MANUAL

FRANCIS LEFEBVRE

An International Approach to Capital Markets and Financial Regulation

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de un estudio técnico cedido
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To Alberto Alonso Ureba and Pedro González-Trevijano Sánchez, for their continuous support and guidance within the University world.
Antonio Serrano Acitores

To my family for their unconditional support and love.
Cintia García Sánchez

To my parents and my brothers who are always by my side.
Mariví Serrano Acitores

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PROLOGUE

Financial markets and institutions involve flows of funds throughout our economy, which in turn affect national and international transactions, business profits, the production of goods and services, and the economic well-being of individuals and countries. What happens to financial markets, financial institutions, and money is of great concern to any decision maker or politician.

The ongoing internationalization of business transactions calls for professionals with multidisciplinary training, a global outlook, a specific knowledge of the Common law and the legal and business implications of simultaneously applying different legal systems across several jurisdictions.

Aware of this situation, the Garrigues Center of post graduate Legal Studies, together with Fordham University and Universidad Nebrija, launched an official LL.M. program in international transactions and business law.

As part of the LLM, there is a five credit (ECTS) course on capital markets and financial regulations which is brilliantly taught by professor Antonio Serrano Acitores who thought in using the core materials of the course to put together a practical guide in the form of a book.

Thus, this book, which I have the honor to present, contributes to understand the rationales and main elements of financial regulation, the 'why', 'how' and 'who'. It gets to approach the most important policy areas in the field of financial regulation and gets the knowledge to follow and shape the national and international debate on financial and capital markets regulation, with a legitimate bias on the United States and the European Union. This book examines how financial markets (such as bonds, stocks, and foreign exchange) and financial institutions (banks, insurance companies, mutual funds and other institutions, including central banking) work by exploring the role of money in the economy and their impact in international transactions. Finally, it also gets into shadow banking and intermediation activities, economic functions and intermediation process.

Congratulations to the Director, Antonio Serrano Acitores, as well as to the other two authors, Cintia García Sánchez and Mariví Serrano Acitores, for this brilliant effort of concentrating in a single piece an international, practical and indeed complete systematic approach to capital markets and financial regulations in today´s world, in the form of a direct, concise and clear manual for students and the general public in any jurisdiction.

Madrid, November 2017

Javier Marzo

Partner, J&A Garrigues, SLP

CHAPTER 1: WHY STUDY CAPITAL MARKETS AND FINANCIAL REGULATION?

The financial crisis experienced in the recent past, and its financial consequences, are clear proof of the crucial role that the financial system plays in the economic well-being of a country. In order to correctly understand how this system works, its importance, and how it is regulated, we are, in the following chapters, going to analyze, in a detailed manner, the institutional and regulatory framework of capital markets and the role that financial institutions perform therein.

To this end, firstly we will make a comprehensive analysis and general overview of capital markets and financial regulation. Then, we will study the existing financial markets and the different financial instruments traded therein. After that, we will focus on the banking industry, especially central banking, the management of financial institutions and financial regulation. Finally, we will examine key-players in the financial system such as shadow banking institutions, mutual funds, hedge funds, insurance companies, pension funds and venture capital and private equity firms.

As we will see in later chapters, the financial system of an economy consists of three components:

- Financial markets.
- Financial intermediaries.
- Financial regulators.

The importance of the financial system lies in its role, which is to intermediate between lenders and borrowers, providing a range of saving vehicles with differing risk and return characteristics, and helping investors to find the financing they need, taking into consideration the returns and the risks they are willing to undertake'[1]. In other words, the main function of the system is to channel funds between the two groups of end users of the system: from lenders who have "surplus units", to borrowers who have "deficit units". Despite this being the main function of the financial system, it also provides other services such as payments facilities, insurance, pensions, and foreign exchange, together with facilities that allow people to adjust their existing wealth portfolios.

As set out in the following chapters, apart from direct borrowing and lending between end-users, borrowing and lending through **intermediaries** and **organized markets** have important advantages in what concerns economic growth and efficiency. Financial markets perform the essential economic function of channeling funds from households, firms and governments that have saved surplus funds by spending less than their income, to those that have a shortage of funds because they wish to spend more than their income. This system of **direct finance** implies that borrowers borrow funds directly from lenders in financial markets by selling them securities. Therefore, financial markets, such as bond and stock markets, are crucial to promoting greater economic efficiency by channeling funds from people who do not have a productive use for them, to those who do[2].

