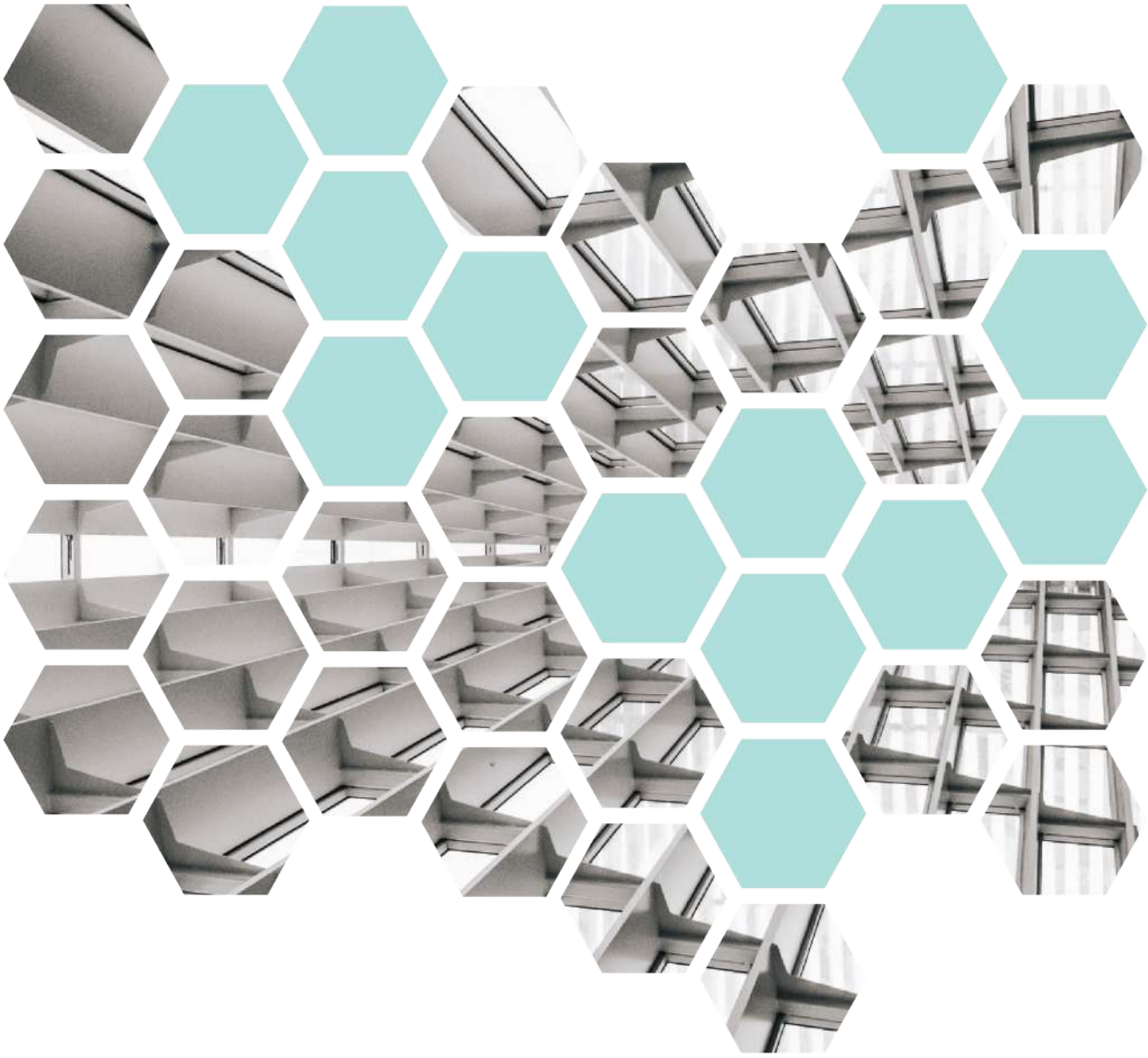
REPORT ON THE NON-BANK FINANCIAL MARKETS STABILITY

1/2020



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Note

The analysis within this report are based mainly on the financial reports of the entities supervised by the FSA until the reference date 31 March 2020, as well as on other subsequent data and information available on financial markets (IMF-World Economic Outlook, EC, NCSP, NIS, NBR). As a result of rounding, the totals may not correspond exactly to the sum of the components or there may be small differences from the percentage variations indicated in the graphs or tables.

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Overview

*(**Tempora mutantur et nos mutamur in illis/** time change with us!*)

John Stuart Mill said in 1848, in "Principles of Political Economy," that economics is governed by the laws of nature, which cannot be changed by the human will. The time that has passed since then and until now has shown us the opposite, even more, human intervention has a major influence over nature and, consequently, over the economic evolution. Nature must be allowed to regenerate. In this regard, a balance must be found between economic expansion, consumption and the time needed for regeneration.

Vulnerabilities on the non-bank financial system have changed significantly in the wake of the COVID-19 health crisis. Uncertainty in the global economic evolution represents a risk for all the countries and, in particular, for the approximately 550 entities supervised by the Financial Supervisory Authority (162 legal entities on the capital market, 319 legal entities on the insurance market and 73 legal entities on the private pension market). Since February-March this year, in just a few weeks the global economic landscape has changed radically, from estimates of increases in gross domestic product (GDP) of up to 4-5% in some countries, reaching declines up to -9/-10% (International Monetary Fund), in some cases, for 2020. Unemployment has risen sharply, the incomes of a large part of the global population have fallen sharply or disappeared overnight, being influenced by the closure of some entire economic sectors. All countries of the world are looking for solutions of support for the companies affected and for the population. The persistence of the health crisis will emphasize the risks, leading to growing imbalances. Therefore, the balance and financial stability since the publication of the last Report on Non-bank Financial Stability are changed and must be viewed from a different angle. FSA has a flexible, adaptable and proactive approach in order to be able to mitigate the emerging risks in such a short period of time.

The financial system is a cross-border one and is connected to the European one, first of all, and to the global one, secondly. Therefore, the global turbulence is influencing both the local financial market and the real economy by spreading the contagion. A number of factors have amplified the assets volatility in all the markets, contributing to the sharp tightening of financial conditions in a very short time. Since the beginning of the crisis, the Authority has taken a number of measures in order to combat the COVID-19 crisis, which are aimed at maintaining the stability of the non-bank financial system.

The risk approach has evolved, becoming more complex, taking into account both macro risks (top-down approach) as well as micro risks (bottom-up approach), going to the emerging risks related to climate change and, recently, to the risks related to the pandemic.

The main geopolitical events that took place in 2019 at European and global level led to an increase in uncertainty and volatility, influencing the short-term financial markets and the medium- and long-term economic activities and their relative balance. In 2019, the trade policies of the United States of America (USA) continued to encourage domestic consumption and were aimed at imposing fees on the Chinese goods, while China, in its turn introduced fees on the US products. Thus, the trade

conflict between the US and China continued, dampening the dynamics of the worldwide GDP. Global economic growth slowed the most since the financial crisis (+ 2.9%), according to the International Monetary Fund (IMF) estimates, marked by a decline in the production and investment activity amid a high uncertainty.

The initial scenarios considered that the slowdown in the global economy is temporary and that a recovery will follow from 2020 by gradually accelerating the economic increase, amid the signing of Phase 1 of the US-China trade agreement, and by clarifying EU-UK trade relations in 2020. Unfortunately, 2020 began not only with escalating tensions between the US and Iran, but also with the emergence of the risk related to the new COVID-19 coronavirus. The spread of this virus has become the biggest source of concern globally regarding the economic activity, because in March this year, the World Health Organization (WHO) declared a real pandemic caused by COVID- 19. The new coronavirus appeared in December 2019 in China, expanding rapidly in January first in the region, then globally. The impact has spread through the financial markets and commodity channels, resulting into massive declines in energy prices (especially oil) and metals, affecting the global trade flows - amid a much lower demand from China - and the tourism decline - as a result of containment measures imposed by the states in order to prevent the spread of this virus. At the same time, concerns remain about the future US trade policies and long-term relations between the European Union (EU) and the United Kingdom.

However, amid this background of uncertainties related to COVID-19 and the lockdown measures imposed by the states in order to prevent the spread of this virus (this leading to a significant slowdown in the economic activity), the indicator of the economic sentiment for the euro area[1] entered on-a negative territory in March 2020 (-49.5 points, from +10.4 in February), reaching the lowest level recorded so far since December 2011 (when Europe was facing the sovereign debt crisis).

Besides, the latest estimates of the International Monetary Fund, published in April this year, suggest the entry of the global economy into the most significant recession since the Great Depression (1929-1933) so far and indicate a economic downturn of -3% in 2020 , well below the level of 2009, reached during the global financial crisis, when the global economy decreased by -0.1%. The lowest values among the regions analyzed are recorded by the euro area, for which the International Monetary Fund (IMF) estimates a contraction of around -7.5% in 2020.

For 2021, IMF indicates a recovery of the global economy, with an advance of 5.8%, in the baseline scenario which implies that the pandemic effects will diminish in the second half of 2020.

The European Central Bank (ECB) continued to maintain a favorable economic environment for lending between 2018 and 2019, keeping a low interest rate on its main refinancing operations and on the marginal lending facility and the deposit facility and resuming the schedule of assets purchase stating from November 2019. In order to support the European economy, given the COVID-19 outbreak, the ECB has taken a series of measures in order to ensure a higher liquidity and to support financing within a difficult macroeconomic environment: favorable conditions for quarterly longer-

[1] ZEW indicator (Zentrum für Europäische Wirtschaftsforschung) on the economic sentiment for the euro area, developed on the basis of a questionnaire.

term refinancing operations, the conduct of additional new longer-term refinancing operations, and the introduction of a new asset purchase programme of EUR 120 billion until the end of 2020.

In the current context, the National Bank of Romania (NBR) has also decreased the monetary policy interest rate from 2.5% to 2% in March 2020, and for the provision of liquidity in the banking system has decided to purchase leu denominated government securities on the secondary market, in order to strengthen the financing of the real economy and the public sector.

The Romanian economy had a sustainable growth in 2019, of + 4.1%, being around the potential, while the level of public indebtedness evolved on a downward trend towards 35.2% in December 2019.

International Monetary Fund forecasts published in April this year in the *World Economic Outlook* report indicates the entry of the Romanian economy into recession in 2020, with a decline of -5% of GDP, followed by a recovery to 3.9% in 2021.

International stock markets recorded mixed developments during 2019, given the context of geopolitical uncertainties, but towards the end of the year, volatility indicators tended to decline and most markets increased.

One of the main achievements for the Romanian capital market was materialized by the FTSE Russell announcement of the intention to recognize the inclusion of the Bucharest Stock Exchange (BVB) in the emerging market category starting from September 2019 and to include the local market into the geographical indices starting from September 2020.

Obtaining this status by BVB will bring more visibility to the Romanian capital market, will allow the exploitation of new opportunities and will attract more investors. In 2019, the market capitalization increased to Lei 180 billion , indices registering appreciations between 29% and 47%. At the same time, the cumulative value of transactions on all markets decreased by 14.55%, from Lei 14.23 billion in 2018 to Lei 12.16 billion in 2019, largely due to lack of public offers developed on the Romanian market.

The investment fund market in Europe benefited in 2019 from an appreciation of the net assets of collective investment undertakings (+ 20.08%) and of alternative investment funds (+ 14.84%). The cumulative value of net underwritings at European level was positive and increased (from net outflows of EUR -71 billion in 2018, to net sales of EUR 148 billion in 2019), emphasizing the significance of the investment fund industry in the process of saving on a balanced financial market, especially in a financial environment characterized by low interest rates.

In the first quarter of 2020, volatility on the international financial markets has increased rapidly amid the spread of the COVID-19 pandemic, and stock indices declined significantly as a result of the effects of contagion on the financial markets and the global economic downturn forecasts.

Fixed-income instrument markets, and in particular sovereign bond markets, also experienced rapid yield increases in the first quarter of 2020 due to fears of a possible long-term recession.

