It is a time deposit that restricts holders from withdrawing funds on demand. A CD is typically issued electronically and may automatically renew upon the maturity of the original CD. When the CD matures, the entire amount of principal as well as interest earned is available for withdrawal.

Certificate of deposit features:

Early Withdrawal Penalty. Although it is still possible to withdraw money from a CD prior to the maturity date, this action will often incur a penalty. This penalty is referred to as an early withdrawal penalty, and the total dollar amount depends on the length of the CD as well as the issuing institution. Typical early withdrawal penalties are equal to an established amount of interest.

Types of CDs Available:

- CDs of less than \$100,000 are called small CDs. Some of these CDs will have minimum investment requirements. For example, a financial institution may require at least \$1,000 for a CD to be opened.
- CDs for more than \$100,000 are called large CDs or jumbo CDs. Almost all large CDs, as well as some small CDs, are negotiable.

The term of a CD generally ranges from one month to five years

Deposit Insurance

Explicit **deposit insurance** is a measure implemented in many countries to protect bank depositors, in full or in part, from losses caused by a bank's inability to pay its debts when due. Deposit insurance systems are one component of a financial system safety net that promotes financial stability.

Many national deposit insurers are members of the International Association of Deposit Insurers (IADI), an international organization established to contribute to the stability of financial systems by promoting international cooperation and to

encourage wide international contact among deposit insurers and other interested parties.

A fund that is devoted to insuring the deposits of individuals by the Federal Deposit Insurance Corporation (FDIC). The Deposit Insurance Fund (DIF) is set aside to pay back the money lost due to the failure of a financial institution. The DIF is funded by insurance payments made by the banks.

The Federal Deposit Insurance Corporation (FDIC) provides deposit insurance that guarantees the deposits of member banks up to \$250,000 per depositor, per bank. Member banks are required to place signs visible to the public stating that "deposits are backed by the full faith and credit of the United States Government."

When insured bank fails insuring agency may ask some healthy bank to take over failed bank. It can take charge and manage operation of failed bank till suitable buyer is found. It can pay off the deposit up to the maximum amount insured.

Importance of deposits in banking

Deposit Mobilization. Financial institutions provide the system through which savers deposit their money and borrowers can access those resources. The process by which deposits are transformed by the banking sector into real productive capital is at the core of financial intermediation.

Banks ensure the efficient transformation of mobilized deposit funds into productive capital. Deposit mobilization is therefore a key first step in the financial intermediation process. Banks simply cannot function without deposits from savers in the economy.

Historically, economists had trouble deciding how bank deposits fit into the money supply. By the 1900s, however, most economists agreed that deposits and bank notes alike had to be considered part of the money supply.

Savings and Investment Methods. Deposits are not only a part of the money supply; they also affect it in important ways. Governments create and spread money throughout the economy in response to key movers like investment. Investment is largely possible because people can move large sums of money by saving, transferring and withdrawing funds from bank accounts. Bank deposits are a primary

tool for investment and without them businesses would not be able to access funds from individuals at all.

Money Creation through Demand Deposits. Businesses and individuals can also receive funds through the bank itself. Banks can affect the money supply through demand deposits, or loans that the bank funds through cash deposits it receives. By using interest rates to create their own profit, banks are also creating money to increasing the money supply in the economy. Banks cannot use all their reserves for loans, however -- the government requires them to keep a certain amount to satisfy withdrawals.

Various non deposit sources

Apart from these traditional fixed deposits, saving deposit, and current accounts, banks in modern times take the form of numerous deposit schemes with a wide range of interest for a variety of maturities to meet diverse needs of the public and to attract different class of savers. The efficiency of depends on its ability to attract deposits.

Borrowings. The sources of borrowings are:

Central Bank: The Central Bank will provide liquidity to the banks and other institutions when sources dry up. They may grant accommodation to scheduled banks by way of:

- a) Rediscounting or purchase of eligible bills; and
- b) Loans and advances against certain securities

Borrowing from interbank: The interbank lending market is a market in which banks extend loans to one another for a specified. Such loans are made at the interbank rate (also called the overnight rate if the term of the loan is overnight). These are:

1. Interbank deposit sources
2. Interbank call money
3. Repurchase agreement

Borrowing from international financial institution: These are provide by the international institution like, International Monetary Fund (IMF), World Bank and its affiliated bodies, Development banks and other foreign agencies/development partners.

Topic 7. Lending

Objectives

In this chapter we will look at the importance of lending, general principles of good lending practice, in particular the canons or principles of lending. Lending money is an important part of a banking business but it must be done properly and prudently, otherwise the bank may sustain loss. Much of bank lending is now credit scored, so we'll also look at this area. Tenets of lending- safety, profitability, liquidity, and risk diversification. Main kinds of fund-based and non-fund based credit facilities. Credit scoring. Lending products offered by banks.

What is lending?

Lend - grant to (someone) the use of (something) on the understanding that it will be returned.

Lending (also known as "financing") in its most general sense is the temporary giving of money or property to another person with the expectation that it will be repaid. In a business and financial context, lending includes many different types of commercial loans.

Lending and borrowing are the same transactions from the two viewpoints.

