ICEMIT
1st International Scientific Conference on Economy, Management and Information Technologies – ICEMIT 2023

New mechanisms and managing of money supply in monetary-credit system within financial system

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Article info

Review paper

DOI:
https://doi.org/10.46793/ICEMIT23.183V

UDC/ UDK:
338.23:336.74

Abstract

In this paper, we analyzed the new mechanisms on which the operation of the financial system rests, compared to the monetary system, with an emphasis on the roles of banks in them. The goal of the paper is to point out the importance of the new subsystems that exist within the financial system, as well as the importance of the participants who are most deserving of the efficient functioning of this large entity. The results indicate that monetary and credit policy, primarily interest rate policy, has the greatest impact on the financial market. Furthermore, the multiplication of money in circulation is influenced by several elements that are also a limiting factor in the credit activity of banks: e.g., required reserve rate, liquidity reserve rates and changes in non-monetary deposits, etc.
Keywords**:** *banks, financial system, deposits, loans, monetary policy.*

1. Introduction

The financial system consists of all the mechanisms, institutions, and instruments of financing the needs for long-term and short-term capital of the national economy. More specifically, it concerns all financial flows that go from various sources of monetary accumulation to various places of its use. The financial system is part of the overall economic system of the country, and the overall factors of the socio-economic basis of its formation and functioning differ from each other. The financial system or financial sector, whose constituent parts are the monetary and fiscal system, is a set of institutions and instruments through which the collection, concentration, transfer, and allocation of financial resources is carried out (Hadzic & Barjaktarovic, 2015; Dusanic, 2003). The financial system determines the economy and the character of the economic system, because it represents a suitable set of institutions, instruments and mechanisms that realize the mobilization, concentration, transfer and allocation of financial resources and monetary savings of the society (Kosutic & Hadyic, 2019; Ahmed et al., 2020). Developed economies, as a rule, have a sophisticated and efficient financial system that is in the service of economic growth and development of their economies (Mishkin, 2008). Subsystems of the financial system are related to economic flows of an economy. The financial market enables the performance of many economic functions. It is the place where supply and demand for financial instruments meet. That is why we can say that one of the most important is the function of connecting subjects of economic and social life who have, at a given moment in time, excess financial resources with subjects who lack these resources. In this regard, almost all participants in economic and social life, in certain time intervals, can also be participants in financial markets. Participants in the financial markets are legal and natural people, with the most diverse roles and opposite motives. These are (Radovic-Markovic et al., 2022):

- companies that collect financial resources and capital for financing their business by issuing individual securities.
- banks, which approve various types of loans.
- investment funds, which place the surplus of their funds for certain terms (shorter or longer);
- natural people who save.
- farmers who take a loan to carry out agricultural work, etc.

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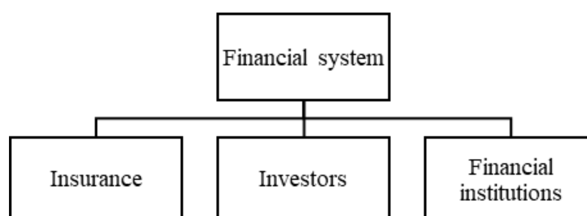
Further, the financial system consists of monetary - credit system, banking system, budget system, insurance, savings, financial operations of companies and financial control (Radovic-Markovic et al., 2022). The monetary-credit and banking systems are of particular importance (Abdullayeva, 2021). It can be said that the monetary system represents a set of solutions (institutional and organizational) in terms of monetary instruments, monetary relations and between economic subjects, money regulation mechanisms, ways of directing economic flows and the role of market mechanisms in the monetary area. A key part of the financial system is the monetary system because its functioning ensures the direction of money flows and processes (Semancikova, 2016).