Commodity price developments were strongly influenced in the first quarter of 2020 by the effects of the COVID-19 pandemic. Thus, there were significant decreases in oil prices in March 2020, amid a sharp slowdown in demand, but also as a result of the failure of negotiations between the Organization of the Petroleum Exporting Countries (OPEC) and its partners to cut the oil production. Thus, oil prices have recorded in March the lowest values from the years, the oil price WTI[22] being 20.48 USD/barrel, respectively, the price of Brent oil falling to 26.35 USD/barrel on March 31, 2020. The price of WTI oil delivered in May entered on a negative territory in the second half of April for for the first time in history, due to the massive drop in demand and the glut in US inventories.

European supervisors have carried out a risk assessments of non-bank financial markets for the current year. According to the European Insurance and Occupational Pensions Authority (EIOPA), **insurance companies have been exposed on both sides of the balance sheets: on the liabilities side due to changes in benchmark interest rates, as well as to the increase in claims, and on the assets side in view of the financial market volatility.** At the same time, they faced difficult situations given the current market context and the need to ensure the business continuity. However, according to Solvency II, insurance companies have sufficient eligible own funds in order to cover the solvency capital requirements, which , in their turn, provide the possibility of absorbing significant losses and thus ensure the market stability and the consumer confidence. Recent stress tests have also shown that the insurance sector is well-capitalized and able to absorb severe but plausible system shocks. In the current context, EIOPA has requested the (re) insurance companies to temporarily suspend the distribution of dividends and shares buy back, so as to maintain the capital positions in the balance sheets and to protect consumers.

The European Securities and Markets Authority (ESMA) has emphasized the significance of incorporating elements of sustainability into investment strategies and business decisions, which have accelerated in recent years, as reflected in the steady increase in “green bond” issues and the continuous inclusion of ESG assets (*Environment, Sustainability and Governance)*in investors' portfolios. In April 2020, given the COVID-19 outbreak, ESMA updated the risk dashboard, indicating an increase in the macroeconomic risk and the risks of liquidity, market, contagion, credit and operational risks. Since mid-February this year, global stock markets have experienced major price corrections, comparable to those during the financial crisis of 2008. Corporate and sovereign bond markets have shown signs of severe stress, with widening spreads. **Trading venues have experienced an increase in trading volumes and there have been numerous circuit breakers amid declining returns below the risk thresholds (circuit breakers).** In terms of investment funds, there has been a decline in performance across classes of assets, and bond funds have experienced capital outflows. Operational risk has increased, given the large share of teleworking, even though no incidences of Business Continuity Plans were reported.

Once with the onset of the COVID-19 pandemic, in addition to monetary policies implemented by the European Central Bank and by non-euro area national banks, fiscal policies have played a key role, with state governments providing a number of additional fiscal incentives in order to prevent long-term economic damage: tax cuts, payment of sick leave, salary subsidies or, for companies affected

[2] West Texas Intermediate – reference indicator in the price of petroleum

by coronavirus, suspension of payment of social contributions, VAT, etc. In addition, the European Union has implemented an additional package of measures in order to reduce the economic and social fallouts, based particularly on investment initiatives, easing fiscal requirements, increasing the amounts allocated to European funds, providing guarantees for SME financing, etc.

In the current context, **the primary goal of the Financial Supervisory Authority for 2020 has been to mitigate the impact of the COVID-19 pandemic over the stability of the non-bank financial markets and, implicitly, to protect financial consumers.** To this end, several measures have already been implemented, including: a 25% reduction in all taxes due to FSA, governance requirements for conducting remote meetings, the possibility for private pension fund administrators to invest a higher percentage in government bonds, a higher percentage than 70% of the value of assets, the extension of reporting deadlines, recommendations on the transparency of issuers in relation to stakeholders, the verification of business continuity plans, as well as the issuance of warnings on cyber risk.

Compared to the gross domestic product (GDP), the assets of the non-bank financial sector had a moderate increase trend in 2019, exceeding the decrease from the previous year determined by the higher evolution of GDP in nominal terms. The largest sector in terms of size and number of participants is the private pensions sector, whose assets have reached 6.09% of GDP. The next sector in terms of the size of assets is the investment fund industry, which accounts for 4.39% of GDP, followed by the insurance sector with 2.09% of GDP. In total, the assets of the three non-bank financial markets accumulated 12.57% of Romania's GDP at the end of 2019.

Stability of private pensions market

The evolution of the private pension system has been positive throughout its operation, the number of participants and the value of their personal assets constantly increasing. The value of total assets under management, at the level of the entire system, reached at the end of February 2020 the level of Lei 65.37 billion (EUR 13.58 billion), with a number of participants of 8,013,785. During the 12 years of operation of the private pension system, the evolution in the value of assets was determined by the increase in contributions as an aggregate effect of the increase in the number of participants and the average contribution and positive investment returns, obtained by funds through a prudent diversification policy, thus decreasing the market risk of a class of assets, at a time when there are declines in the prices of financial assets. Thus, the risks related to pension funds, for both Pillar II and Pillar III, remain very low due to the quality of investments held by funds through investments in fixed income instruments and the appropriate level of liquidity. The private pension system in Romania has over time complied with the requirements of prudence, quality and security of portfolios, so that the contributions of participants are safe. Although during recent years the strategic allocation of assets has varied slightly, the share of fixed income instruments exceeds the level of 72% of the total at the end of February 2020.

Most pension fund investments are made locally, at a rate of 87% at the end of February 2020 and denominated in lei, at a rate of 91%. For the most part, Romanian financial instruments are represented by Romanian government bonds, shares listed on the Bucharest Stock Exchange (BVB) and bank deposits, and investments in financial assets denominated in lei were mainly in government

bonds, shares listed on BVB, corporate bonds or bank deposits. Therefore, the generally higher level of bond yields denominated in lei compared to that of similar instruments issued in other currencies, aggregated with the predominantly positive performance of the local stock market, led to private returns being obtained by private pension funds generally higher than inflation.

Credit risk remains low due to the high quality of issuers of fixed income instruments, the share of deposits with credit institutions and sovereign bonds (with investment rating) being about 11%.

Market risk is composed of the interest rate risk, spread risk, stock risk and currency risk. Market risk is specific to financial investments and is managed at an appropriate level through the portfolio diversification policies applied by fund managers, in accordance with the applicable law and the good practice in the field.

The level of concentration on the depositaries of assets of private pension funds remains high, the services being provided by three authorized credit institutions, one of which has a market share of 83%. The causes are structural, related to the functioning mechanisms of the system and its characteristics, placed in the context of its evolution over time. The high level of concentration is the main concern from the perspective of operational risks for this market segment, and the activity of depositories is closely monitored in order to avoid the materialization of risks.

The rates of return obtained by private pension funds were positive, with no fund recording a rate of return below the minimum rate for its risk category. In order to better reflect the long-term nature of Pillar II pension funds, starting with the 2020 reportings, the method of calculating the rate of return has been changed by increasing the annualization period from 24 months to 60 months.

In the long run, the average annual return calculated since the beginning of the system, corresponding to the entire operational period of the Second Pillar of private pensions recorded values between 6.27% and 7.97%, remaining at a high level. Due to the similar investment structure, the evolution of the yields of the fund units related to the voluntary pension funds under Pillar III follows the same trend presented to Pillar II funds, with the mention that some funds were launched more recently and therefore the long-term performance history in their case is different.

Risks related to the stability and proper functioning of pension funds remain low, given the mechanism of operation of the private pension system of defined contributions (at the level of the amount of contributions), excluding from the outset the solvency risk which is the main concern in the case of a defined benefits pension systems (still predominant in Europe both in number and in assets).

The private pension system in Romania includes multiple mechanisms in order to protect participants that address **risk limitation from different perspectives: asset segregation, prudential limitations of investment policy, the significant role of safeguarding assets and verifying the legality of depositary operations, supervision by FSA, the prudential requirements for fund managers, as well as the existence of the Private Pension System Rights Guarantee Fund (FGDSPP).** The latter has the role of compensating for any losses of participants or beneficiaries both during the period of accumulation of contributions and after the opening of the right to a pension, resulting from the inability of administrators or pension providers to honor their obligations.

The category of protection mechanisms for participants to the private pension system in Romania also includes the prudential financial requirements applicable to fund managers: the minimum level of the share capital and the obligation to establish a calculated actuarial technical provision in order to cover the risk that, at retirement, the value of individual assets of the participant is less than the amount of the net contributions made by him.

Law no. 411/2004 on privately managed pension funds was amended in 2019, by including new provisions regarding the minimum required share capital, which thus acquires a macroprudential character and is established based on the contributions received in the previous year from which one decreases the share of infrastructure investments.

The economic turmoil caused by the COVID-19 outbreak is translated into sharp fall in the prices of financial assets. However, the private pension system is oriented towards long-term savings and has very low requirements for financial outflows (deaths, disabilities and certain retirement situations before reaching the minimum age). Therefore, even if on short term the volatility of the unit value of the net assets of private pension funds has suffered a shock, on long term it remains the least affected.

Balanced and prudent diversification has helped the private pension system to overcome several episodes of increased volatility in the past (see August 2015, January 2016, June 2016, June 2017 and December 2018). Despite temporary episodes of high volatility, the pension fund assets have grown from year to year, with a increase rate of at least 19% in all years since establishment.

The short-term depreciation of financial assets generated by the coronavirus pandemic crisis is not likely to affect the future pensions of the participants, since they are the result of long-term investments. Despite fluctuations in the prices of financial instruments, the total assets of the private pension scheme remain above the guaranteed value.

Given the context of the increasing phenomenon of population aging, which increases the pressure over the social protection mechanisms, **the private pension system from Romania was completed with the fourth pillar of pensions, namely the occupational pension system**. At the beginning of 2020, the Parliament passed *Law no. 1/2020 on occupational pensions*, which transposes the provisions of *EU Directive 2341/2016* on the activities and supervision of institutions for the provision of occupational pensions (IORP II). The goal of this new system is to provide an additional pension component, financed mainly by employers and, in subsidiary, by employees.

Stability of capital market

The capital market as a whole, but especially the stock market component, are extremely important for the stability of the non-bank financial market, due to the fact that most entities of the other segments of this market have stock investments. Along with the Bucharest Stock Exchange, the Central Depository is the most significant infrastructure institution of the local capital market. It fulfills multiple roles, of which the most visible and significant are those of recording the holdings and ensuring the completion of clearing and settlement processes. In 2019, the Central Depository was re-authorized according to *EU Regulation no. 909/2014 (CSDR) of the European Parliament and of the Council of 23 July 2014 on improving the settlement of securities in the European Union and on central securities depositories* and entered in the ESMA register, which confirms its vital role in

creating a harmonizedpost-trading framework in the European Union by introducing a set of common rules and reducing the complexity of regulation on the European financial market, caused by different national rules.

The new European regulations aim to increase the transparency, security and efficiency of the Central Depository's settlement operations and registry services. The improvement of the post-trading infrastructure took place in the context of the classification of the Bucharest Stock Exchange as an emerging market by FTSE Russell in 2019.

Stock market indices from Romania generally had recorded good evolutions in the years following the global financial crisis, both in absolute terms and in relation to local inflation. The increases in the year 2019 compared to 2018 are the most significant. This is also due to the fact that, in 2019, the Bucharest Stock Exchange (BVB) obtained the status of emerging market.

On the other hand, due to the worsening situation regarding the spread of COVID-19 virus, in March 2020, compared to December 2019, the stock market indices have recoded significant decreases, the BET-NG index (-26.16%) having the highest plunge. The sectors with the largest shares in the capitalization of the local stock exchange, namely the financial sector, respectively the energy sector (including oil, gas, exploitation and transport, utilities) were the sectors that had one of the most volatile developments internationally.