The definition "loan" came from the Latin "credo" which translates as "believe", "trust", or "creditum", which means "debt" or "loan". That is why the category of credit is considered by economic science mainly as the trust of one person to another, on the basis of which a certain value is given in a loan in monetary or commodity form for temporary use. **Trust** is the foundation of credit relations, one of the most important prerequisites for their emergence.

Elements of credit relations are the **objects** and **subjects** of the loan.

Object of credit relations - a certain amount of cash, which is in the free use of the creditor and can be transferred to the borrower for use at a certain percentage.

The subjects of the loan are the lenders and borrowers.

Lenders are businesses or financial institutions that lend money, with the expectation that it will be paid back. The lender is paid interest on the loan as a cost of the loan. The higher the risk of not being paid back, the higher the interest rate. The lender is a participant in a loan agreement, which provides a loan, that is, certain money or tangible assets for temporary use.

Characteristic features of the creditor's activities are as follows:

- ~ sources of values for the issuance of a loan may be both own material and monetary resources of the creditor, as well as funds involved in other subjects of the market;
- ~ the purpose of the creditor is to obtain a profit from the provision of value for temporary use;
- ~ the creditor's resources, which are transferred to use by other economic agents, remain their property.

Borrower is a party to a loan agreement that obtains certain values for temporary use and undertakes to return them after the expiration of the established term.

Characteristic features of the borrower are:

- ~ the purpose of the borrower is to meet the temporary need for additional monetary or material resources;
- ~ the borrower is not the owner of the resources received temporarily, but is only their temporary administrator;
- ~ the borrower must provide economic and legal guarantees for the returning of funds received from the creditor

The canons of lending

There are general principles of good lending or canons of lending, which, if applied consistently, should reduce the guesswork and hence risk involved in lending to a customer.

The general principles of good lending can be broken down into five categories:

- ~ the borrower

- ~ the lending proposition (*The principle of the purpose of the loan*)
- ~ security (*The principle of loan security*)
- ~ repayment (*Principle of returning*)
- ~ remuneration. (*The principle of payment*)

The borrower: a bank's agreement to lend should depend on its view of the customer's current and future ability to repay. It is therefore essential that the bank obtains as much information as possible regarding the financial affairs of the potential borrower and is confident that it can rely fully on the information provided. Other factors the bank should consider, especially in respect of advances for business purposes, include: the age or, more importantly, the maturity of the borrower; qualifications and experience; financial acumen; integrity and reliability; organisational ability and efficiency.

The principle of deadline (Lending period) - provides for the formation of a period of using borrowed funds and the deadline for their return to the creditor. The need to establish such a term due to the fact that the loan is issued to meet only the temporary needs determined by the specifics of the activity of a particular borrower. The principle of timeliness implies the return of the loan is not at any convenient time for the borrower, and in a strictly defined period fixed by agreement between the parties.

The lending proposition (*The principle of the purpose of the loan*) - lies in the fact that Subjects, who have expressed the intention to enter into credit relations, must determine in advance the purpose for which the funds will be used. For the lender, the main criteria for determining the goals of a loan are the proper returns and the minimum level of risk for those operations for which a loan is issued. Compliance with such a principle is ensured by the creditor's control over transactions carried out by the borrower.

The crucial questions to consider when analyzing the lending proposition are:

- ~ What is the purpose of the advance?
- ~ How much of an advance is required?

~ When will the advance be repaid?

Security (*The principle of loan security*) - means that there are certain conditions for the borrower to return the value received for temporary use. *Such conditions can be* when the borrower owns of certain tangibles of the equivalent value of the loan for the acquisition of which it is issued. This principle expresses the need to protect the interests of the creditor in case of violation by the borrower of their obligations. The amount of property security is set at a level that exceeds the size of the loan, in the event of a decrease in the market value of the collateral.

Repayment (*Principle of returning*) - means the need for obligatory repayment by the borrower of the value received for temporary use. The possibility of this principle for the creditor is due to the fact that he only provides a loan that expects the return of the transferred values. For the borrower, the importance of this principle is conditioned by the need to organize its activities in such a way as to ensure the release of the value received for a temporary use and its return to the creditor.

Remuneration (*The principle of payment*) - is that the loan is provided to the borrower for a fee, which is determined in the form of interest. Compliance with this principle is a decisive factor in the economic interest of the creditor in the transfer of values for temporary use to the borrower. Remuneration is very important as this is one of the ways in which the bank makes a profit!

Credit scoring

Credit scoring is a statistical analysis performed by lenders and financial institutions to assess a person's creditworthiness. Lenders use credit scoring, among other things, to decide on whether to extend or deny credit. A person's credit score is a number between 300 and 850, 850 being the highest credit rating possible.

Creditworthiness is a valuation performed by lenders that determines the possibility a borrower may default on his debt obligations. It considers factors, such as repayment history and credit score. Lending institutions also consider the amount of available assets and the amount of liabilities to determine the probability of a customer's default.

The scorecard refers to the set of points that are used when scoring an application. Points are allocated according to the characteristics of various applicants whose accounts were fully repaid on time with no issues and then compared with the characteristics of those facilities that were either slow to repay, and are compared again to those who did not repay their loans in full.