Capital markets play an important role in helping drive job creation, innovation and financial security. When financial markets malfunction seriously, the real economy takes a nosedive. There are many kinds of financial markets, addressing many kinds of needs. Financial markets are classified into internal markets versus external markets, capital markets versus money markets, cash markets versus derivative markets, primary markets versus secondary markets, private placement markets versus public markets and exchange-traded markets versus over-the-counter markets.

Alternatively, funds can move from lenders to borrowers by a second route called

1 Darškuviene, V., *Financial Markets*, Education and Culture DG Lifelong Learning Programme, 2010, p. 6.
Available at: *http://www.bcci.bg/projects/latvia/pdf/7_Financial_markets.pdf*

2 Mishkin, F. S. and Eakins, S. G., "Why study financial markets and institutions?", in *Financial Markets and Institutions*, 8th ed., Pearson, 2015, p. 1.

indirect finance, so-called as it involves a **financial intermediary** that stands between the lender and borrower and helps transfer funds from one to another.

Financial intermediaries play a very important role in promoting the economic efficiency of a country, by reducing transaction costs in financial markets, by alleviating the effects of asymmetric information and by conducting risk sharing and asset transformation.

One of the main reasons for the importance of the study of capital markets and its regulation is that we are all, at least part of the time, users of financial capital. Financial capital can be defined as accumulated wealth that is available to create further wealth. We borrow money to buy a house or a car, do our jobs, and make our own small contribution to the growing wealth of nations. Furthermore, financial capital is used by corporations, governments, authorities, and international agencies to make investments in productive resources. When a company builds a new factory, it is engaged in capital expenditure, using funds provided by shareholders or lenders or set aside from past profits to purchase assets used to generate future revenues. Governments use tax revenues to invest in infrastructure projects such as roads or hospitals, and agencies, such as the World Bank, inject funds into developing countries to create a basis for economic growth and future prosperity[3].

In addition to being users of capital, we are also its suppliers. Sometimes we are suppliers of capital directly, by buying shares issued by corporations and debt securities issued by governments and their agencies. On other occasions, we employ financial intermediaries to invest funds on our behalf. We can also deposit cash in bank accounts, invest in mutual funds, and set aside money in pension plans for our retirement. We pay taxes to the government and local authorities, and we pay premiums to insurance companies who invest the proceeds against their future liabilities. Companies, too, become sources of capital when they reinvest their profits rather than paying cash dividends to shareholders.

Bearing in mind the very important role played by financial markets and financial intermediaries, the financial system is among the most heavily regulated sectors of the economy, and banks are among the most heavily regulated of financial institutions[4]. We regulate finance over and above the way we regulate other industries because finance exhibits market failures that can have devastating consequences. As we will see, there are ten basic categories of financial regulation: the governments' safety net, restrictions on assets holding, capital requirements, prompt corrective action, chartering and examination, assessment of risk management, disclosure requirements, consumer protection, restrictions on competition, and macroprudential supervision. However, the regulatory process may not always work very well, as evidenced by the recent global and other financial crises.

Current changes in the regulatory system are happening in response to problems in the credit markets and the financial crisis that struck in 2008. Governments recognize that steps must be taken to ensure that financial firms are never again allowed to take on risks that are so significant and so poorly understood, resulting in such severe economic consequences for businesses, households and individuals. That is why many legislative amendments have taken place in different countries as governments and other international institutions are aware that future regulation needs to address the following issues: (i) the too-big-to-fail problem, either by breaking up large financial institutions or imposing higher capital requirements on them, (ii) compensation at financial firms, (iii) Government-Sponsored Enterprises, (iv) credit rating agencies, and (v) the dangers of overregulation.

In view of the above, it is obvious that financial development is at least correlated with economic development and that a sophisticated financial system promotes the efficiency of investment and economic growth in a market economy. On the contrary, a poorly functioning financial system can hamper economic growth and development.