Between 2012-2019, the market capitalization related to the GDP reached a maximum of 12.4% at the end of 2013, after which it experienced a downward trend, falling to about 9% in GDP in 2018, following that in 2019 to return to the level of 10.5% in GDP. The factors that contributed to this downward trend in 2014-2018 were the relatively small number of new listed companies and their low market value, as well as the performance of stock prices (and thus of the stock market indices), which was lower than the GDP growth in nominal terms. Market liquidity has dropped in 2019, mainly due to the low capitalization of the free-float, the immobilization of significant packages of shares by a number of investors (eg. local investment and pension funds, but also foreign investors portfolio) and the lack of functional stock lending mechanisms (and short selling).

The local market for financial investment services has been continuously strengthened as a result of the pressure exerted by the constant trend of decreasing the trading costs for investors and the relatively low level of traded value. Due to the legislative requirements at European and international level, it has been necessary to increase the compliance costs for brokers and the capital requirements in terms of the operational risk. By the end of December 2019, a total of 26 brokers were operating on the regulated market within BVB, of which 18 Financial Investment Services Companies (FISC), 3 local credit institutions and 5 entities authorized in other EU Member States. The cumulative value of FISCs' own funds has increased significantly compared to December 2018, by approximately 10%, reaching the level of Lei 173 million, while the number of active investors accounts was 16,006 (an investor can have accounts open simultaneously to several brokers).

Of the 18 FISC, 14 recorded profit in 2019, the cumulative value of their profits being about Lei 27.56 million. The cumulative loss of the other 4 FISC was approximately Lei 2.46 million. These values, given the context of the strengthening trend of the financial investment services market, indicate the maintenance of the risk of profitability, at the level of the entire market, for this category of entities.

The investment funds market has experienced a continuous development, the number of open-end investment funds increasing from 51 in December 2009 to 82 in December 2019, while the value of their assets has multiplied approximately 7 times.

The total value of assets of all collective investment schemes (mutual funds) in Romania was Lei 46.57 billion on December 31, 2019, increasing by about 18% compared to the level from the end of December 2018. On the overall market, the consolidated structure of all collective investment schemes, however, indicates a preference for fixed income instruments/money market instruments with a total value of around Lei 22.69 billion , recording a share of about 49% of the accumulated assets of the CIS. Investments in shares on the entire market amount to Lei 22.34 billion , representing approximately 48% of the total assets of the mutual fund.

Given the current context characterized by the COVID-19 outbreak, for the market of collective investment schemes the most relevant are investment risks, credit risk and liquidity risk. Furthermore, they are generally properly managed across the market, by diversifying and complying with the investment policies undertaken in the funds prospectuses. The low complexity of the market means that, for the time being, these risks are not amplified by the use of financial leverage, as complex financial instruments (eg. derivatives, structured bonds, securitization bonds, etc.) do not have a significant share in total assets. The high level of concentration of depositary services is high at the end of 2019, for the same structural reasons as in the case of pension funds.

For the second component of the capital market, the local stock market, market risk and liquidity risk are relevant. From this perspective, the year 2019 was characterized by an average level of stock price volatility and a low average daily value of transactions, compared to the values observed during the recent years, which indicates the level of these risks. However, the first quarter of 2020 marks a significantly higher level of volatility on the stock market, compared to 2019, this being determined by the economic fallouts caused by the COVID-19 pandemic. On the local stock market, the volatility regime of the BET index has become high-medium. At the same time, the contagion risk has increased rapidly in March this year and has reached its highest value since 2011.

Stability of insurance market

The insurance market from Romania has continued the positive evolution during the recent years from the perspective of the volume of gross written premiums (GSP) and the structure of the insurance market, observing a tendency to accentuate the diversification of consumer interest for insurance products, especially for the life and health insurance segment. In 2019, the volume of gross written premiums approached the threshold of Lei 11 billion, increasing by over 8% compared to the previous year, respectively by about 24% more than the value recorded in 2009. The level of insurance penetration in GDP , one of the indicators of the level of development of the insurance market, calculated as the ratio between gross premiums and GDP of Romania, showed a relatively steady trend, its value decreasing slightly in 2019 to 1.04%, amid a faster appreciation of GDP.

The insurance market remains dominated by the motor insurance sector which holds a significant share in the total gross written premiums for the non-life insurance business, of about 72%. Thus, the first 3 classes from the perspective of GWP volume have a cumulative share of about 86%, and the other 15 insurance classes are at a level of about 14%.

Among the insurance companies currently operating, **the level of concentration of market shares has increased significantly during the recent years**, so that the first five companies achieved in 2019 about 77.3% of total gross written premiums compared to 72, 3% in 2018.

Also, on the life insurance segment, the level of concentration is high, both by insurance classes and by companies.

A slight change in trends on the insurance market is seen by the increase in the share of health insurance, both in terms of the volume of gross written premiums for non-life insurance and for life insurance. This shows an increase in the level of diversification on the Romanian insurance market.

The combined ratio (cost and profitability risk indicator) remained high, but did not affect solvency and liquidity levels, which remain in a comfortable area related to the legal requirements.

From the perspective of the distribution activity, the share of brokered premiums in total gross written premiums had a relatively stationary evolution during the last years (2016-2019), being in the range 63% - 66%. **The high level of brokerage on the non-life insurance market is a peculiarity of the local market**, in contrast to the situation from most European countries, where the share of sales through insurance brokers is lower. The revenues from the brokerage activity earned by the insurance brokers in 2019 has recorded a percentage increase of 15.19% compared to 2018, and **the calculated average commission was 17.52%.**

Of the gross technical provisions existing at the end of March 2019, about 41% were related to reinsurance ceding. Traditionally, in case of life insurance, insurance companies generally take a much larger share of the written risk. Due to the fact that insurance premiums are generally anticipated and the indemnities, in case of occurrence of the insured event, are fixed by contract for each event, namely are more predictable, life insurance companies do not resort as often to the ceding in reinsurance as in the case of non-life insurances.

Prudential requirements for the liquidity ratio of insurers are mandatory under the applicable law and must have an over-unit value. In general, liquidity is much higher for life insurance activities where the risks are easier to shape and know less structural changes over time. Although the median liquidity ratio for both insurance activities has decreased slightly in 2019, it remains unitary for all companies and for both insurance segments (non-life and life), except for one company.

The Solvency Capital Requirements (SCR) calculated under the Solvency II regime varied during the fourth quarter of the period 2016-2019 between Lei 2.8 billion and Lei 3.1 billion , increasing over time due to the risks to which the insurance companies are exposed, with a slight increase in the Solvency Capital Requirement (SCR) of around 3%, similar to the Minimum Capital Requirement (MCR) in 2019 compared to the previous year. At the aggregate level, excesses of assets over liabilities (own funds of insurance companies) have, since the first year of implementing the new legal regime, recorded values meant to cover the capital requirement calculated in accordance with Solvency II, which is a measure of financial system stability of the insurance system. The value of own funds eligible to cover the solvency capital requirement was on 31.12.2019 at the level of Lei 5.48 billion , increasing by 7% compared to the value recorded on 31.12.2018 and higher by about 19% compared to 31.12.2016.

The risks generated by adverse developments in financial markets given the context of COVID-19 pandemic and the containment measures imposed by states **can be completed with the business risk for the insurance market, caused by a potential decline in the gross written premiums and an increase in the redemptions of the policies in force.** However, most insurance companies from Romania do not assess the impact of COVID-19 as a major one on their risk profile and financial position. Some insurers performed additional stress tests and impact analysis, and the impact was marginal. Also, with few exceptions, most companies are well capitalized, with liquidity and solvency indicators well above the minimum thresholds. From the perspective of insurance products, most companies either have exclusions for epidemics/pandemics or have a low exposure for this type of risk.

Interconnection of non-bank financial markets

While the coronavirus epidemic (COVID-19) spread from a regional crisis from China to a global pandemic, the contagion has intensified, the value of shares in international markets has decreased and market volatility has increased highly and rapidly.

In the US, recent levels of volatility exceed those observed in October 1987 and December 2008. The indicator measuring the likelihood of entering a recession has risen rapidly between February and March and is heading to a critical point. To date, there has been no other infectious disease that has had more than a marginal effect over the financial market volatility. Starting from 24 February 2020, news of COVID-19 developments has dominated other international events and acted as a global risk factor for the international economy. In addition, the estimated economic impact is exacerbated by the interconnection of economies and financial markets, which has allowed an instant reaction and an uniform transmission of shocks to all economies.

The level of financial stress, calculated and published by the Office of Financial Studies[3], which identifies potential vulnerabilities in the financial system and its weaknesses that can generate, amplify and transmit tensions in the US and/or on the international financial market, has increased rapidly in 2020, and the volatility will continue to remain high during the recent months, indicating US as the region with the highest potential for an economic instability in three groups of economies. On February 21 (Friday) the American market entered the regime of high volatility, according to the *Markov-Switching* model, followed by Germany. On Monday, February 24, 2020, all stock markets (of the sample), except for Austria and Romania, have experienced very high volatilities. The Romanian market entered the high volatility regime on March 5, being the last market (of the sample) affected by volatility (low sensitivity to external events). At the same time, the dependence between volatility and correlation between the Romanian market and the European market (Stoxx 600 index) has increased rapidly.

The stability of financial markets is doubly hit, both in terms of GDP and in the mechanism of transmission of the financial markets. The correlations between uncertainty and indicators for financial conditions are negative and show that an economic uncertainty has a direct impact over the stability of the financial market from Romania.

[3] https://www.financialresearch.gov/

The COVID-19 pandemic showed how strong the contagion risk is, as well as the effects for both the bank and non-bank markets. Although the local financial market does not have the same level of sophistication like the markets developed, the level of interconnection is high, which makes it necessary to constantly monitor all the possible channels of risk transmission between sectors. All three sectors of activity of the FSA are approximately equally likely to receive shocks from outside, with significant consequences for their size, operation and performance.

The slowdown in the global and European economy can also have a significant impact over the insurance sector, as the trend in all European economies is to decrease the number of new car registrations. Another vulnerability to the financial stability that can affect the insurance sector is the surge in the debts of the households.

From the perspective of cross-sector balance sheet exposures, used to measure the level of interconnection between markets, UCITS (capital market) have a share of 26% invested in listed shares, private pensions (PII) - 20%, while the insurance sector invested very little in the capital market. The specifics of the activity of insurers, investment and pension funds make the financial assets held to play an extremely significant role for their ability to comply with their obligations towards policyholders/investors/participants. At the same time, a shock felt by one of the issuers of such instruments or by one of the markets where they are traded, with a significant share in aggregate assets at the level of one of the non-bank financial sectors supervised by FSA, could have an implicit effect on the performance or stability of that sector.

The analysis of the exposure network shows that in the case of all the three non-bank financial sectors supervised by FSA, the main risk exposure is towards the Romanian state, through the sovereign bonds held in the portfolio. In comparison, the level of interconnection with the stock markets has a medium to low magnitude, while the interconnection with the banking system (viewed exclusively from the perspective of balance sheet assets) is very low.

The contagion index for government bonds, for a mobile sample of 150 weekly bond yields, increased at the same time as the contagion index for the capital market as a result of the risk aversion of investors who left the stock markets and bought government bonds, but also amid the background of the measures taken by the European Central Bank in order to increase the market liquidity.

The analysis of the net contagion, respectively the difference between the received contagion and the transmitted contagion, shows that Bulgaria, Romania and Hungary receive net contagion, while Spain, Italy, Belgium, France, Ireland transmit net contagion. Italy is the country that transmits the most contagion because it is the third largest economy in the world in size of the bond market.

The operating mechanisms of the authorized entities on the local non-bank financial market and the institutional investors that characterizes them, together with the existence of mutual exposures between the three sectors, facilitated by financial instruments, determine the existence of common risk factors that influence their dynamics. The mixed financial stability indicator, which provides information on the current evolution of non-bank financial intermediation by taking into account the dependency between the three sectors, shows a steady deterioration in the financial stability, without reaching a critical level.