There are several purposes for which credit scoring models can be used:

- to predict the likelihood of a new loan facility going bad or becoming delinquent;
- to determine the level of credit limit that may be given to a credit card;
- to predict the credit risk of approving a new current account and providing overdraft facilities.

These type of credit scoring is an *application scoring*.

There is also *behavioral scoring* which can be used to:

- increase a credit card limit for an existing customer;
- decide whether or not to pay items presented to an existing account if there are insufficient funds available;
- upgrade credit and/or debit cards to say, a “gold” account.

<i>The benefits of credit scoring include:</i>	<i>The limitations of credit scoring include:</i>
a consistent and impartial assessment of customers – all customers are treated consistently and equitably	a large number of historical applicants and repayment patterns data is needed to build a reliable scorecard – this can present a challenge, particularly to small organisations
allows management to control the “credit tap” – that is, increase or reduce credit exposure, therefore giving the bank control over the approval volumes/ “bad” rates	it can be expensive to build and put in place, although there can be the option of developing an in-house version or buying an “off the shelf” package
a uniform method of processing standard customer requests	it is time sensitive, as the efficiency will deteriorate over time; old data can prove unreliable, therefore systems need to be replaced or updated over time
an increase in the ability to consider volume credit approvals irrespective of value	it is not infallible and errors can occur
much improved management information systems as information is held electronically	not all lending decisions are suitable for credit scoring, depending on the customer’s circumstances; it may be that some applications still need to be manually underwritten.
an efficient and cost effective method of credit assessment	
with a standard and tested system, the quality of the credit portfolio will be reliable during a stable economic cycle	
an increased level of customer service through increased response times to credit requests.	

Lending products offered by

Banks “borrow” funds from depositors which are then advanced to other customers. The margin between the rate of interest paid by the banks and the rate charged to borrowers is profit for the bank. You will appreciate therefore that lending is a very important part of a bank’s business.

Lending takes many forms. Different banks have different names for their products but in practice the basic elements are broadly similar. We will now look at some of the more common lending products.

- ~ Bank financing for small business start-up and working capital
- ~ Asset financing for equipment and machinery or business vehicles.
- ~ Mortgages
- ~ Credit card financing
- ~ Vendor financing (through trade credit)
- ~ Personal (unsecured) loans

Overdrafts

Overdrafts are only available on current accounts and involve the customer withdrawing from their account, either by cheque or any other means, more than has been deposited which means that, instead of the bank being due to repay to the customer the balance on the account, the bank is owed money by the customer.

Personal loans

The minimum and maximum amounts that can be lent by way of a personal loan will vary from bank to bank. Generally, personal loans are unsecured. The maximum term is usually ten years. Personal loans can be granted for a variety of purposes, notably the purchase of motor vehicles, home improvements, holidays and purchases of household items such as furniture.

Interest is calculated by applying the rate of interest to the whole amount of the loan in respect of the full term of the loan. The total is then divided by the number of monthly payments agreed to determine the amount of the repayment instalments. These details will be conveyed to the customer in a credit agreement to be entered into between the bank and the customer.

A variety of personal loans are currently available on the market; for example, some will have a variable rather than a fixed rate of interest, some may allow one-off payments to be made by the customer in reduction of the debt, etc.

House purchase loans (mortgages). The most common types of house purchase loans are the following.

■ **Interest only mortgages.** With an interest only loan, there are no repayments to the loan account of any capital at all during the life of the loan. The payment made by the customer to the lender covers only the interest accruing on the loan. The only occurrence that will cause this amount to change is if there is a change in base rate.

■ **Repayment mortgages**

This type of loan requires the borrower to repay part of the capital borrowed and an interest payment charged on that capital every time an instalment is made. The balance of the account should therefore be zero at the end of the loan period.

■ **Personal pension mortgages**

A personal pension may be used by a self employed person or by anyone who is not a member of an occupational pension scheme to provide the cash required to repay their interest only mortgage. With a personal pension, there is some tax relief. In addition, the individual may retire at any time from age 50, and can withdraw up to 25% of the value of their pension fund as a tax-free lump sum which facilitates the repayment of the mortgage.

The type of lender you will need for a business loan depends on several factors:

~ **Amount of loan:** The amount of money you want to borrow influences the type of lender. For larger loans, you may need a combination of types of commercial loans.

~ **Assets pledged:** If you have business assets you can pledge as collateral for the loan, you can get better terms than if your loan is unsecured.

~ **Type of assets:** A mortgage is typically for land and building, while an equipment loan is for financing capital expenditures like equipment.

~ **Startup or expansion:** A startup loan is typically much more difficult to get than a loan for expansion of an existing business. For a startup, you may have to look at some of the more untraditional types of lenders described below.

~ **Term of the loan:** How long do you need the money? If you need a short-term loan for a business startup, you will be looking for a different lender than for a long-term loan for land and building.

Topic 8. An outline of Bank Services

Objectives

In this chapter we will explain the outline money transmission and payment services. We are now going to consider how technology has enabled the range of bank services and money transmission methods to be extended, particularly online and telephone banking, and how funds can be transferred electronically. We will also look at the increasing use of plastic cards, especially credit and debit cards, in banking and money transmission. Impact of information and telecommunication technologies on banking Automated Teller Machines (ATMs). Tele-banking. Internet Banking. Mobile Banking. Electronic Funds Transfer Electronic clearing system.