An efficient capital market is essential for raising capital by the corporate sector of

3 Chisholm, A. M., *Introduction to International Capital Markets*, Wiley, 2009, p. 1. Available at: http://samples.sainsburysebooks.co.uk/9780470746882_sample_411493.pdf
4 Mishkin, F. S. and Eakins, S. G., "Financial Regulation", in *Financial Markets and Institutions*, 8th ed., Pearson, 2015, p. 419.

the economy and for the protection of the interest of investors in corporate securities. There arises a need to strike a balance between the raising of capital for economic development on one side, and protection of investors on the other. Unless the interests of investors are protected, the raising of capital, by corporations and other economic institutions, should not be possible. An efficient capital market can provide a mechanism for raising capital and also for protecting investors as buyers of financial securities, so this is the key reason for the importance of financial regulation.

Financial institutions facilitate transactions in which there is not a ready seller to match with a buyer, or vice versa, or when there are different characteristics of assets involved, such as different sizes. In these cases, the intermediary acts as a market maker, using their own capital or holding the assets until a buyer or seller can be found. This enables the buyer or seller to transact at that moment, regardless of market conditions. Furthermore, financial intermediaries, as mentioned before, reduce transaction costs for savers and investors and help reduce problems of asymmetric information that are inherent in the relationships between investors and entrepreneurs. In addition, and to an important and increasing extent, the development of sophisticated derivative instruments has helped not only to improve the allocation of risk in the economy, but also to increase the efficiency of the saving-investment process. For a given level of saving, more efficient financial intermediation increases the productivity of investment. It thus seems obvious that the more efficient the financial system, the more rapid the growth rate.

Financial regulation is of interest because firms, consumers, and governments fund many of their activities through banks and securities markets. Furthermore, financial instability can damage the broader economy. In this way, financial regulation is intended to protect borrowers and investors that participate in financial markets and to mitigate financial instability. Hence it is important to understand the regulatory policies of the agencies that oversee banking and securities markets, as well as to understand which agencies are responsible for which institutions, activities, and markets. Some agencies regulate particular types of institutions for risky behavior or conflicts of interest, some agencies promulgate rules for certain financial transactions, no matter what kind of institution engages in them, and other agencies enforce existing rules for some institutions, but not for others. These regulatory activities are not necessarily mutually exclusive.

In conclusion, we could say that the importance of the financial system, with its markets, intermediaries and regulation, resides in the fact that well-functioning financial markets are a key factor in producing strong economic growth. In addition, activities in financial markets also have direct effects on personal wealth, the behavior of business and customers, and the cyclical performance of the economy. As a consequence, it is important to set a proper regulatory framework in order to control and supervise the activities performed in capital markets and by financial intermediaries, so as to provide security to the system and to protect investors, thus trying to avoid the dreadful consequences of the recent financial crisis.

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CHAPTER 2: AN OVERVIEW OF THE FINANCIAL SYSTEM

1. INTRODUCTION TO THE FINANCIAL SYSTEM

A financial system consists of institutional units and markets that interact, typically in a complex manner, for the purpose of mobilizing funds for investment and providing facilities for the financing of commercial activity[5]. In this sense, the International Monetary Fund has defined institutional units as entities, such as a households, corporations, or government agencies, capable in their own right of owning assets, incurring liabilities, and engaging in economic activities and transactions with other entities.

As has been already explained in the previous chapter, the importance of the financial system lies in its role, which is to intermediate between lenders and borrowers, providing a range of savings vehicles with differing risk and return characteristics, and helping investors to find the financing they need, taking into consideration the returns and the risks they are willing to undertake[6]. Put more simply, to channel funds between the two groups of end users of the system: from lenders who have "surplus units", to borrowers who have "deficit units" and potentially more productive ways to invest those funds. Thus, the financial system facilitates the transformation of savings into investment and consumption. Nevertheless, the financial system also provides other financial services, including, among others, payments facilities, insurance, pensions and foreign exchange, together with facilities, which allow people to adjust their existing wealth portfolios.

In view of the above, we can say that the economic development of any country depends upon the existence of a well-organized financial system, since it is the financial system, which mobilizes the savings and invest them to productive ventures, promoting the wellbeing and standard of living of the people of a country. Indeed, there is extensive literature debating the impact of finance on growth that emphasizes the positive influence of the development of a country's financial sector on the level and the rate of growth of its per-capita income[7].