At the same time, due to the specific structure and operating mechanisms of non-bank financial institutions, some sectors are more likely to amplify and pass on shocks from outside them to other

parts of the financial system (eg. stock exchanges, sovereign bond markets, derivative markets, mutual funds, etc.), while others (when functioning properly and not affected by vulnerabilities) most often act as stabilizers that cushion or even absorb the shocks received, thus protecting the rest of the financial system (eg. especially private pension funds, but also insurance companies, etc.). Life insurance companies and pension funds have traditionally been long-term investors, which puts them in a position of buffer for volatility and provider of a systemic liquidity. This situation is also found in case of pension funds from Romania, which are still in the stage of accumulation and increase. Lower interest rates and an environment where the level of interest rates remains low for a long period of time can erode the profitability of insurance companies and pension funds, especially those with long-term investments.

Analysis of the transmission of macroeconomic shocks over the insurers' portfolios in Europe4 points out that an increase in the macroeconomic risk in Europe may lead to a common shock for insurance companies, as their portfolios mainly consist in bonds. Macroeconomic shocks have a different impact over bonds depending on their maturity. Life insurance companies are more affected by low interest rates because the duration of long-term liabilities increases more than that of short-term assets. Analysis of the largest European insurance groups and their financial counterparts5, focused on direct connections between insurers and banks in the EU, shows that at least 20% of insurance companies' assets are investments in banks. As a result, at European level, insurers are an important source of financing for banks. The analysis of the network distribution shows that the network of insurance groups, banks and other financial institutions displays an interconnectivity, that credit/financing events do not spread easily through direct contagion. Unfavorable events in the network lead to only limited direct contagion effects.

Insurers' solvency positions are high enough and their exposure is low enough in order to avoid direct contagion caused by the bankruptcy of one of their counterparties, which could eventually lead to their own bankruptcy.

This also applies to simultaneous adverse events on the first ten banking partners, except for two insurance groups.

The still insufficiently developed stock market from Romania can be a potential factor for amplifying the shocks received by contagion from foreign stock exchanges. The same situation can be observed in case of investment funds, which are particularly likely to be a transmission channel and a factor of amplification in the event of a potential liquidity crisis.

Financial stability and macro-prudential policies

The year 2019 meant the fulfillment of several measures regarding the development of non-bank financial markets from the perspective of the medium-term strategic goal of accession to the euro area, which result in the gradual increase of the level of convergence. Of these, the most significant were: improving the functioning of the Bucharest Stock Exchange and its transition from frontier market to emerging market; reauthorization of the Central Depository; implementation of the

[4] Acatrinei (2017) - EIOPA, Financial stability report, December 2017

[5] Alves, Ivan, et al. Network analysis of the EU insurance sector. No. 07. European Systemic Risk Board, 2015

primary legislative framework on alternative investment funds; implementation of the primary legislative framework on mutual insurance companies; introduction of the occupational pension system.

Other important projects in the process of accessing to euro area were started in 2019, and will be completed in the next period: solving the issues related to inactive accounts on the Romanian capital market; supporting the establishment of a national CCP; participation to the project on "European Single Electronic Format - ESEF" - Implementation of Commission Delegated *Regulation (EU) 2018/815* completing *Directive 2004/109/EC* as regards technical regulatory standards on the specification of a single electronic reporting format; strengthening the risk management capacity for FSA of entities active on the capital market by implementing the supervisory framework developed with the assistance of the World Bank; strengthening the risk management capacity for FSA of insurance market entities by implementing the supervisory framework developed with the assistance of EIOPA; improving the existing framework for consumer protection of non-bank financial services by approval by FSA in 2019 of the Consumer Protection Policy through which the establishment of an integrated organizational framework is needed, necessary for the development of FSA programs in the field of consumer protection and financial education, through preventive monitoring and warning actions regarding possible violations of consumers' rights and interests and through reactive actions for managing and solving complains; improving the supervisory function of the Romanian insurance market in terms of market conduct, funded by the European Commission, a project that involves technical assistance provided by EIOPA in the field of supervising the conduct of insurance distributors.

From the perspective of macroprudential policy, in 2019, the National Committee for Macroprudential Oversight (NCMO) did not issue new recommendations to FSA. The Financial Supervisory Authority remained liable for complying with CNSM Recommendation no. R/4/2018, on permanent term, regarding the implementation of the macroprudential instruments for fulfilling the intermediate goals included in the General Framework on the strategy of the macroprudential policy of the National Committee for Macroprudential Oversight.

For this the FSA conducts regular analysis on the risks and vulnerabilities identified in the three supervised non-bank financial markets, as well as the opportunity to implement the existing macro-prudential instruments. To date, the following macroprudential measures have been implemented:

(i) at the level of financial investment service companies (FISC): the capital conservation buffer (implemented in 4 equal annual installments of 0.625% of the total value of risk-weighted exposures, between 1 January 2016 and 1 January 2019);

(ii) in case of insurance companies: the liquidity indicator of insurance companies; recovery plan;

(iii) in case of the private pension market: restrictions on significant exposures;

(iv) for private pension fund managers: limiting the exposure to an issuer to 5% of net assets; exposure to a group of issuers and their affiliates may not exceed 10% of the assets of the private pension fund;

(v) for all supervised entities, the FSA shall apply IT system security requirements.

In 2020, FSA will continue to **take the necessary measures in order to mitigate the risks generated by the COVID-19 pandemic on non-bank financial markets, along with the goals undertaken by its Strategy 2019 - 2023.**

Introduction

The first edition from 2020 of the *Report on the Non-bank Financial Markets Stability* presents the current situation and continues the analysis of risks and potential vulnerabilities to the private pension market, capital market and insurance market, from the perspective of financial stability, as shown by the interpretation of indicators reported by the entities supervised by the FSA until the date of 31 March 2020, as well as the latest available data and information on the evolution of financial markets. Data analysis was carried out both on long term, in order to provide a more accurate picture of the evolution of the non-bank financial system as a whole and of the specific and structural factors that determined this evolution, and on short term, in order to highlight the current trends in the current macroeconomic context. The report also provides information and analysis on the current situation triggered by the COVID-19 epidemic and its impact on the economy and on the non-bank financial environment.

The first part of the report deals with both the international and local macroeconomic and financial context and the long-term trends of these markets compared to other relevant European markets. The main risks and vulnerabilities identified by the European authorities in the field are also reviewed. Chapters 3, 4 and 5 present separate analysis of the stability of the private pension market, the capital market and the insurance market, highlighting potential risks and vulnerabilities. The last parts of this report analyze on the one hand the interconnection of local financial market segments and the possible cross-border influences, and on the other hand, it reviews the main macroprudential policy measures implemented in order to strengthen the stability of local non-bank financial markets. At the same time, considering the strategic goal of Romania's accession to the euro area on medium term, the main elements regarding the non-bank financial markets in the action plan undertaken are presented, which were fully achieved in 2019, as well as other progress made by FSA in implementing them. Of these, the most important were: the granting of the emerging market status to the Bucharest Stock Exchange by FTSE in September 2019 and its inclusion in the geographical indices calculated by FTSE Russell starting with September 2020; the reauthorization of the Central Depository in December 2019, based on EMIR, according to the provisions of the *Regulation (EU) 909/2014 on improving the settlement of securities in the EU and on central securities depositories,* which involves the alignment with the European practices and its registration in ESMA Register; the implementation of the primary legislative framework on alternative investment funds, the implementation of the primary legislative framework on mutual insurance companies and the introduction of the occupational pension scheme by transposing the IORP II Directive.

The overall picture resulting from the information and analysis presented in this report highlights the resilience of the non-bank financial system and of its entities, despite the short-term shocks received given the context of the current crisis triggered by the COVID-19 pandemic.

1. Analysis of the local and international macroeconomic and financial context

During 2019 economic and financial developments at European and global level were marked generally by a high level of uncertainty and volatility, especially as a result of certain geopolitical events (eg. trade tensions between the US and China, uncertainty about the UK's withdrawal from the European Union) with a medium and long-term impact over the economic activities and balances and respectively with a short-term effect over the variables that characterize the financial markets.

Although the financial conditions at European level remained stimulating, the economic developments have been oscillating, characterized by inconsistencies and significant differences in pace between the Member States of the European Union.

Nationally, the economic increase remained robust in 2019, significantly higher than the European Union average, given the maintenance of a low level of total debt and external debt, but also accompanied by a worsening of the current account deficit. A vulnerability of the Romanian economy is related to the increase in the current and budgetary account deficits. The current economic model, which is based on economic increase supported mainly by private consumption stimulated by the appreciation of the population incomes specific to recent years, causes a significant increase in imports, above the volume of exports, with a negative impact over the current account deficit. Given the context of the outbreak of the COVID-19 pandemic, the fiscal measures necessary to mitigate the negative effects over the Romanian economy will put pressure on the budget deficit, leading to its deepening in 2020.

1.1. International macroeconomic and financial evolutions

Global economic growth slowed in 2019 (+2.9%), according to IMF estimates, the largest since the financial crisis, with a decline in the production and investment activity, amid the high uncertainty due to escalating trade tensions. The continued slowdown in increase also manifested itself in case of the Chinese economy, which registered an advance of 6.1% in 2019 compared to 2018, when the advance of the Chinese economy was 6.6%, amid trade tensions with the US, but also as a result of the manifestation of global uncertainties. In the fourth quarter of 2019, the annual economic increase stood at a level of 6%.

Financial and macroeconomic conditions remained relatively relaxed, with the boosting monetary policies of the Federal Reserve (US FED) and the European Central Bank (ECB) remaining unchanged. However, the EU and euro area economies have experienced a slowdown in their annual increase to 1.2% in Q4-2019 (from 1.7% in Q1), while in the case of the euro area the increase rate slowed up to 1% (from 1.4% in Q1, seasonally adjusted series).

According to data published by Eurostat, the quarterly increase was 0.4% for the EU-28 and 0.3% for the euro area in Q3-2019, above the market expectations, but followed by a slowdown in Q4-2019 (+0.1% for both). Among the EU Member States, in Q4-2019, a negative increase in the quarterly rate was recorded in Greece (-0.7%), Finland (-0.6%), Italy (-0.3%) and France (-0.1%). Given the current

European context, Romania registered the fourth economic increase (+4.2%) in the EU in Q4-2019 compared to the same period of the previous year, ranking after Ireland (+6.3%), Hungary (+4.6%) and Malta (+4.3%). Modest developments were recorded in Italy (+0.1%), Germany (+0.5%), Finland (+ 0.6%), Sweden (+ 0.8%) , Austria and France (both with +0.9%). France and Germany slowed their economic pace faster than other euro area countries, marked by more social discontent and external trade barriers.

Table 1 GDP evolution in EU between 2018 – 2019

	Q1_19	Q2_19	Q3_19	Q4_19	Q1_20	2018	2019
EU-28	**1.7**	**1.4**	**1.5**	**1.2**	**-**	**2.0**	**1.5**
EU-27	**1.7**	**1.5**	**1.6**	**1.3**	**-2.7**	**2.1**	**1.5**
Euro area	**1.4**	**1.2**	**1.3**	**1.0**	**-3.3**	**1.9**	**1.2**
Romania	**5.0**	**4.4**	**3.2**	**4.2**	**-**	**4.4**	**4.1**
Bulgaria	3.8	3.5	3.2	3.1	-	3.1	3.4
Hungary	5.3	5.1	4.8	4.6	-	5.1	4.9
Poland	4.7	4.1	4.0	3.7	-	5.1	4.1
Czech Republic	2.8	2.7	2.5	2.0	-	2.8	2.6
Germany	1.0	0.3	0.6	0.5	-	1.5	0.6
UK	2.0	1.3	1.3	1.1	-	1.3	1.4
France	1.3	1.5	1.5	0.9	-5.4	1.7	1.3
Spain	2.2	2.0	1.9	1.8	-4.1	2.4	2.0
Italy	**0.2**	**0.4**	**0.5**	**0.1**	**-4.8**	**0.8**	**0.3**

Source: Eurostat (percentage change compared to the similar quarter of the previous year-seasonally adjusted data)

A vulnerability of advanced economies, but also of emerging and developing ones, is linked to the very high level of public and private debt. Public debt can have a positive impact over the economic development, given that it is used to finance investment that can stimulate increase. However, the high level of state indebtedness can reduce the space for management in addressing unexpected shocks, which makes a global economy already in a fragile balance, vulnerable.