Payment Services

There are several ways how to provide payment services

- **Currency and Coin**
- **Checks**
- **Electronic Payments**
- **Government Payments**

Currency and Coins

The Fed is responsible for distributing currency and coin to depository institutions, and for ensuring that enough currency and coin are in circulation to meet public demand.

Federal Reserve notes are printed by the U.S. Bureau of Engraving and Printing in Washington, D.C., and Fort Worth, Texas. Coin is produced at U.S. Mints in Philadelphia and Denver. New currency and coin are shipped to Reserve Banks and branches across the country. When people need additional cash, such as during the holidays or at times of natural disaster or crisis, a depository institution may order more currency and coin from its Reserve Bank or branch. Institutions pay for these orders by drawing down their Federal Reserve account balances.

Depository institutions may return excess cash to their local Reserve Bank for credit to their reserve accounts. Reserve Banks sort and verify the deposits. They store coin and reusable paper notes in their vaults. Soiled and worn-out notes are destroyed. Counterfeit notes are sent to the Secret Service. Bags of coin are weighed to verify amounts. Reserve Banks do not check coins for wear and tear.

The Federal Reserve Banks ensure that there is enough fit currency and coin in circulation to meet public demand. There was \$888 billion of currency in circulation at the end of 2009. Using high speed machines, Reserve Banks processed 32 billion pieces of currency in 2009 and destroyed 6 billion pieces of unfit currency.

CHECKS

The number of checks has been declining since the mid-1990s as the use of electronic payments options has grown.

Reserve Banks also provide check collection services to depository institutions. The Fed processes approximately one-third of the paper items that ultimately clear as checks in the United States. Commercial banks also may clear checks directly with each other through clearinghouse associations or through agreements with other banks. Nationwide, the number of checks written has been declining since the mid-1990s as the use of electronic payments has grown. In addition, the Check Clearing for the 21st Century Act, or “Check 21,” enacted in 2004, allows an electronic image of a check to be used for clearing. Today, almost 99% of checks are processed as images. Since late 2003, Reserve Banks have reduced the number of locations where checks are processed from 45 offices to a single site in Atlanta.

The Federal Reserve Banks process approximately one-third of the paper items that ultimately clear as checks in the country. In 2009, the Federal Reserve System cleared 8.6 billion checks, most of which were processed as electronic images.

ELECTRONIC PAYMENTS

The Fed processes approximately three-fourths of the automated clearinghouse payments in the country.

Automated Clearinghouse (ACH)

While the Fed's volume of check processing has been declining, its volume of electronic payments has been rising. The Fed's Automated Clearinghouse (ACH) payment system provides an electronic means to exchange debit and credit entries between depository institutions to settle customer transactions. The Fed processes approximately three-fourths of the nation's ACH payments. Electronic Payments Network, a private organization, is the nation's other ACH operator. Common ACH credit transfers include direct deposits of payroll, Social Security benefits, and tax refunds. ACH debit transfers commonly include recurring payments for mortgages, insurance premiums, utility bills, and the like. Converted paper check payments and one-time payments made over the Internet or by telephone are other examples.

Fedwire

For larger transactions, debits and credits are transferred electronically through Fedwire, a highly sophisticated, computerized communication system that transfers funds almost instantly from one depository institution to another anywhere in the United States. Fedwire, which is operated by the Reserve Banks, includes the Fedwire Funds Service and Fedwire Securities Service. The Funds Service allows depository institutions and certain other financial institutions to make large payments to each other in real time. The Fedwire Securities Service is a transaction settlement system that enables depository institutions and certain other government and financial institutions to hold, maintain, and transfer securities. These include securities issued by the U.S. Treasury, other federal agencies, government-sponsored enterprises, and certain international organizations, such as the World Bank.

GOVERNMENT PAYMENTS

Federal Reserve Banks process a wide range of electronic payments for the government, such as Social Security and payroll checks.

The Fed also acts as the U.S. government's banker. Reserve Banks maintain the Treasury Department's checking account and clear U.S. Treasury checks. They also process a wide range of electronic payments for the government, including Social Security and payroll checks. Reserve Banks also support the issuance, transfer, and redemption of U.S. Treasury securities, manage Treasury securities auctions, and

process U.S. savings bonds. Reserve Banks handle a variety of other operations for government units, including processing food coupons and postal money orders.

E-Banking

E-Banking or Electronic Banking is a major innovation in the field of Banking. Earlier Banking was conducted in a very traditional manner, there were no such innovations. Information revolution led to the evolution of Internet, which lead to E-Commerce continued by evolution of E-Banking.

History of E-Banking

- E-Banking History dates back to 1980s.
- The term online became popular in the late '80s and referred to the use of a terminal, keyboard and TV (or monitor) to access the banking system using a phone line
- Stanford federal credit union was the first who offer online internet banking services to all of its members in 1994.
- Later on snapped up by other banks like Well Fargo, Chase Manhattan and Security First Bank.

What Is an E-Bank? Logical answer is to use e-channels:

- Internet
- WAP based mobile network
- Automated telephone
- ATM network
- SMS and FAX messaging
- Multipurpose information kiosks
- Web TV and others ...