In conclusion, the core function of the financial system is to facilitate the allocation and deployment of economic resources, both spatially and across time, in an uncertain environment[8].

As set out in the following chapters, apart from direct borrowing and lending between end-users (*e.g.* lending €6,000 to your cousin who is about to create a start-up), borrowing and lending operations can be carried out by means of intermediaries and organized markets, this implying relevant advantages.

On one hand, financial markets perform the essential economic function of channeling funds from households, firms and governments that have saved surplus funds, to those that have a shortage of funds. This means of direct finance implies that borrowers borrow funds directly from lenders in financial markets by selling them securities, also referred to as financial instruments or assets. In short, financial markets serve as forums where securities are issued and traded[9].

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5 FINANCIAL SOUNDNESS INDICATORS: COMPILATION GUIDE, International Monetary Fund, 2006, p. 11.
Available at: https://www.imf.org/external/pubs/ft/fsi/guide/2006/pdf/chp2.pdf

6 Darškuviene, V., *Financial Markets*, Education and Culture DG Lifelong Learning Programme, 2010, p. 6.
Available at: *http://www.bcci.bg/projects/latvia/pdf/7_Financial_markets.pdf*

7 Rajan, R. G. and Zingales, L., *Financial Systems, Industrial Structure, and Growth*, Oxford Review of Economic Policy, Vol. 17, nº 4, Oxford University Press, p. 468.
Available at. https://faculty.chicagobooth.edu/raghuram.rajan/research/papers/finsys.pdf

8 Merton, R. C., *The Financial System and Economic Performance*, Journal of Financial Services Research 263-300, Kluwer Academic Publishers, 1990, p. 263.
Available at: http://www.people.hbs.edu/rmerton/Financial%20System%20and%20Economic%20Peformance.pdf

9 Gambacorta, L., Yang, J. and Tsatsaronis, K., *Financial Structure and Growth*, BIS Quarterly Review, 2014, p. 21.

Financial markets play an important role in helping drive job creation, economic development, innovation and financial security. Consequently, when financial markets malfunction seriously, the real economy takes a nosedive. As we will see in later chapters, there are different kinds of financial markets, addressing different kinds of needs.

On the other hand, funds can also move from lenders to borrowers by a second route called indirect finance, since it involves a financial intermediary (a financial institution, such as a bank) that stands between the lender and the borrower and aids the transfer of funds from one to another. Financial intermediaries generally take in savings from lenders and provide funding to borrowers.

The main advantage of financial intermediaries taking part in the financial system is that they promote the economic efficiency of a country by reducing transaction costs in financial markets, through alleviating the effects of asymmetric information and conducting risk sharing and asset transformation.

The basic functions and structure of a financial system are essentially the same in all economies, past and present, East and West. In this way, all financial systems combine intermediation-based and market-based finance and their main aim is the efficient allocation of capital.

Efficient capital allocation is achieved by investment in sectors that are expected to have high returns, and withdrawal of funds from sectors with poor prospects. This goal can be reached thanks to financial markets and intermediaries. For instance, efficient secondary market prices help investors separate good investments from bad ones, whilst lenders and intermediaries tend to screen out bad investment projects, and financial intermediation can be considered as a means of mitigating the asymmetric information problem.

In this way, one of the main findings in this context is that developed financial systems are associated with a better allocation of capital. Financially developed countries tend to increase investment in their growing industries and decrease investment in their declining industries[10].

In light of the above, and keeping the very important role played by financial markets and financial intermediaries in mind, the financial system is among the most heavily regulated sectors of the economy, and banks are among the most heavily regulated of financial institutions[11]. We regulate finance over and above the way we regulate other industries because finance exhibits market failures that can have devastating consequences. Promoting competition, ensuring market integrity, and managing "public-good" type externalities, is what broadly constitutes the potential roles of regulation, and other government activities designed to improve economic performance of the financial system[12].

In fact, the recent changes in the regulatory system are happening in response to problems in the credit markets and the financial crisis that struck in 2008. Governments recognize that steps must be taken to ensure that financial firms are never again allowed to take on risks that are so significant and so poorly understood, resulting in such severe economic consequences for businesses, households and individuals.