On the other hand, the data for March this year suggests a weakening of the macroeconomic conditions in Europe and the US in the first quarter of 2020. The ZEW indicator of the economic sentiment (6-months forecasts) for the euro area re-entered on a negative territory, falling sharply by 59.9 points to -49.5 points (from +10.4 in February), the lowest level since December 2011, when Europe was facing a sovereign debt crisis. The decline was recorded mainly in the United Kingdom (-58.5), Italy (-57.6), France (-53.3) and Germany (-49.5), where there is a marked pessimism for a longer period. Expectations over the economic predictions for the euro area have deteriorated compared to the previous month, mainly amid the uncertainties about the rapid spread of COVID-19 and the containment measures imposed by the states, decreasing the people mobility and leading to a significant slowdown in the economic activity.

Expectations of financial market experts also deteriorated significantly in the US, where the ZEW indicator lost 51.9 points, reaching the level of -50.4 points in March, under the influence of the spread of the COVID-19 pandemic.

The year 2020 began with an escalation of the geopolitical tensions between the US and Iran and the outbreak of the COVID-19 pandemic, which has become the biggest source of global concern about

the economic activity since the global financial crisis. The new coronavirus appeared in December 2019 in China, COVID-19 spreading rapidly in January in that region. Although initially the spread of COVID-19 led to a sharp slowdown in China, the impact on financial markets and commodity channels, resulted into massive declines in energy prices (especially oil) and metals, affecting the global trade flows – amid a much lower demand from China - and the decline of tourism - as a result of the lockdown measures imposed by the states.

Commodity price developments were strongly influenced in the first 3 months of 2020 by the effects of the COVID-19 outbreak, causing significant declines in oil prices in March 2020, amid a sharp slowdown in demand, but also as a result of the failure of the OPEC + negotiations (OPEC and its partners) to reduce the oil production. Thus, oil prices recorded in March the lowest values of the recent years, the price of WTI oil standing at 20.48 USD/barrel, respectively the price of Brent oil dropping to 26.35 USD/barrel on March 31, 2020. Although In April, OPEC members and their partners (OPEC +) reached an agreement to reduce the production volume in order to limit the declining oil prices, the price of WTI oil, a benchmark for the US market, continued to fall. The price of the WTI oil delivered in May entered on a negative territory in the second half of April for the first time in history, following a massive drop in demand and a glut in the US inventories.

The effects of the COVID-19 spread in Europe and the containment measures were reflected in the decline of GDP of European economies in the first quarter of 2020. According to the first estimates released by Eurostat by the end of April, the euro area economy declined in the annual rate with 3.3%, and for the EU-27, the decrease was lower, with -2.7%, in the first quarter of 2020 compared to the same period of the previous year. More severe decreases compared to the European averages were recorded in France (-5.4%), Italy (-4.8%) and Spain (-4.1%), countries strongly affected by the spread of COVID-19.

Compared to the previous quarter, seasonally adjusted GDP fell by 3.8% in the euro area and by 3.5% in the EU-27 in the first quarter of 2020, the most significant decrease since 1995, according to data published by Eurostat. The latest data on the GDP dynamics estimates show that the economies of France and Italy are entering a technical recession, with two consecutive quarters of declines. The French economy fell by 5.8% in the first quarter of 2020 compared to the previous quarter, the highest fall since 1949, after also recording a negative increase in the fourth quarter of 2019 (-0.1%). According to the signal data published, the Italian economy recorded a fall by 4.7% compared to the previous quarter, while in the fourth quarter of 2019 the fall was by 0.3%.

The US is also feeling the effects of the crisis caused by the new coronavirus and its lockdown measures, with the economy declining by 4.8% in the first quarter of 2020, the lowest level since the -8.4% fall in the fourth quarter of 2008, according to the most recent data published by the Bureau of Economic Analysis. Also, the unemployment rate in the US increased by 0.9 pp in March compared to February, the largest monthly increase since 1975, to a value of 4.4%. The number of unemployed remained at 7.1 million people (up 1.4 million) in March, according to the US Bureau of Labor Statistics. The number of initial applications for unemployment benefits continued to rise in the United States throughout April, following the impact of COVID-19 and the lockdown measures. Only in the week ending on 25 April 2020, initial applications for unemployment benefits stood at around 3.8 million, compared to around 4.4 million in the previous week.

Given the context of the COVID-19 pandemic outbreak and the effects of the necessary containment measures, the social-economic impact is major, the latest data indicating that the global economy has entered in the most significant recession since the Great Depression (1929- 1933). The latest estimates of the International Monetary Fund, published in April this year, indicate a decline of -3% in 2020, well below the level of 2009, reached during the global financial crisis, when the global economy fell by -0.1 %. For 2021, IMF estimates indicate a recovery of the global economy, with an advance of 5.8%, in the baseline scenario which implies that the pandemic effects will be reduced in the second half of 2020, and the containment and quarantine measures will be gradually lifted during this period. Advanced economies will decline by -6.1% this year, while estimates for emerging countries and developing economies show a fall by -1% in 2020, as these countries face massive outflows of capital, currency pressures and a more limited fiscal space, with potential negative consequences over the implementation of measures to support the economic growth.

The lowest values among the regions analyzed are in the euro area, for which the IMF estimates a negative increase of around -7.5% in 2020, given the context where even the pre-crisis forecasts generated by COVID-19 indicated a further slowdown in increase, with moderate advances for the euro area. The impact of COVID-19 over the economy of some developed countries from the euro area is significant, Italy (-9.1%), Spain (-8.0%), France (-7.2%) and Germany (-7.0%) , being among the most affected countries in terms of social-economic effects, which led to more pessimistic estimates of the IMF regarding the economic increase of this area.

The US economy will also be severely affected by the crisis generated by COVID-19, with an estimated decline of -5.9% in 2020 according to the IMF. Despite aggressive but necessary mitigation measures to support the economic activity and to protect the workers, the effects of the crisis are expected to be persistent, with increasing unemployment rates.

Table 2 Growth projections (%)

Region/country	2019	IMF estimates		EC estimates	
		2020	2021	2020	2021
Global	2.9	-3.0	5.8	-3.5	5.2
Advanced economies	1.7	-6.1	4.5	-	-
Emerging and developing countries	3.7	-1.0	6.6	-	-
US	2.3	-5.9	4.7	-6.5	4.9
Euro area	1.2	-7.5	4.7	-7.7	6.3
EU	1.5	-7.1	4.8	-7.4	6.1
Germany	0.6	-7.0	5.2	-6.5	5.9
France	1.3	-7.2	4.5	-8.2	7.4
Italy	0.3	-9.1	4.8	-9.5	6.5
Spain	2.0	-8.0	4.3	-9.4	7.0
Great Britain	1.4	-6.5	4.0	-8.3	6.0
Romania	**4.1**	**-5.0**	**3.9**	**-6.0**	**4.2**
Bulgaria	3.4	-4.0	6.0	-7.2	6.0
Hungary	4.9	-3.1	4.2	-7.0	6.0
Poland	4.1	-4.6	4.2	-4.3	4.1
Czech Republic	2.6	-6.5	7.5	-6.2	5.0

Source: IMF, World Economic Outlook, April 2020, European Commission, spring forecast of the European Commission, May 2020

On the other hand, the European Commission (EC, spring forecast, May 2020) estimates a more significant decline in the global economy, of -3.5%, in 2020 and a return in 2021 (+5.2%), given the context where a gradual relaxation of quarantine and social distance measures would create the premises for a stabilization of economic activities.

According to the EC estimates, the economies of all EU Member States will be affected by the effects of the COVID-19 pandemic and the lockdown measures, with falls between -4.3% (Poland) and -9.7% (Greece) in 2020. Along with Greece, the most affected countries in the euro area remain Italy (-9.5%), Spain (-9.4%) and France (-8.2%). Thus, the EU economy will fall by 7.4%, a much lower level than during the global financial crisis (2008-2009), while estimates for the euro area indicate an even more significant decrease of -7, 7% this year. Also in the case of the United Kingdom, the European Commission estimates a significant decrease (-8.3%) in 2020.

The forecasts for 2021 show a recovery of all the economies of the Member States of the European Union, with an economic increase between 3.7% (Finland) and 7.9% (Greece). However, the EU economy (+ 6.1%) will not fully recover the next year the losses from the COVID-19 crisis.

In order to assess the impact of the COVID-19 pandemic over the economic increase, the World Bank published the results in case of two distinct scenarios. In the baseline scenario, where states would abandon the lockdown measures during the second quarter, the economic increase for the Central European region and the Baltic States will fall by -1% in 2020, while in a scenario more pessimistic, based on a deeper recession, where states waive the isolation measures in the second half of 2020, the fall will be by -2.5%, according to the World Bank estimates.

However, there is a high level of uncertainty about the future developments regarding both the pandemic duration and the extent of the impact that the pandemic will have over the economic activities.

Table 3 Growth projections by European area (%)

Region		Baseline scenario				Scenario 2			
	2019	**2020**	**2021**	**Review towards January forecasts**		**2020**	**2021**	**Review towards January forecasts**	
				2020	**2021**			**2020**	**2021**
Central Europe and Baltic states*	4.0	-1.0	5.5	-4.3	2.5	-2.5	5.9	-5.8	2.9
Western Balkans **	3.6	-1.1	4.4	-4.7	0.6	-3.8	4.5	-7.4	0.7
Eastern Europe***	2.6	-3.6	3.0	-6.5	-0.1	-7.1	2.8	-10.0	-0.3

Source: World Bank, * Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland and Romania; ** Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Northern Macedonia and Serbia; *** Belarus, Moldova and Ukraine

The Central Bank of France presented estimates of economic growth in the first quarter of 2020, which confirms the entry of the French economy in a technical recession, with two consecutive quarters of declines. Data show a decrease of -6% of the economy compared to the previous quarter, due to the effects of the spread of COVID-19 and the strict measures imposed to prevent its spread,

after the fourth quarter of 2019, when the economy fell by -0.1%. According to the Central Bank, the economic activity decreased by 32% in the last two weeks of March this year, the quarantine measures being imposed since March 17, and among the most affected economic sectors are transport, tourism and construction.

The effects of the crisis caused by the new coronavirus and its prevention measures are also being felt in the United States, with the unemployment rate rising by 0.9 pp in March compared to February, the highest monthly increase since 1975, to a value of 4.4%. The number of unemployed reached 7.1 million people (up 1.4 million) in March, according to the US Bureau of Labor Statistics. Figures on the number of people applying for unemployment benefits in the US are constantly rising as a result of the impact of COVID-19 and the measures taken in order to prevent its spread, only in the week ending on 11 April 2020, the initial unemployment benefits being at a level of about 5.2 million, given that in the previous week the number of applications was about 6.6 million.

The pandemic crisis had a significant impact over China's economy, which fell by -6.8% in the first quarter of 2020 compared to the same period of the last year, according to data released by China's National Bureau of Statistics, the largest fall since 1992, from when the official publication of the quarterly indicator is available. Industrial production fell by 8.4%, retail sales declined by 19% and investments decreased by 16.1% in the first quarter of 2020 compared to the same period of the previous year. The urban unemployment rate reached a record level in February (6.2%) and fell slightly to 5.9% in March, according to a government survey.

All these adverse developments have led to increasingly pessimistic expectations regarding the economic activity, a deterioration in the consumer confidence and revisions on estimates of economic increase, partly offset by the introduction by more and more states of fiscal measures to support the economic sectors affected in their economic increase by the crisis generated by COVID-19, as well as through the efforts of central banks to ensure the financial stability through interest rate cuts and market liquidity.