Graph 1: Participants in the financial market



Source: Author's review based on (Cogoljević & Savić, 2019)

2. Mechanisms of the Financial System

Within the financial system, there are various forms of organizing financial institutions, specialized in creating financial instruments and activating appropriate mechanisms. Funds are transferred through financial institutions, which come from the financial savings of the economy and the population in favor of financing investments, primarily in the economy. However, it is also possible to directly transfer funds from transactors who have surplus funds to those who have needs and can absorb them. In question, therefore, are direct forms of overflow of funds. This is the case, for example, when citizens buy securities issued by certain companies, to collect additional funds. It is characteristic that most of the financing of additional investments is done through the mediation of financial institutions (Davis et al., 2022). The transfer of funds takes place from sectors that realize a surplus to those that lack funds. There are two ways to do this - directly or through financial intermediaries. Funds originating from financial savings appear in the balance sheets of financial intermediaries (institutions), in the form of liabilities to the owners of funds. Transfers to sectors with a deficit of funds are included in the assets of financial intermediaries. They represent the obligation of the user of funds towards financial intermediaries, i.e. institutions. The basic task of financial institutions is to increase the efficiency of operations. They should provide support for improving operations at the level of the economic and, therefore, the financial system. At the same time, financial institutions are developing new business technologies, new forms of integration in the financial market and new forms of business strategies (Ristanovic, 2019). They also develop activities that absorb risks in business. In our country, the financial market consists of the central banking system, commercial banks, and other financial institutions (Dabic, 2000). Considering the existing legal framework, participants in the financial market appear as issuers, intermediaries, and investors. Depending on the type of securities, legal entities (domestic and foreign) may participate in the emission market, which meets the requirements set by law. The basics of defining those conditions are taken from international regulations and are incorporated into national legal regulations. There are plenty of brokers on the stock exchanges. We would single out the most common ones, namely banks, savings banks, insurance companies, investment funds, specialized stockbrokers of the broker and dealer way of trading, discount and Lombard companies, gyro companies, exchange offices... Discount companies are financial intermediaries for carrying out purchases, discounts and rediscounting of bank and trade acceptances (bills of exchange) or holding them until maturity (Li et al, 2020). By discounting, i.e. handing over the bill before its maturity, the remitter receives money before the bill's maturity, but the sum is reduced by interest; in this case, the owner of the bill is credited (Kwasi et al., 2017). Lombard firms, as financial intermediaries, carry out the purchase, pawning and pawning of securities; provide loans based on the pledge of securities, gold, other precious metals, goods stored in public warehouses, goods on the road, etc. Giro-firms are financial intermediaries that perform non-cash and clearing payment operations. Exchange offices are financial intermediaries that carry out the purchase and sale of foreign currency, currencies and gold coins, based on the authority of the state body responsible for the circulation of these values, with the payment of a commission. It is characteristic of all listed types of financial intermediaries that they have been given permission to work by the competent authorities. In accordance with international standards and the engagement of experts from international financial organizations, the status of the stock exchange is regulated. Founders, membership, listing of securities, organization of stock exchange meetings, trading procedure and the principle of publicity in work. The number and structure of investors is directly related to the amount of financial savings of the population and the level of trust in the financial system, i.e. business banking.

The functioning of the overall infrastructure of the financial market is determined by a clear macroeconomic policy, a stable political system, consistent and transparent legal regulations, effective court protection of creditors, a critical mass of financial savings for the formation of the required level of demand, the appropriate volume and structure of quality financial instruments (Surdani & Aswan, 2019). The banking sector functions as an integral part of the financial system, which is why the stability of the banking system can be threatened by inefficient operations (Muhovic & Subic, 2019).