This chapter identifies and defines the main components that typically constitute a financial system; that is to say, financial markets, financial intermediaries and financial regulation, and its prime functions.

Available at: http://www.bis.org/publ/qtrpdf/r_qt1403e.pdf

10 Wurgler, J., *Financial Markets and the allocation of capital*, Journal of Financial Economics 58 (2000) 187-204, Yale School of Management, 2000, p. 188.
Available at: http://pages.stern.nyu.edu/~jwurgler/papers/capallocation.pdf

11 Mishkin, F. S. and Eakins, S. G., "Financial Regulation", in *Financial Markets and Institutions*, 8th ed., Pearson, 2015, p. 419.

12 Merton, R. C., *The Financial System and Economic Performance*, Journal of Financial Services Research 263-300, Kluwer Academic Publishers, 1990, p. 264.
Available at: http://www.people.hbs.edu/rmerton/Financial%20System%20and%20Economic%20Peformance.pdf

2. FINANCIAL SYSTEM STRUCTURE

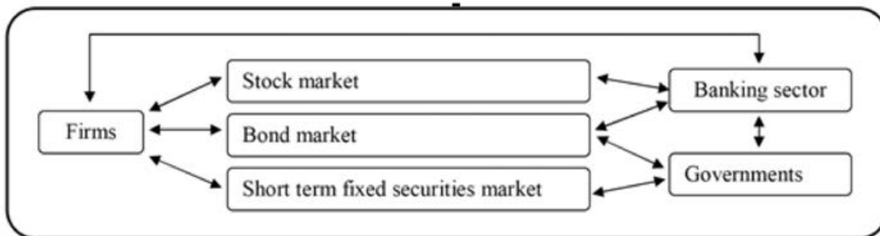
According to a structural approach, the financial system of an economy is composed of three main parts, each of which plays a fundamental economic role. The said parts are[13]:

- **Financial markets**. Financial markets facilitate the flow of funds in order to finance investments by corporations, governments and individuals. They provide a forum within which financial claims can be traded under established rules of conduct and can facilitate the management and transformation of risk[14]. In this way, financial markets allow the purchase and sale of financial instruments quickly and cheaply. One of the most important examples of a financial market could be the New York Stock Exchange.
- **Financial institutions.** Financial institutions are the key players in financial markets and, as its very name indicates, they intermediate between those that provide funds and those that need funds, determining their flow, and transforming and managing financial risk. Financial institutions provide a myriad of services, including access to the financial markets and collection of information about prospective borrowers to ensure they are creditworthy. Some examples of financial institutions are banks, mutual funds or insurance companies, among others.
- **Financial regulators.** Financial regulators perform the role of monitoring and regulating the participants in the financial system. Governments and government regulatory agencies, among other regulatory bodies, are responsible for making sure that the elements of the financial system operate in a safe and reliable manner.

We should also note the importance of central banks, whose main aim is to monitor and stabilize the economy of a country, as we will study in **Chapter 11 "Fundamentals of Central Banking".**

Figure 1 shows the simplified structure of a financial system.

Figure 1: The Structure of a financial system



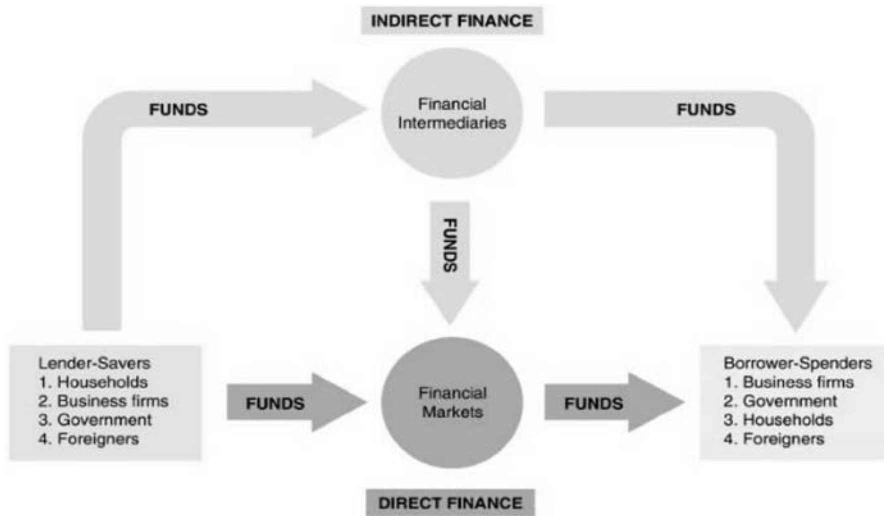
Source: Darškuviene, V., *Financial Markets*, Education and Culture DG Lifelong Learning Programme, 2010, p. 6.