The constant effort of the European Central Bank (ECB) to support a credit-friendly economic environment was visible in 2018-2019, while anticipating the stability of inflationary pressures. At the monetary policy meetings, the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility should remain unchanged, at a low level compared to market expectations of 0.00%, 0,25% and -0.50%. The ECB continued to reinvest in full in maturing securities purchased under the quantitative easing program. At its monetary policy meeting in September 2019, the ECB also decided to resume the asset purchase program from November 2019, at a rate of EUR 20 billion/month, in order to strengthen the impact of monetary policy rates. The ECB's main goal remained to maintain favorable lending conditions and to support the accommodating orientation of the monetary policy.

In the current context, the purpose of the monetary policies must be to support a fairer and more orderly functioning of markets by introducing liquidity facilities and favorable financial conditions. From this perspective, the ECB has decided to implement a series of measures to provide liquidity in the financial system and to support favorable financing conditions in a macroeconomic context marked by a high level of uncertainty:

- establishing more favorable conditions for quarterly longer-term refinancing operations (OTRTL-III);

- carrying out new additional longer-term refinancing operations (ORTLs) in order to cover the period up to the OTRTL III operation from June 2020;
- the introduction of a new asset purchase programme amouting to EUR 120 billion by the end of 2020;
- the introduction of a new pandemic emergency purchase program (PEPP) with a total value of EUR 750 billion;
- the introduction of a new series of non-targeted pandemic emergency long-term refinancing operations (PELTRO).

On the other hand, the Federal Reserve (US FED) has decided to decrease the target range for the federal funds rate to 0-0.25% in order to sustain the economic activity, favorable labor market conditions and to stimulate the return of inflation to the US FED target. (2%).

The US FED also announced the introduction of other measures in order to ensure the functioning of the market, including the purchase of treasury securities and mortgage-backed securities (MBS). In order to support the US economy, the Federal Reserve has taken additional steps in order to provide up to USD 2.3 trillion in loans, thereby supporting households and employers and strengthening the capacity of the state and of the local governments to provide critical services during the pandemic.

In order to mitigate the effects of the spread of COVID-19 and of the measures to prevent the spread of the virus, the United States has approved a USD 2,000 billion financial incentive package, of which USD 500 billion is for loans to companies in difficulty, USD 350 billion are reserved for loans to small businesses, while USD 250 billion will be used as direct payments to individuals and families, respectively, for unemployment benefits.

Given the current context, the NBR also decided to reduce the monetary policy interest rate from 2.5% to 2% (from March 23, 2020), and for the provision of liquidity in the banking system decided to buy government securities in lei on the secondary market in order to consolidate the financing of the real economy and of the public sector.

According to Eurostat, inflation has evolved around an average of 1.5% -1.2% in the EU-Euro area during 2019, while the core inflation, which excludes energy prices and volatile unprocessed food prices, has remained at a moderate level (maximum 1.4% in November-December, minimum 1.0% in May). In February 2020, there was a decrease in the inflation rate compared to the previous month, both for the EU (1.6% compared to 1.7% in January) and for the euro area (1.2% compared to 1.4 %).

In March this year, the annual inflation rate fell to 0.7% in the euro area and 1.2% in the European Union. The highest inflation rates in March 2020 were observed in Hungary, Poland (3.9% both) and in the Czech Republic (3.6%), and modest increases were recorded in Spain, Italy, Cyprus and Portugal (0.1 %), according to the methodology of the harmonized index of consumer prices.

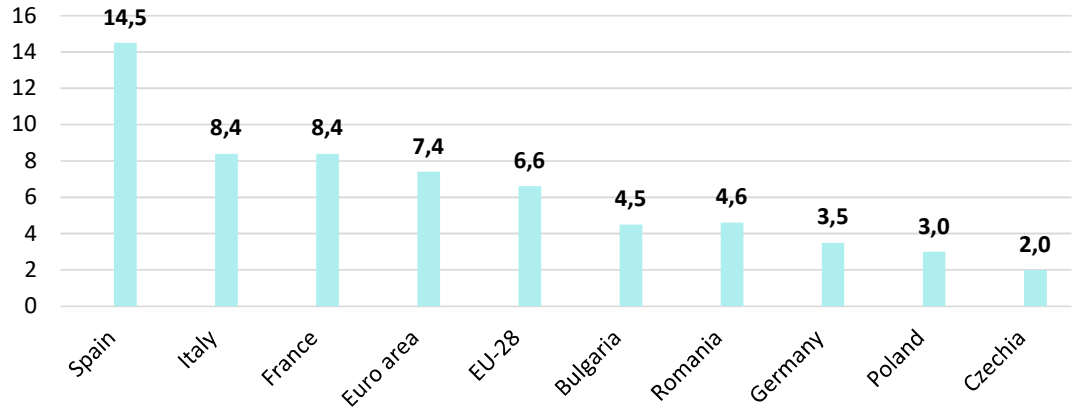
According to the flash estimates published by Eurostat, in April the annual inflation rate will continue its downward trend, falling to a value of 0.4% in the euro area, mainly due to an increase in food, alcohol and tobacco prices (+3 , 6% compared to + 2.4% in the previous month), especially in the raw food (+ 7.7% compared to 3.6% in March 2020). The downward trend is due to lower energy prices (-9.6% compared to -4.5% in March), especially oil, due to a lower demand.

With regard to the future developments, the European Commission expects the effects of the COVID-19 pandemic to put a downward pressure on the prices due to a low demand, deteriorating the economic activity and leading to a less optimistic perspective for the labor market, limiting the future wage increases. In this context, also taking into account the assumptions based on much oil prices will fall, the EC reviewed the estimate for the Harmonized Index of Consumer Prices (HICP) to 0.2% for the euro area and 0.6% for the EU in 2020.

Labor demand remained consistent in the EU during 2019 and in the first 2 months of this year, as seen from the seasonally adjusted unemployment rate which stood at 6.5% in the EU in February 2020, the lowest level since February 2000, respectively at 7.3% in the euro area, the lowest level recorded in the last 12 years. In March, states imposed stricter measures in order to prevent the spread of COVID-19, and the seasonally adjusted unemployment rate stood at 6.6% in the EU-27 and 7.4% in the euro area, compared to the previous month.

Unemployment, however, remains heterogeneous among European countries, with the highest level being recorded in Greece (16.4%, data for January 2020), Spain (14.5%), Italy and France (both 8.4%), while, at the opposite pole, we can find countries such as the Czech Republic (2.0%), the Netherlands (2.9%) and Poland (3.0%). Europe is still facing problems with the level of skills required by new jobs as a result of business expansion, and the low involvement of the young population. The youth unemployment rate stands at 15.2% in the EU and 15.8% in the euro area in March 2020, increasing from the previous month (14.8% in the EU and 15.4% in the euro area, respectively).

Figure 1 Unemployment rate (%) in European Union states in March 2020



Source: Eurostat

The labor market will be significantly affected by the crisis generated by COVID-19 and by the effects of measures imposed by states in order to prevent the spread. According to the EC spring forecast, the unemployment rate will increase to 9.6% in the euro area (from 7.5% in 2019) and to 9% in the EU (6.7% in 2019) this year. Although an improvement is expected for 2021, EC estimates show that the labor market will not fully recover, the number of employees in the EU would be, on average, about 1% lower than in 2019.

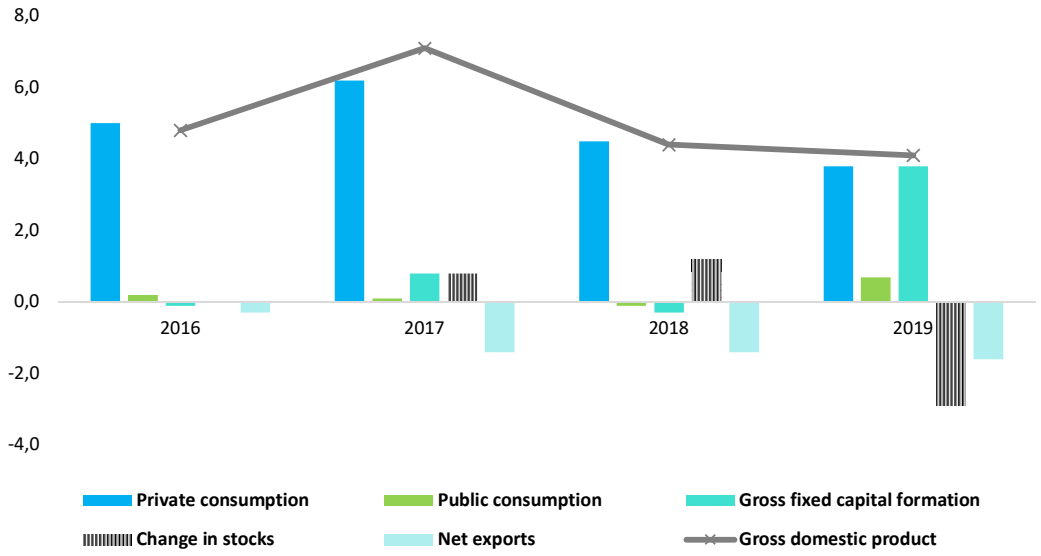
1.2. Local macroeconomic and financial developments

The Romanian economy recorded in 2019 a sustainable increase rate (+ 4.1%), around the potential. The output gap is beneficial and ensures medium-term sustainability, as long as the investment contribution is positive.

Economic activity has intensified in the fourth quarter of 2019 to 4.3% per unadjusted series, respectively 4.2% per seasonally adjusted series, compared to the increases recorded in the third quarter of 2019 (+ 3.0% and + 3.2%) compared to the same period of the previous year.

On the expenditure side, private consumption continued to make a significant contribution in GDP increase (3.8 pp), supported by the advance of net income. The contribution of the gross fixed capital formationbecame positive (3.8 pp from -0.3 pp in 2018), with an increase in volume by 18.2% compared to 2018, given the expansion of construction works. Thus, the contributions of the two categories of spendings counterbalanced the unfavorable effects of both net exports, which increased its negative contribution (-1.6 pp from -1.4 pp in 2018) amid a more pronounced slowdown in exports of goods and services as a result of a lower external demand, coupled with an increase in imports driven by a robust domestic demand and a change in stocks (-2.9 pp).

Figure 2 Contribution (%) of the categories of expenditures to the GDP increase between 2016-2019



Source: INS, FSA calculations

Table 4 GDP dynamics by main components (unadjusted series) (%)

Indicator	2016	2017	2018	2019
Gross domestic product	**4.8**	**7.1**	**4.4**	**4.1**
Resources				
Agriculture	4.2	14.5	10.8	-3.2
Industry	5.1	8.4	4.4	-1.5
Constructions	12.3	-8.0	-1.0	17.3
Retail and wholesale trade	9.3	8.2	4.2	5.1

Indicator	2016	2017	2018	2019
Information and communication	6.3	18.1	8.0	8.1
Financial brokerage and insurances	11.1	-21.3	2.8	-0.8
Real estate transactions	1.8	7.1	2.1	5.7
Profesional, scientifical and technical activities	2.0	16.3	4.9	5.7
Use				
Private consumption	8.3	10.1	7.2	6.0
Gross fixed capital formation	-0.2	3.6	-1.2	18.2
Exports	16.0	7.6	6.2	4.6
Imports	16.5	10.8	9.1	8.0

Source: NIS, unajusted series, annual dynamics

According to the National Institute of Statistics (NIS), on the supply side, one observed the advance of construction activity in 2019, with 17.3% compared to 2018 (an increase in GDP increase by 1.0 pp compared to 2018), of wholesale and retail trade (in volume) - by 5.1% compared to the previous year, contributing by 0.9 pp to the GDP increase, and the decrease of the industrial activity (- 1,5%; a minus to the GDP increase by 0,3 pp compared to 2018). Significant increases in volume are also noticeable in case of information and communications activity (+ 8.1% compared to 2018), support and administrative activities (+ 5.7%) and real estate transactions (+ 5.7%), each with a contribution of 0.4 pp to the GDP increase.