E-channels enable financial transactions from anywhere and allow non-stop working time.

Advantages of E-Banking: round the clock banking; user friendly; low cost; portable banking; quality banking; speed banking.

Limitations of E-Banking: start-up cost; training & maintenance; security; legal issues.

VIRTUAL BANKING SERVICES

Modern banking is virtual banking. It means a customer cannot see the bank but with the help of technology he can conduct the banking activities anywhere in the world.

The major types of virtual banking services includes:

1. Automated Teller Machines (ATMs)
2. Smart Cards
3. Phone banking
4. Home banking
5. Internet banking
6. Mobile banking

Automated Teller Machines (ATMs)

ATMs are widely used electronic channels in banking. It is a computer controlled device at which the customers can make withdrawals, check balance without involving any individuals.

To use this system customers are given a plastic card which contains the customer's name & account no.

Customer is given a pin number. Whenever he wants to use it he needs to enter pin number.

Mostly ATMs are near to branches but nowadays ATMs are available at places like malls, theaters, stations etc.

Smart Cards

It is a chip based card (micro chip containing monetary value). When a transaction is made using the card, the value is debited & a balance comes down. It is used for making purchases without the need of any pin. It is a powerful card which carries out functions of ATM card , Credit Card , Debit Card.

Tele-banking

It means banking over phone. Mainly used for marketing banking services.

A customer can do entire Non-Cash related banking over phone anywhere at anytime
With fall in mobile phone rates mobile banking will emerge as one of the most cost effective delivery channel.

Internet Banking

It has helped in banking at the click of a mouse. In internet banking , customer of a bank with a PC can log on to the bank website & conduct basic functions.

Mobile Banking Services

SMS Banking

SMS Banking brings the Banking at your fingertips. Bank has introduced the SMS Banking Facility for its customers. Under SMS Banking following facilities are offered to the Customers.

- Account information
- Transaction
- Investments
- Support
- Content services

Advantages of Mobile Banking

□ Benefits for Mobile Operators

- Operators can expand their services portfolio, promote their brands and create strategic marketing differentiation - attracting new customers
- Mobile Banking strengthens customer loyalty and reduces churn and attrition rates.
- Mobile Banking increases operator revenue by boosting traffic

□ Benefits for Financial Institutions

- Mobile Banking allows financial institutions to enhance customer satisfaction and retention by offering new, better services while gaining a direct marketing channel for their products and services

- They attract new customers to the one on-one bank-customer relationship
- By turning mobile phones into their bank's ATMs, financial institutions gain access to new markets, different from those traditionally served by their physical branches.
- As access to mobile phones grows worldwide, so does the opportunity to attract more customers and extend the reach of financial services.
- Access to banking services at anytime and from anywhere also generates revenue through higher service usage, and reduces operating expenses because of fewer direct teller interactions, while maintaining or improving the level of services.
- Financial institutions gain another important benefit by adding Mobile Banking to their existing channels. They will be with their customers at all times.

Benefits for the End User

- Mobility
- More Secured than Manual Transactions
- Time Independent (24/7)
- Less Costly
- Convenient
- Speedy

ONE OTHER IMPORTANT BENEFIT - ENCOURAGES GREEN AND PAPERLESS BANKING

Disadvantages of Mobile Banking

- May prove costly for normal mobile holders
- Restricted scope
- Non-uniformity of services
- One account managed through only one number
- Threat of virus and spams
- Higher costs of KYC (Know Your Customer)
- Risk of Unofficial mobile application
- Theft of mobile
- Loss of Personal Banking Experience

- Discomfort due to Small Screen
- Not considered for bulky or large volume of transactions

Internet Banking

Internet Banking allows you to conduct bank transactions online, instead of finding a bank and interacting with a teller. **In a broad sense, it is the use of electronic means to transfer funds directly from one account to another, rather than by cheque or cash.**

DEFINITION

- Systems of banking in which customers can view their account details, pay bills, and transfer money by means of the internet.
- The remote delivery of new and traditional banking products and services through electronic delivery channels.

Online banking allows a user to execute financial transactions via the internet. Online banking is also known as "internet banking" or "web banking." An online bank offers customers just about every service traditionally available through a local branch, including deposits, which is done online or through the mail, and online bill payment.

Online banks do not provide direct ATM access, but they make provisions for consumers to use ATMs at other banks and retail stores, and they may reimburse consumers for some of the ATM fees charged by other financial institutions. Reduced overhead costs associated with not having physical branches typically allow online banks to offer consumers significant savings on banking fees; they also offer higher interest rates on accounts. Online banks handle customer service by phone, email or online chat. Online banking is frequently performed on mobile devices as Wi-Fi and 4G networks have become widely available.

SERVICES: Bill Payment; Credit Card; Insurance; Customer services; Recharging your prepaid phone; Shopping

Who can use internet banking?

Step 1: Access Internet Banking - Obtain your User ID and Passwords.

Step 2: Create your Own Unique User ID.