As a consequence of the above, financial markets and financial intermediaries perform the function of channeling funds from agents who have saved funds and want to lend, to agents who need funds and want to borrow. This function is illustrated quite nicely in MISHKIN'S figure, which also conveniently serves to introduce us to a number of other concepts and terms. **Figure 2** shows how the flow of funds takes place in the financial system.

13 Darškuviene, V., *Financial Markets*, Education and Culture DG Lifelong Learning Programme, 2010, p. 6.
Available at: *http://www.bcci.bg/projects/latvia/pdf/7_Financial_markets.pdf*

14 FINANCIAL SOUNDNESS INDICATORS: COMPILATION GUIDE, International Monetary Fund, 2006, p. 11.
Available at: https://www.imf.org/external/pubs/ft/fsi/guide/2006/pdf/chp2.pdf

Figure 2: Flows of funds through the financial system



Source: Mishkin, F. S. and Eakins, S. G., in *Financial Markets and Institutions*, 8th ed., Pearson, 2015, p.16.

Finally, to conclude with this structural approach to the financial system, we have to explain the financial instruments that are traded in financial markets and by financial intermediaries; that is to say, financial assets.

An asset is generally defined as any resource that is expected to provide future benefits, and as a consequence, is economically valuable. In this way, financial assets, also referred to as financial instruments, are intangible assets, which are expected to provide future benefits in the form of a claim to future cash.

In view of the above, we can say that financial assets are the financial vehicles that allow the transfer of funds between lenders with surplus funds and borrowers with deficit funds.

Any financial transaction involves two parties. On one hand, we find the **issuer**: the party that develops, registers and sells financial instruments to finance its operations, and who agrees to make future cash payments to the counterparty in the financial transaction. The most common examples of financial issuers are corporations and governments. On the other hand, the **investor** is any person or entity that commits capital with the expectation of future returns. Thus, investors are the party that owns the financial instrument, and consequently, the right to receive payments from the issuer.

3. FINANCIAL MARKETS

3.1 Financial markets definition, functions and participants

Financial markets are defined as the marketplaces where the trading of financial instruments or assets takes place. Thus, financial markets are the medium that facilitates the basic cash-flow cycle of savings flowing to capital investments, followed by a return to investors (by means of profits and interest payments) for consumption and recycling as new savings[15].

15 Merton, R. C., *The Financial System and Economic Performance*, Journal of Financial Services Research 263-300, Kluwer Academic Publishers, 1990, p. 263.
Available at: http://www.people.hbs.edu/rmerton/Financial%20System%20and%20Economic%20Peformance.pdf

Financial markets perform several critical economic roles, including the following[16]:

- **Mobilization of savings and capital allocation.** Financial markets aggregate savings and allocate funds choosing not only among competing sectors, but also among competing firms[17]. Thus, the first function achieved by financial markets is to channel funds into productive activities and sectors.
- **Source of information.** Financial markets provide helpful information in order to coordinate financial decision-making. As happens in markets of a different nature, transactions between issuers and investors in a financial market determine the price of the traded asset. Furthermore, the required return (*i.e.* the interest rate) from the investment of funds is also determined by the participants in a financial market. To put it simply, financial asset prices and interest rates are determined by financial markets and are used by investors or their agents in making their financial decisions and in choosing the portfolio allocations of their wealth. The motivation for borrowers of funds with deficit units depends on the required return that investors demand, and the other way round, since investors are going to make their financial decisions mainly depending on the return involved and on the investment risks.
- **Liquidity function.** Another of the prime functions of financial markets is the provision of money and monetary assets. In the financial field, liquidity refers to financial assets, which can be converted into cash readily without loss. In the absence of this liquidity function, an investor would be forced to hold a financial instrument until conditions arise to sell it or the issuer is contractually obligated to pay it off. However, financial markets provide an opportunity for investors to sell financial instruments effectively and rapidly since they serve as a forum where financial instruments are easily traded.