Overall, the current economic model is characterized by a focus on private consumption, the main driver of economic expansion and maintaining investments on a positive territory. The net investments reported by business agents and the public institutions has recorded a significant advance in 2019 (+ 17.9%) compared to the previous year, according to the data published by NIS. The evolution was supported by a more emphasized annual increase of new construction works (+ 32.5%) and by a lower increase in the volume of purchases of equipment, including means of transport (+ 9.3%). In the structure, net investments were oriented towards industry in a percentage of 28.4%, followed by constructions (28.2%) and trade-services (23.1%), the latter falling to the third place, occupied by constructions in the previous year.

A potential risk signaled on medium term can be materialized into the conditions of the accelerated expansion of the current account deficit, taking into account the fact that the main factor that has been the basis of economic increase in recent years has been the private consumption, stimulated by significant wage increases. The current account deficit stood at 4.6% of GDP in 2019 (increasing from 4.4% in 2018), under the influence of the deterioration of trade balance. Romania's exports remain competitive, but affected by a lower external demand, and the deepening of the current account deficit has as main source the high dynamics of imports. Non-EU trade has led to a trade deficit FOB[6]-CIF[7] of EUR 5.7 bill (33% of the total commercial deficit), 9% above the level recorded in the previous year. Relations with EU partners were competitive, dominated by the transport machinery and equipment segment, with a share of 38.6% in total FOB exports and 29.4% in total CIF imports. In the first two months of 2020, the current account of the balance of payments recorded a deficit of EUR 325 million,increasing compared to the same period of the previous year (EUR 176

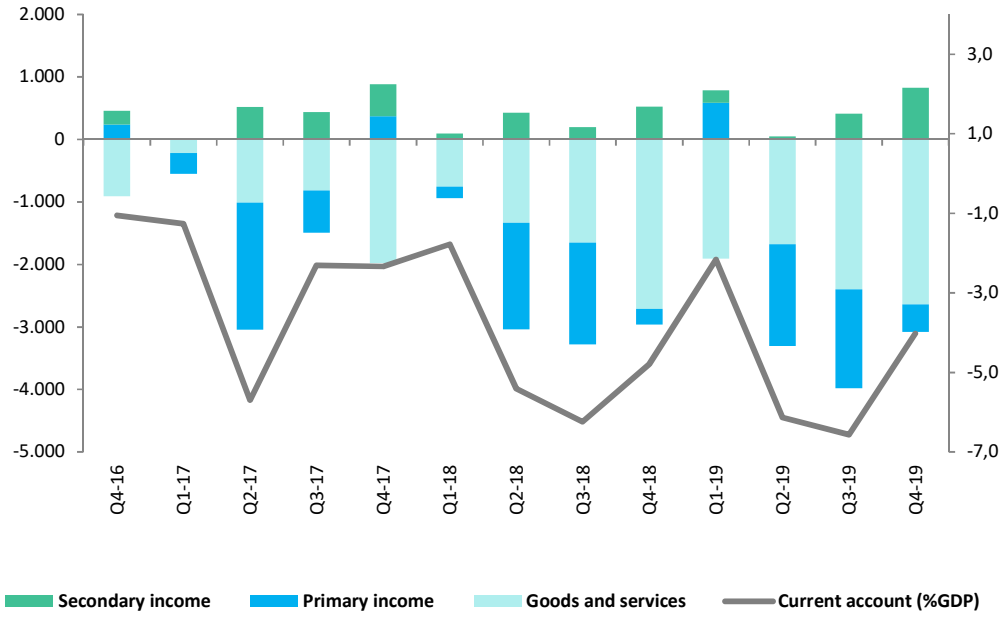
[6] Free on Board, according to the international clauses of transport
[7] Cost, insurance and Freight, according to the international clauses of transport

million). In terms of structure, the balance of goods registered a higher deficit of EUR 240 million , while the balance of services had a smaller surplus of EUR 123 million. In case of the balance of primary and secondary incomes, the surplus was higher by EUR 88 million, respectively by EUR 126 million .

In the first two months of 2020, FOB exports increased by 2%, while CIF imports increased by 2.9% compared to the same period of the previous year, leading to a deficit of the FOB-CIF trade balance of about EUR 2.6 billion , increasing about 7% from January to February 2020.

The net position of international investments recorded in 2018 a value of -43.6% of GDP, slightly decreasing in 2019, to -42.8% of GDP, despite the deterioration of the current account deficit.

Figure 3 Current account evolution by components (billions of euro)



Source: NBR, FSA calculations

The level of indebtedness of the public administration evolved on a downward trend, from the maximum recorded at the end of 2014 (39.2% in GDP) to 35.2% in December 2019, which places government finances, from a long-term perspective, on one of the most favorable positions in the EU. In Europe, the lowest public rates of indebtedness were observed in Estonia (8.4%), Bulgaria (20.4%), Luxembourg (22.1%) and the Czech Republic (30.8%), and high level of indebtedness, above the GDP level, remained in Greece (176.6%), Italy (134.8%) and Portugal (117.7%), when analyzing the data for 2019 published by Eurostat. However, in January there was an increase in public administration indebtedness level in Romania, which recorded a value of approximately Lei 392,153 million compared to December 2019 (Lei 373,467 million), with a share in GDP of 37%.

The share in GDP of gross external indebtedness (47.4% -December 2019) has followed a decreasing trend during the last 12 months (48.8% -December 2018). Unlike Romania, the developed countries from the euro area fall on average with a percentage of external indebtedness of over 120% of GDP.

Table 5 Situation of deficits and indebtedness level (%)

Indicator	Q1_19	Q2_19	Q3_19	Q4_19
Current account balance*				
RO	-2,2	-6,1	-6,6	-4,0
Euro area	2,3	1,0	3,8	3,6
Governmental deficit ESA				
RO	-5,7	-3,2	-4,4	-4,2
Euro area	-2,1	-0,1	-0,8	0,4
Governmental debt				
RO	33,8	33,8	35,2	35,2
Euro area	86,5	86,3	86,0	84,2
Gross external debt**				
RO	48,1	49,8	49,6	47,4
Euro area	125,6	125,7	127,8	121,9

Source: Eurostat, ECB, MPF, NBR, FSA calculations; * share in quarterly GDP; ** related to GDP calculated as the sum of the last 4 quarters

The evolution of the monthly indicators published by the National Institute of Statistics (NIS) highlights the sustained economic activity on short term, with significant increases in construction, services and trade, along with declines in industry in the first two months of 2020, before introducing the necessary measures of prevention against the spread of COVID-19.

Construction works advanced significantly in February 2020 compared to the same period of the previous year, by 23.5%, with a positive impact on investments. The volume of new constructions increased by 11.8%, and the current maintenance and repair activity registered an advance of 70.8% in February 2020 compared to the similar period of the previous year. By construction items, the increase was supported by all 3 sub-components: the extension of works to engineering constructions (+ 47.3%), non-residential buildings (7.2%) and residential buildings, with an advance of 12.9%.

On the other hand, the annual dynamics of industrial production returned on a negative territory starting from the second half of 2019, a trend imprinted by the energy (-8.2%) and processing (-2.5%) branches. The annual pace of manufacturing has remained modest since the second half of last year, in line with the trend from Europe, but also amid the background of difficulties related to competitiveness and domestic demand affecting the sectors of consumer goods. Activity decreased in February 2020 compared to the same period of the previous year, mainly in the footwear and leather products industry (-24.4%), clothing (-20.6%), wood processing and wood products manufacturing (-17.6%) and repair and maintenance of machinery and equipment (-30.1%), being affected by cost pressure and higher competitiveness of imports. On the other hand, there were consistent leaps in dynamics in the electrical equipment manufacturing industry (+12.6%), chemicals (+14.6%) and beverages (+9.7%).

The services sector stood out with a more alert advance, noting services for enterprises (+16.6% in February 2020 compared to the same period of the previous year), with a positive impact on the economy dynamics. The improvement in the performance of this category is based on the emphasized increases from February in the turnover of activities with a significant share, respectively the rental and leasing activities (+24.7%), the real estate transactions (+26.0%), the service information and information technology activities (+35.7%) and transport (+12.0%).

At the same time, a significant dynamic of the turnover has been recorded in the retail trade (+ 13.8%), through the sales of food products (+15.6%) and non-food products (+13.7%) and the sales of motor fuels (+10.5%) in February 2020 compared to the same month of the previous year. Data published by the NIS for March 2020 show a slowdown in the turnover increase in the case of retail trade (+3.9%). The decreases in sales of non-food products (-1.6%) and of motor fuels (-8.3%), which took place amid the background of the measures imposed in order to prevent the spread of COVID-19, were offset by the significant advance of sales of non-food and food products (+17.4%).

The economy evolution was accompanied by the improvement of employment and the stabilization of the unemployment rate around the average of 3.9%, the lowest level since 1997, given that the employment rate of the population aged 20 to 64 was 70.9% in 2019, increasing compared to 2018 (69.9%) and slightly exceeding the target set for Romania (70%) in the Strategy Europe 2020, according to data published by the National Institute of Statistics (INS).

The challenges that persist on the Romanian labor market are those related to the labor shortage, but also regarding the low level of skills. In March 2020, the first month when strict measures were introduced in Romania in order to prevent the spread of COVID-19, the unemployment rate increased by 0.7 pp compared to the previous month, standing at a level of 4.6%.

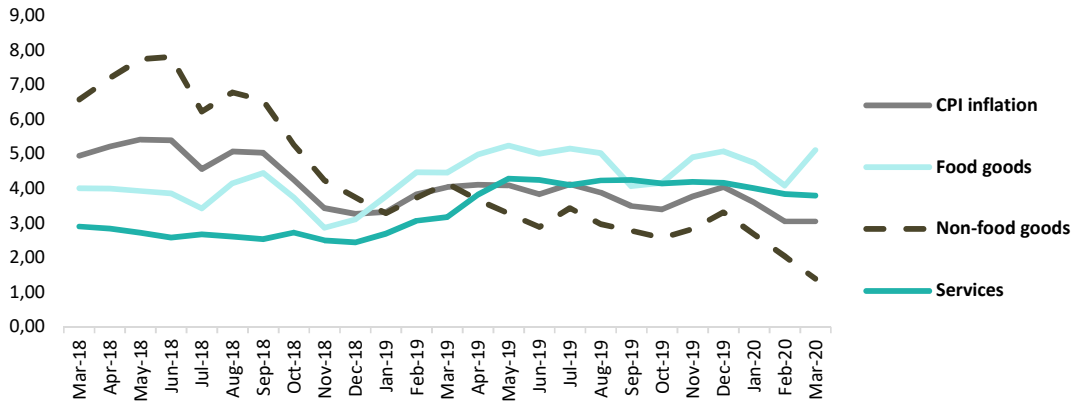
The labor market has expanded significantly during the last 4 years, recovering the losses post-crisis. The financial resources of the companies allowed in 2019 a significant increase in the average net earnings (calculated from the monthly NIS data), respectively by about 13% in December, in nominal value, compared to December 2018, with a positive impact over the power of purchase. In this context, a potential risk can be materialized if the increasing rate of earnings exceeds that of labor productivity, with negative influences over competitiveness. The average net earnings record, on the other hand, a wide wage distribution, the ratio being 4 times between the maximum/minimum level by branches of activity.

The current favorable perspective for revenue growth has boosted consumer demand and induced some inflationary pressures. The annual inflation rate evolved in 2019, starting from 3.32% in January and up to 4.04% in December, with a maximum reached in July at 4.12%. Prices were influenced by the end of 2019 by a combination of factors such as high demand for some products (fruits, vegetables, pork), the slight depreciation of the national currency against major currencies, along with medium-term factors assigned to wage dynamics .

The Harmonized Index of Consumer Prices (HICP) stood at 3.9% in 2019, one of the highest rates in the European Union, but is decreasing from 2018 (+4.1%), especially as due to the evoutions in the oil price.

Inflation showed a downward trend during the first 3 months of this year, falling to a level of 3.05% in March, mainly due to a monthly increase in prices for some categories of food products (fruits, vegetables and canned). The downward evolution is based on decreases in the fuel segment influenced by the removal of overexcises on fuels, but also by the evolutions related to oil quotations.