Step 3: Link the Account Number to your User ID

Advantages of Online Banking

Convenience is a major advantage of online banking. Basic banking transactions such as paying bills and transferring funds between accounts can easily be performed at times convenient to consumers. In effect, consumers can perform banking transactions 24 hours-a-day, seven-days a week. Online banking is fast and efficient. Funds can be transferred between accounts almost instantly, especially if the two accounts are held at the same banking institution. Banking accounts can be monitored more closely thanks to online banking. This allows consumers to keep their accounts safe. Around-the-clock access to banking information provides early detection of fraudulent activity that has the potential to cause financial or damage loss. Online banking allows for the opening and closing of fixed deposit and recurring deposit accounts that typically offer higher rates of interest.

Disadvantages of Online Banking

For a novice online banking customer, using systems for the first time may present challenges that prevent transactions from being processed. Although online banking security is continually improving, such accounts are still vulnerable when it comes to hacking. Consumers are advised to use their data plans, rather than public Wi-Fi networks when using online banking, to prevent unauthorized access. Additionally, online banking is dependent on a reliable internet connection. Connectivity issues from time-to-time may make it difficult to determine if banking transactions have been successfully processed. On occasion, consumers may prefer face-to-face interactions for more complex banking issues.

Topics of practical classes

Topic 1. Money

Learning Objectives are to find out approaches to understanding the essence of money as an economic category, to master the mechanism of origin of money, to ensure the inevitability of the appearance of money in the process of development of social production and exchange;

Issues: What Is Money? The emergence of money as an objective consequence of the development of commodity production and exchange. Rationalistic and evolutionary concepts of the origin of money. Meaning of Money. Functions of Money. Medium of Exchange. Unit of Account. Store of Value. Evolution of the Payments System. Commodity Money. Fiat Money. Cheques. Electronic Payment. E-Money. Measuring Money. Are We Headed for a Cashless Society?

Topic 2. Financial intermediation.

Learning Objectives are understand the nature and purpose of financial intermediaries; identify the main features of the bank and distinguish the bank from other financial intermediaries; describe the main types of non-bank financial institutions.

Issues: Function of Financial Intermediaries: Indirect Finance. The Importance of Financial Intermediaries to Securities Markets: Types of Financial Intermediaries. Depository Institutions (Banks). Contractual Savings Institutions. Investment Intermediaries. Nonbank Financial Institutions . Insurance. Life Insurance. Property and Casualty Insurance. Credit Insurance. Pension Funds. Registered Pension Plans (RPPs). Social Security and Public Pension Plans. Finance Companies. Securities Market Operations. Investment Banking. Securities Brokers and Dealers. Organized Exchanges. Mutual Funds.

Topic 3. The Banking system

Learning Objectives are to formulate the basic principles of the construction of banking system

Issues: Banks and Other Financial Institutions. Historical Development of the Ukrainian Banking System. The Dual Banking System in the United States. The importance of main universal principles of banking Main definitions; functions of Banking System. Main types of banking systems are known in the world such as one-level and two-tier banking system. International Banking .

Topic 4. Banker/Customer Relationships

Learning Objectives are to discuss the banker/customer relationship.

Issues: What is a bank? What is a customer? The relationship between banker and customer. The duties of both the banker and the customer. The Banking Code. Long-Term Customer Relationships. Personal customers. Business customers. Sole traders. Partnerships.

Topic 5. Central bank.

Learning Objectives are to analyze the activity of Central Bank.

Issues: Central Banking and the Conduct of Monetary Policy. Central Banks and the Bank of Ukraine. The Money Supply Process. Tools of Monetary Policy. The Conduct of Monetary Policy: Strategy, and Tactics.

Topic 6. Deposit Banking

Learning Objectives are to study the Deposit Banking.

Issues: What are 'Bank Deposits'? Description of deposit accounts: current deposit accounts; savings accounts; time deposit accounts; call deposit accounts. Federal Deposit Insurance Corporation. Deposit Interest Rate. Importance of deposits

in banking. Deposit Mobilization. Consequences of failing to mobilize deposits in the economy. The Importance of Bank Deposits in the Money Supply.

Topic 7. Lending

Learning Objectives are to study lending.

Issues: What is lending? The canons of lending. Credit scoring. Lending products offered by banks. The Consumer Credit Act. Managing Credit Risk. Screening and Monitoring. Long-Term Customer Relationships. Loan Commitments. Collateral and Compensating Balances. Credit Rationing.

Topic 8. An outline of Bank Services

Learning Objectives are to overview study Bank Services.

Issues: Savings and investment accounts. Current accounts. Savings accounts. Lending facilities. Money transmission and payment services. Share dealing services and advice. Investment advice. Investment and portfolio management. Executor and trustee services. Insurance and assurance. Safe custody services. Travel facilities. Telephone and online banking. Electronic Funds Transfer at Point Of Sale (EFTPOS). Electronic funds transfer – CHAPS. Credit cards.

TESTS

1. It is a system of exchange where goods or services are directly exchanged for other goods or services without using a money:

- A. Inflation;
- B. Credit;
- C. Money;
- D. Barter

2. Commodity money; representative money; fiat money – are:

- A. the main forms of money;
- B. the main functions of money;
- C. the main types of inflation;
- D. the main theories of money.

3. It is a system of exchange where goods or services are directly exchanged for other goods or services without using a money:

- A. Function of money;
- B. Barter;
- C. Money;
- D. Form of money.