  Despite the aforementioned, it should be noted that different financial markets are characterized by different degrees of liquidity. For instance, the money market is much more liquid than the bond or the stock market.
- **Reduction of transaction costs.** Transaction costs are defined as the time and money spent in carrying out financial transactions, and are considered as a major problem for people who have excess funds to lend[18]. Transaction costs include, among others, costs of search and information or costs of contracting and monitoring. The existence of a forum where financial instruments are traded enables the reduction of the referred cost.
- **Risk management.** Financial markets provide risk-pooling and risk-sharing opportunities for lenders and borrowers in the financial system. Well-developed capital markets allow for separation of responsibility for the capital-flow requirements of investments from the risk-bearing responsibility for those investments[19].

There are different types of participants in the financial markets, who are normally classified in accordance with the role they play in them. In this way, according to their motive for trading, financial markets participants are grouped into the following categories[20]:

- **Public investors**. Public investors are the ultimate financial instrument's owners

16 Darškuviene, V., *Financial Markets*, Education and Culture DG Lifelong Learning Programme, 2010, p. 7-9.
Available at: *http://www.bcci.bg/projects/latvia/pdf/7_Financial_markets.pdf*

17 Stiglitz, J.E., *Financial Markets and Development*, Oxford Review of Economic Policy, Vol. 5, nº 4, p. 56.
Available at: https://www.unicef.org/spanish/socialpolicy/files/Financial_Markets_and_Development.pdf

18 Mishkin, F. S. and Eakins, S. G., "Overview of the financial system", in *Financial Markets and Institutions*, 8th ed., Pearson, 2015, p. 23.

19 Merton, R. C., *The Financial System and Economic Performance*, Journal of Financial Services Research 263-300, Kluwer Academic Publishers, 1990, p. 263.
Available at: http://www.people.hbs.edu/rmerton/Financial%20System%20and%20Economic%20Peformance.pdf

20 Darškuviene, V., *Financial Markets*, Education and Culture DG Lifelong Learning Programme, 2010, p. 9.
Available at: *http://www.bcci.bg/projects/latvia/pdf/7_Financial_markets.pdf*

who commit capital with the expectation of financial returns from holding securities. This category includes private individuals, such as households, and institutional investors, such as pension funds or mutual funds.

- **Brokers**. Brokers, who may be individuals or firms, are agents that execute purchase and sale orders for investors, matching buyers with sellers of financial instruments. This type of participant acts as an agent, that is, on behalf of public investors and not on their own account, and receives remuneration, generally commission fees, for the financial services provided.
- **Dealers**. Dealers are in charge of linking buyers and sellers but, unlike brokers, they trade financial instruments on their own account. The main aim of a dealer is to profit from trading rather than from holding securities. Thus, dealers obtain their return from the differences between the prices at which they buy and sell the security over short intervals of time.
- **Credit rating agencies.** These agencies are in charge of making assessments of the creditworthiness of borrowers.

It must be taken into account that the above-mentioned groups are not mutually exclusive.

3.2 Financial markets classification

Now that we know that the major purpose of financial markets is to transfer funds from lenders with surplus units to borrowers with deficit units, we have to identify the different existing types. Thus, financial markets can be classified as follows:

a) Debt and equity markets

Typically, borrowers with deficit units can access finance in two different ways. Firstly, they can issue a debt instrument, or in other words, a contractual agreement by which the issuer pays the holder of the financial asset interest and principal payments on a regular basis until the maturity date, when the final payment is made.

Debt markets are used both by firms and governments to raise funds for long-term purposes. In this way, bonds are long-term borrowing instruments for the issuer, which represent cash flows payable during a specified time period. To put it simply, a bond is a debt capital market instrument issued by a borrower, who is then required to repay the lender (investor) the amount borrowed plus interest, over a specified period of time. Generally, bonds are considered to be those debt securities with terms to maturity of over one year, since, as we will see later, debt issued with a maturity of less than a year is considered to be money market debt (for example, T-bills or commercial paper).