3. The Monetary System and The Role of Banks in it

The greatest influence on the financial market is monetary - credit policy, primarily interest rate policy. This market includes several specialized markets such as the short-term gira money market, short-term loan market (most often interbank), discount market, Lombard market, etc. The interbank market of currency and short-term securities is the most significant part of the money market and is very important for the banking system because optimal liquidity of all entities and banks' liquidity is maintained through this market (Vesic & Jevtic, 2019). The most important segment of the capital market is the long-term securities market, but the mortgage market, the credit and deposit investment market (where long-term investment loans and deposits are traded), as well as the equity market, where invested capital is traded, are also important. as founding capital. The ability of banks to collect demand deposits has already been presented as one of the basic determinants of banks, which, in addition to other specifics, distinguishes them from other financial intermediaries. If it is not termed, depositors can directly withdraw money invested in banks as bank debt or transfer it to another account. In addition to transaction deposits on transaction accounts that can have various names (current, checking, gyro accounts, etc.) that are used for non-cash payments, banks collect time and savings deposits. He is of the opinion that the difference between savings and time deposits is reflected in the fact that savings deposits do not have maturity dates, while time deposits have precisely defined deadlines. However, a savings deposit can be a term savings, and not only demand funds in savings accounts where depositors are required to announce the withdrawal of funds in advance. In addition to savings deposits of individuals and businesses, there are also deposit certificates. These securities can be transferable or non-transferable, they are issued in a high denomination and, as a rule, they have fixed interest rates and fixed repayment terms. Financial innovations have influenced the combination of deposits, so today commercial banks also offer different options for depositing funds such as, for example. dedicated savings deposits for pensions. Nevertheless, although the forms of deposits have evolved, the deposit potential of banks has been reduced by the transfer of funds from banks to intermediaries on the capital market, primarily investment funds. Although deposit-credit operations are still the main source of income for commercial banks, banks generate income from commissions through off-balance sheet business activities (Barjaktarovic et al., 2022). Off-balance sheet operations include both classic commercial banking operations (e.g. credit guarantees, letters of credit, foreign exchange operations), as well as investment banking operations, and increasingly financial derivatives operations (e.g. bank clients use financial derivatives to protect themselves from interest and other risks and they pay a commission for that).

The multiplication of money in circulation is influenced by several elements that can simultaneously limit the credit activity of banks (Barjaktarovic et al., 2022). These elements are the level of the required reserve rate, the level of the liquidity reserve rate and changes in non-monetary deposits, i.e. the movement of funds from deposits to cash and vice versa. Thus, the deposit potential and the possibility of obtaining part of the funds from the primary issue enables banks to carry out the secondary issue of money. However, banks cannot create money indefinitely, as there are several limiting factors. First, the principle of doing business with partial reserves obliges banks to have a certain amount of cash to be able to pay depositors at their request. Second, the central bank requires that a certain percentage of bank deposits be placed in the name of required reserves. Third, in addition to the required reserves, banks maintain a certain level of reserves above the rate set by the central bank as the banks' required reserve rate, to insure against the risk of their reserves falling below a certain percentage of the required reserve. The money that banks have at their disposal, as well as the funds in their accounts with the central bank, has a specific characteristic, considering that its insertion or withdrawal from the banking system is manifested in a multiplied form. By controlling this money, the central bank controls the money supply and the money supply in circulation.

However, to the greatest extent, the credit system is based on the possibility of disposing of other people's surpluses with appropriate compensation. Practically, this means that the transfer of capital from those who have surpluses to those whose funds are lacking is enabled through the banks. Each loan carries some kind of return for the loan issuer (bank), which is measured in money and represents the cost of the loan - interest. In fact, a loan represents a property-legal relationship in the creditor-debtor relationship, in which the creditor transfers his funds to the debtor for a certain period and under certain conditions. Loans for the bank represent a debtor-creditor business in which the bank, as a creditor, cedes the right to dispose of funds to its client on a contractually defined term and under defined conditions. It is very important to mention the principle of repayment, which obliges the debtor to return the loan taken from the creditor and is different from other forms of giving such as donations, gifts, etc.

Loans can be viewed from different aspects (term of approval, form, purpose, with or without security, with or without interest, etc.). Each of the observed aspects of the loan carries with it a certain "basket of risks", and it is necessary for the bank to create different strategies that will reduce the potential realization of risky events for any aspect of the bank's operations [16]. When determining the creditworthiness of a client, whether he is a legal entity or a natural person, the

bank's management conducts an analysis of five key factors of creditworthiness, known as the 5C analysis [17]. These factors are (Dabic, 2000):

1. capacity, which represents the ability to pay the debtor's obligations in the sense that the realized income must be greater than the planned annuities;
2. capital, which represents the profitability of the borrower;
3. collateral, which is a pledge of the loan borrower in the form of claims, stocks, cash, equipment and commercial real estate as a form of bank insurance when granting loans;
4. conditions in which the borrower operates - the state of the economy, trends in the economy, valid regulations and the like can affect the ability to pay annuities;
5. character, which represents the characteristics of the borrower regarding his will, work experience and reputation to settle obligations on time (Vukovic et al., 2020).