4. It is a specific product that has the ability to be changed on any other product is the universal equivalent.

- A. Function of money;
- B. Barter;
- C. Money;
- D. Form of money.

5. A function of money, the main essence of which is that money is a means of measuring the value of all other commodities, because they have their own value:

- A. measure of value;
- B. a medium of exchange;
- C. a unit of account;
- D. World money.

6. Commodity money include:

- A) bills;
- B) Shells;
- C) securities;
- D) silver coins.

7. Fiat money include:

- A) bills;
- B) gold coins;
- C) securities;
- D) silver coins.

8. A function of money, the main essence of which is that money a standard numerical one of measurement of the market value of goods, services, and other transactions

- A. measure of value;
- B. a medium of exchange;
- C. a unit of account.
- D. World money.

9. According to this function of money, money must be able to be reliably saved, stored, and retrieved – and be predictably usable as a medium of exchange when it is retrieved.

- A. store of value;
- B. a medium of exchange;
- C. a unit of account;
- D. World money.

10. This type of money is a currency established as money by government regulation or law:

- A. Representative money;
- B. Fiat money;
- C. Commodity money;
- D. Digital money.

11. What elements does include Federal Reserve System:

- A. All commercial banks and regional Federal Reserve Banks.
- B. The Federal Deposit Insurance Corporation and the central Board of Governors.
- C. The central Board of Governors and 12 regional Federal Reserve Banks.
- D. The central Board of Governors and 50 regional Federal Reserve Banks.

12. The banking system in Ukraine has:

- A. A one-level structure.
- B. A two-level structure.
- C. A three-level structure.
- D. A four-level structure.

13. The main goal of National Bank of Ukraine is:

- A. To maintain the stability of the national economy.
- B. To maintain the stability of the society.
- C. To maintain the stability of the financial intermediaries.
- D. To maintain the stability of the national currency.

14. A financial institution that accepts deposits from the public and creates credit is:

- A a customer;
- B a banker;
- C a bank;
- D a financial intermediary.

15. In case someone has opened an account with a bank, she/he becomes:

- A a bank customer;
- B a client;
- C a creditor;
- D a customer.

16. Business or an individual that purchases the goods or services produced by a business is:

- A a bank;

- B a trustee;
- C a vendor;
- D a customer.

17. Why banks are highly regulated in most countries:

A because the customer deposits securities or other valuable with the banker for the safe custody;

B due to bank's performing a number of agency functions for the conveniences of his customer;

C because banks assumes the position of a debtor;

D due to their importance in the financial stability of a country.

18. Money placed into banking institutions for safekeeping is:

A bank deposits;

B reserve fund;

C primary capital;

D borrowings.

19. Given the following: it doesn't serve a purpose of saving your investments. Which type of account is described?

A fixed deposit;

B current account;

C savings accounts;

D recurring deposits.

20. Given the following: an account generally opened by business people for convenience; withdrawal is possible only by means of cheques; banker generally does not allow any interest on this account; money can be withdrawn and deposited at any time. Which type of account is described?

A fixed deposit;

B recurring deposits;

C savings accounts;

D current account.

Comprehensive practical individual task

Comprehensive practical individual task of discipline "Banking" performed independently for each student based on the proposed list of areas of work. CPIT provides thorough analytical study of a particular aspect of monetary relations on the basis of knowledge gained in lectures and workshops. The purpose of CPIT is deepening and consolidation of acquired knowledge and skills development research and analysis in studies of economic nature. IPIT issued in accordance with the established requirements. In the performance and design of IPIT student can use computers, including Microsoft Word and Excel. IPIT is rated on a 100-point scale, taking into account parameters such as depth scientific research, the quality of analytical work, level of acquired knowledge, compliance for writing. CPIT performs one of the component modules required test credit discipline "Money and credit".

Sample tasks

1. Analyze the prerequisites and the need for money.
2. Identify indicators of volume and structure of money supply and describe principles of construction.
3. Give characteristic of commercial banks functions.
4. To prove the concept of currency and monetary relations.

Problem. Calculate the value of units in money supply and money supply if:

- a) cash in circulation outside deposit-taking corporations (banks) - 60 bln. UAH .;
- b) transferable deposits in national currency - 385 bln. UAH .;
- c) transferable deposits in foreign currency and other deposits - 250 bln. UAH .;
- d) securities other than shares - 70 billion. UAH.

Criteria for assessing CPIT.

The student's assessment of the CPIT is set on a 100-point scale as follows:

Excellent "(90-100 points) - the full answer to the question (the highest quality of the written assignment), which must meet the following requirements:

- 1) A detailed, exhaustive statement of the content of the problem raised;
- 2) A complete list of required economic categories, laws of the regulations on the organization of the bank's activities in the field of e-commerce; true disclosure of their content, as well as the mechanism of their interconnection and interaction;

3) Coverage of methodological and practical aspects of the organization of the activity of banks in providing electronic services to clients taking into account world and national experience;

4) The ability to use methods of scientific, functional analysis of phenomena and processes related to the activities of the bank, to characterize their features and forms of detection;

5) The practical task (situation) is solved in full. The calculations are made without errors, with an explanation given a complete analysis of calculations and perfect conclusions.