Secondly, firms can get funding by issuing equities, which are also referred to as stocks. These financial instruments are defined by MISHKIN as claims to share in the net income and the assets of a firm[21].

A share of stock or equity in a corporation represents ownership. Consequently, the provider of funds or the investor, that is to say, the stockholder who owns a percentage interest in a firm, is granted a residual claim on the company's income. The purpose of equity instruments issued by corporations is to raise funds for the firms in the long-term. By contrast, investors buy stock for various reasons: (i) capital appreciation, which occurs when a stock rises in price; (ii) dividends payments, which come when the company distributes some of its profits to shareholders; or (iii) the shareholder ability to vote and influence the corporation[22].

Nevertheless, the main disadvantage of investing in equity instead of investing in debt

21 Mishkin, F. S. and Eakins, S. G., "Overview of the financial system", in *Financial Markets and Institutions*, 8th ed., Pearson, 2015, p. 18.
22 U.S. SECURITIES AND EXCHANGE COMMISSION WEBPAGE. Available at: https://www.investor.gov/introduction-investing/basics/investment-products/stocks#Issue

instruments of a firm is that the investor is a residual claimant, which implies that the corporation is obliged to pay all its debt holders before it pays its equity holders. This implies a higher risk for the investor.

b) Primary and secondary markets

Financial market trading takes place in the primary market and in the secondary market. The primary market is where financial instruments are created; in other words, the place where new issues of financial assets are introduced. For instance, it is in this market that firms issue new stocks and bonds to the public for the first time, giving rise to initial public offerings (IPOS). The important thing to understand about the primary market is that securities are purchased directly from an issuing company. In the primary markets, the initial selling of financial instruments normally takes place behind closed doors, and this is the reason why they are not well known to the public. Under normal conditions, an investment bank assists the firm issuing securities in the initial sale by underwriting them. That is to say; they assist by guaranteeing a price for the corporation's securities and then selling them to the public.

By contrast, a secondary market is the place where the sale of previously issued securities takes place. In the referred market, investors trade among themselves, with previously issued securities, and without the issuing companies' involvement. From the investor's perspective, the secondary market is both a means to sell existing holdings, which were perhaps bought previously in the primary market, as well as a source of new investments where primary supply is not available[23]. There are good reasons why investors may need to adjust their portfolios, such as fund inflows or redemptions, a requirement to match specific liabilities, or a change in investment strategy, etc. In these instances, investors will look to the secondary market to facilitate their required sales and purchases.

For instance, if a firm intends to sell a new issue of common stock to raise capital, this would be a primary market transaction. In this way, the mentioned corporation selling the newly created stock receives the proceeds from the sale in a primary market transaction. However, since the secondary markets are markets in which already existing and outstanding securities are traded among investors, if an investor decided to buy 200 non-newly issued shares of said company, the purchase would occur in the secondary market. In this case, the firm whose securities are being traded is not involved in the secondary market transaction and, thus, does not receive any funds from such a sale, the seller of the securities being the one receiving the proceeds from the transaction in the secondary market.

In addition to stock and bonds, secondary markets also exist for mortgages, various other types of loans, and other financial assets, such as futures, among others.

c) Organized exchanges and over-the-counter markets

We can determine two types of securities exchange in the secondary market: organized exchanges and over-the-counter markets.

Organized exchanges are locations where buyers and sellers of securities meet to trade with financial instruments. Even if they started as physical places where securities trading took place, nowadays, exchanges are more than physical locations since the advent of electronic trading has eliminated the need for exchanges to be physical places. Exchange rules govern trading to ensure the efficient and legal operation of the exchange, and the exchange board constantly reviews the mentioned rules to ensure that they result in competitive trading[24]. An organized exchange centralizes the communication of bid and offer prices to all market participants, who can respond by selling or buying at one of the quotes or by replying with a different quote. Depending

23 REMAKING OF THE CORPORATE BOND MARKET, *International Capital Market Association*, 2016, p. 9. Available at: https://www.theice.com/publicdocs/knowledgecenter/ICMARemakingtheCorporateBondMarketJuly.pdf

24 Mishkin, F. S. and Eakins, S. G., "The bond market", in *Financial Markets and Institutions*, 8th ed., Pearson, 2015, p. 275.