In contemporary literature, more and more attention is paid to another factor, which is communication. The client's willingness to communicate openly with the banker and other advisors about the opportunities and challenges facing the person or company is key to a productive financial partnership.

In any case, the basic importance of lending and credit policies in economies such as those of the Western Balkan countries must be to encourage the development of the region, economic branches, and the economy. However, the monetary economy has changed in recent years, and thus the credit policies. Until approximately 2015, the market game was not played according to fair rules, since lending to credit-deficient clients was allowed, which led to the hyperproduction of problem loans in all economies of the world.

4. Final Considerations

As financial markets are difficult to define and demarcate, and therefore to regulate, the competent state authorities place greater emphasis on the regulation of participants in financial markets, which are primarily financial institutions. Several divisions of financial institutions are represented in the theory. According to the division of the financial system into three basic sectors: banking, insurance, and the capital market (or financial market in the narrower sense), the basic types of financial institutions are deposit-credit institutions, insurance companies and financial intermediaries on the capital market. One of the clearest classifications distinguishes between two homogeneous groups of financial institutions: deposit and non-deposit financial institutions. Banks and a certain number of non-bank financial intermediaries, such as savings and loan associations, savings banks, credit unions, etc., are classified under depository institutions. Non-depository financial institutions include institutional investors (insurance organizations, pension, and investment funds), various forms of non-depository financial institutions such as financial companies, investment, and asset management companies, etc. The essence of banks and other deposit-credit institutions is reflected in the certainty of their obligations, but also uncertainty regarding the return on invested funds, mainly due to the existence of credit risk. On the other hand, insurance companies have uncertain liabilities (hence the need for actuarial valuation), but certain assets, as well as capital market intermediaries who have both certain assets and liabilities that are primarily exposed to market risks and are less exposed to liquidity risk in comparison with banks.

Deposit and credit institutions, primarily banks, played a dominant role in financial intermediation between savings and investment entities until the mid-seventies. Although they are exposed to fierce competition from non-depository financial institutions, banks are still considered the most important financial institutions today. In addition to deposit and credit institutions, there are also credit institutions. Finance companies and purchase finance companies are credit institutions, but not depository institutions. They can appear as financial companies of sellers (sales finance companies) that finance sellers or producers by giving them funds based on which the latter grant credit to customers, or by buying their claims against customers, but also as financial companies of customers (personal finance companies, small loan companies) that grant consumer loans directly to consumers. The latter are also leasing companies that developed from financial companies that enabled credit sales and leases with the option of purchase (hire-purchase companies). They developed after the Second World War as independent institutions or affiliates of trading companies and manufacturers, but later many banks became their majority shareholders. Financial companies most often represent independent profitable organizations, but they can also be established by large production and trade corporations to finance sales, especially when it comes to more expensive products. Some financial companies mainly form their financial assets by issuing commercial notes and bonds, and they also appear as investors on the financial market.

In addition to collecting funds in a non-deposit form, institutional investors place funds through the purchase of securities on the capital market. Depending on the motives of the investors and the method of collecting stakes, there are three basic groups of institutional investors: insurance companies, pension funds and investment funds. Pension and especially investment funds are managed by management companies. While the management of assets of insurance companies and pension funds is largely based on actuarial principles with the aim of protecting certain forms of investor risk or the occurrence of an insured event, the financial potential of investment funds, as well as mediation in the capital market in general, is based on their intermediary role on the capital market, because they transfer the risk of investing in securities to their shareholders.

Acknowledgement

This research paper was a part of the COST action CA19130: Fintech and Artificial Intelligence in Finance - Towards a transparent financial industry.

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