"Good" at (75-89 points) if:

1) In relation to the answer to the highest score, at least one of the above theoretical points is not disclosed, or if:

2) When disclosing the contents of the question as a whole, the following requirements have been correctly applied to the specified requirements, which do not explicitly affect the full disclosure of the issue, or if:

3) The practical task is performed in full, but there are no significant errors in the calculations that have had a negligible impact on the results and conclusions.

"Satisfactory" (60-74 points) if:

1) Two or three items specified in the requirements are not disclosed in relation to the answer to the highest score (if they are clearly needed for a thorough disclosure of the issue);

2) The conclusions drawn or certain definitions are incompletely accepted; the logical sequence is violated when answering the questions;

3) The practical part of the CPIT is executed without explanations and conclusions.

"Poor" (below 60 points) if:

1) The character of the completed theoretical part of the CPIT gives reason to assert that the student misunderstood the content of the question or does not know the correct answer and therefore did not respond to it in content, allowing gross mistakes when answering;

2) The practical task is not performed or executed with errors that influenced the course of its implementation and conclusions.

RECOMMENDED SOURCES OF INFORMATION

1. Adamyk B.P. (2011) Tsentral'nyy bank i hroshovo-kredytna polityka: [The central bank and monetary policy] Pidruchnyk. – K.: Kondor, 416 p.
2. Banking Operations (2008). Edition 4. Written by Colin Watson BA, FCIBS. Editing and typesetting by Keystone Business Associates, Glasgow Published by The Chartered Institute of Bankers in Scotland, Drumsheugh House 38b Drumsheugh Gardens, Edinburgh EH3 7SW, September 2008.
3. Bankivs'ka systema Ukrayiny: instytutsiyni zminy ta innovatsiyi (2015) [Banking System of Ukraine: Institutional Changes and Innovation]: monohrafiya [L. O. Prymostka, M. I. Dyba, I. V. Krasnova ta in.]; M-vo osvity i nauky Ukrayiny, DVNZ «Kyyiv. nats. ekon. un-t im. Vadyma Het'mana». Kyyiv: KNEU, 435 p.
4. Bankivs'ki operatsiyi (2009) [Banking operations]: Pidruchnyk / Edited by d.e.n., prof. O. V. Dzyublyuk. – Ternopil': TNEU «Ekonomichna dumka», 696 p.
5. Dzyublyuk O. V. (2018) Transformaciya bankivs`koyi sy`stemy` u konteksti globalizacijny`x vy`kly`kiv [Transformation of the banking system in the context of globalization challenges:]: monografiya / Edited by d.e.n., prof. O. V. Dzyublyuka. Vienna : Premier Publishing s.r.o. Vienna, 354 p.
6. Hroshi ta kredyt (2006) [Money and credit: pidruchnyk. - 4-te vydannya / Edited by M. Savluk. K.: KNEU, 744 p.
7. Hroshovo-kredytne rehulyuvannya u mekhanizmi zabezpechennya makroekonomichnoyi stabilizatsiyi i efektyvnosti funktsionuvannya bankivs'koyi systemy Ukrayiny (2014) [Monetary Regulation in the Mechanism of Macroeconomic Stabilization and Efficiency of the Banking System of Ukraine]: monohrafiya / Edited by d.e.n., prof. O.V. Dzyublyuk. Ternopil', TNEU. 530 p.
8. Mishkin, Frederic S. (2010) The economics of money, banking and financial markets / Frederic S. Mishkin, Apostolos Serletis. 4th Canadian ed., Pearson Canada. Toronto.

9. Principles of banking and finance, M. Buckle, E. Beccalli (2011), University of London International Programmes, Publications Office Stewart House 32 Russell Square London WC1B 5DN, United Kingdom.

10. Pro banky i bankivs'ku diyal'nist' (2000) [Law of Ukraine On Banks and Banking]: zakon Ukrayiny : pryynyaty 07.12.2000 r. # 2121-III / Verkhovna Rada Ukrayiny. URL : <http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=2121-14>.

11. Pro Natsional'nyy bank Ukrayiny (1999) [Law of Ukraine On the National Bank of Ukraine]: zakon Ukrayiny : pryynyaty 20.05.1999 r. # 679-XIV / Verkhovna Rada Ukrayiny. URL: <http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?page=3&nreg=679-14>.

12. Rozvytok bankivs'koyi systemy Ukrayiny yak osnova realizatsiyi stratehiyi ekonomichnoho zrostannya (2010) [Development of the Ukrainian banking system as a basis for the implementation of the economic growth strategy]: monohrafiya / Edited by d.e.n., prof. O. V. Dzyublyuk. Ternopil': TNEU, 384 p.

13. Sechrest, Larry J. (2008) Free banking / theory, history, and a laissez-faire model / Larry J. Sechrest ; foreword by Kevin Dowd. The Ludwig von Mises Institute Auburn, Alabama, USA.

14. Teoriya i praktyka hroshovoho obihu ta bankivs'koyi spravy v umovakh hlobal'noyi finansovoyi nestabil'nosti (2017) [The theory and practice of monetary circulation and banking in the face of global financial instability]: monohrafiya / Edited by d.e.n., prof. O. V. Dzyublyuk. Ternopil': FOP Osadtsa Yu. V., 2017. 298 p.