Figure 4 Evolution of the annual rate of inflation



Source: NIS, FSA calculations

Regarding future evolutions, the NBR estimates (Inflation Report, February 2020 edition) indicate a likely level of inflation of 3% in December 2020 (-0.1 percentage points compared to the previous forecast), level in variation band, after which it will continue to increase to 3.2% by the end of 2021.

Events related to international trade disputes and the slowdown in the dynamics of the global and European economy have had a minimal impact over the investor sentiment.

The euro fluctuated during 2019 around an average trend of 4.74 lei/euro, below the maximum variation range of 4.78 lei/euro, specific to December. The currency behavior during the first 3 months of 2020 was the significant depreciation of the leu against the European currency amid the high level of uncertainty and high volatility on the financial markets due to the concerns regarding the coronavirus pandemic. Thus, the EUR/Lei exchange rate registered the highest quotations in history: an average monthly value of 4.83 lei/euro (March 2020).

International Monetary Fund forecasts published in April this year in the World Economic Outlook report indicates the entry of the Romanian economy into recession in 2020, with a decrease of -5% in GDP, followed by a return of economic increase to 3.9% in 2021. The short-term outlook is less optimistic also in terms of other indicators. According to the IMF, the unemployment rate could reach a level of 10.1%, and the current account deficit would deepen, amid higher import dynamics related to exports, to an estimated 5.5 % of GDP in 2020 and a return to 4.7% in 2021.

The latest estimates of the European Commission (spring forecast, May 2020) show that the Romanian economy will enter a recession this year, with a decrease of 6%, followed by a return of economic growth in 2021 (+ 4.2%). Private consumption, the main driver of growth in the previous years, will decline (-6.2%), while investment will fall by 15%, after the significant advance recorded in the previous year. In terms of volume of exports, the EC estimates a decrease by 12.8%, while imports will decrease by 14.4%, amid the lower domestic demand. Thus, in 2020, net exports will have a positive contribution to the GDP dynamics, which will lead to the adjustment of the current account deficit to 3.3% of GDP. The EC estimates that the inflation rate will fall to 2.5% in 2020, mainly due to changes in oil prices, while the unemployment rate will increase to 6.5% this year. The European Commission estimates that the budget deficit will increase to 9.2% in GDP in 2020 and

11.4% in GDP in 2021, respectively, while in case of the government debt, the EC expects an increase to 46.2% in GDP in 2020, respectively 54.7% in GDP in the following year.

According to the World Bank estimates, published in April 2020, the negative effects of the COVID-19 pandemic will have a significant impact on the Romanian economy, especially in the first half of 2020, decreasing the economic growth to 0.3% for the current year (from the previous estimate of 3.8%), amid a slowdown in the private consumption and the re-entry on a negative territory of the establishment of gross fixed capital.

Table 6 GDP projections by main components (%)

Indicator	World Bank		
	2020f	**2021f**	**2022f**
Gross domestic product	**0,3**	**4,4**	**3,9**
Resources			
Agriculture	8,9	1,0	1,0
Industry	-1,3	3,1	3,1
Services	0,2	5,4	4,6
Use			
Private consumption	2,9	5,2	5,1
Governmental consumption	15,4	3,1	3,0
Establishment of gross fixed capital	-0,4	4,2	4,1
Exports	2,1	3,7	3,7
Imports	4,3	4,6	4,8

Source: World Bank, April 2020, annual dynamics

On the other hand, the National Commission for Strategy and Prognosis estimated that the impact of COVID-19 over the Romanian economy will be reflected into a decrease by -1.9% of GDP in 2020, a decrease of 6 pp compared to the winter forecast (+ 4.1%), as a result of the estimated negative developments for a number of macroeconomic indicators. Thus, according to NCSP , the industry activity will continue to decrease in 2020 (-4.2% compared to 2019), a trend manifested during the previous year, but with a deepening of the negative dynamics due to the impact of COVID-19 (in decrease by 7.1 pp compared to the winter forecast). For the construction sector, a decrease in activity is estimated by 1.7% compared to 2019, and in case of services the estimated decrease is 1.4%. On the demand side, investments will be affected by the crisis generated by COVID-19, with a estimated 2.6% decline in the gross fixed capital formation compared to 2019, which is a significant revision, falling with 9, 4 pp compared to the previous estimate of NCSP (winter forecast). NCSP estimates a lower negative impact over the private consumption and an increase in the governmental consumption as a result of the effects of measures implemented in order to mitigate the social-economic impact of the COVID-19 pandemic.

Regarding the current account deficit, NCSP estimates an adjustment of up to 4.1% of GDP in 2020 (4.5% of GDP in the previous forecast), following the decrease in the trade deficit from EUR -18.6 billion from the previous estimate (winter forecast) with EUR -16.8 billion.

The recommendations of the World Bank and of the International Monetary Fund for mitigating the negative effects of the COVID-19 pandemic, in order to decrease the impact on the Romanian

economy, are aimed at implementing rapid mitigation measures, including fiscal measures aimed at ensuring the liquidity of companies and SMEs in financial difficulty as a result of the effects of COVID-19, extending the payment deadlines for certain categories of taxes and duties borne by the workers affected.

The fiscal measures introduced in order to mitigate the negative effects on the Romanian economy will put pressure on the budget deficit, leading in 2020 to its deepening. According to the World Bank estimates, the budget deficit is set to increase in 2020 to about 5.5% in GDP, after which, once the negative effects on the economy dissipate, the World Bank expects a downward adjustment of at least 0.5% in GDP per year in accordance with the excessive deficit procedure. However, given this context of high uncertainty, such measures are necessary in order to support the economic growth.

The European Commission has approved the state aid scheme of Romania, amounting to Lei 16 billion (EUR 3.3 billion), in order to support small and medium enterprises (SMEs) given the context of the COVID-19 pandemic. It will be granted in the form of direct grants and state guarantees for investment loans and working capital financing. The goal is to ensure the continuity of the activity for SMEs, by covering the immediate needs of working capital or investments.

The measures proposed by Romania are in accordance with the conditions provided in the Temporary Framework:

- for direct subsidies, the support will not exceed the amount of EUR 800,000 per company,
- and for state guarantees, the amount of the basic loan for each company is limited, the guarantees are limited to 6 years, and the guarantee fee premiums will not exceed the level established in the Temporary State Aid Framework.

Given the current context, marked by an increased uncertainty and where the negative effects of the COVID-19 pandemic will have a significant impact over the economic activity, the European Commission has found that the measures proposed by Romania are necessary, appropriate and proportionate in order to remedy a serious economic turmoil of a Member State.

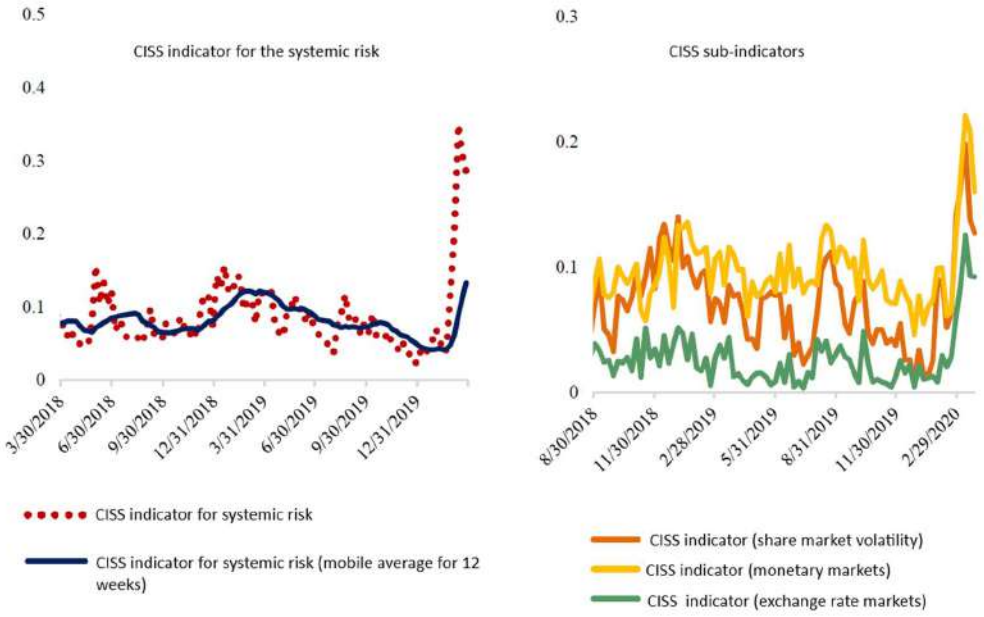
1.3. Evolution of non-bank financial markets at European and international level

The main feature of the international financial markets observed during the first quarter of 2020 consisted in the increase in volatility on the international financial markets due to the COVID-19 pandemic, and the stock market indices registered significant depreciations due to the reversal forecasts and the sharp decline in the global GDP.

CISS indicator for a systemic stress8 experienced a tripling of volatility in the first quarter of 2020 amid an abrupt appreciation of the composite sub-indicators. European Central Bank has taken a series of liquidity-boosting measures that have helped to ease the investment climate.

However, the volatility of the CISS indicator in the first quarter of 2020 did not reach not even half of the maximum level of volatility recorded during the 2008 financial crisis.

Figure 5 CISS indicator for the systemic stress



Source: European Central Bank, FSA

CISS sub-indicators measuring market, bond and foreign exchange market volatility showed a **rapid upward trend in the first quarter.**

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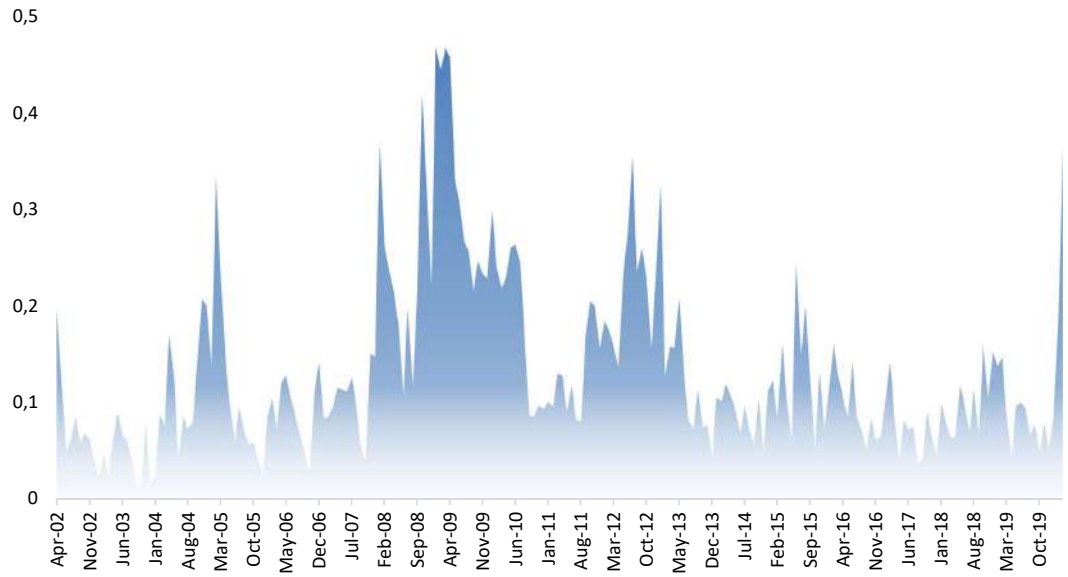
[8] **The CISS Systemic Stress Composite Indicator** includes several sub-indicators dedicated to various sectors of the financial system: stock and bond markets, foreign exchange and money markets, etc. **The contributions of each financial market** are combined in order to create a single indicator. The composite indicator is built as to show the extent to which the systemic financial stress contributes to the financial instability and how it spreads throughout the financial system. This indicator takes into account the time-varying correlations between its subcomponents and places more weight on situations where stress predominates in several market segments at the same time. **The value of this indicator** is constrained to be between 0 and 1, so that higher values indicate periods of high financial hardship and measures also lower preferences for holding risky or illiquid assets.

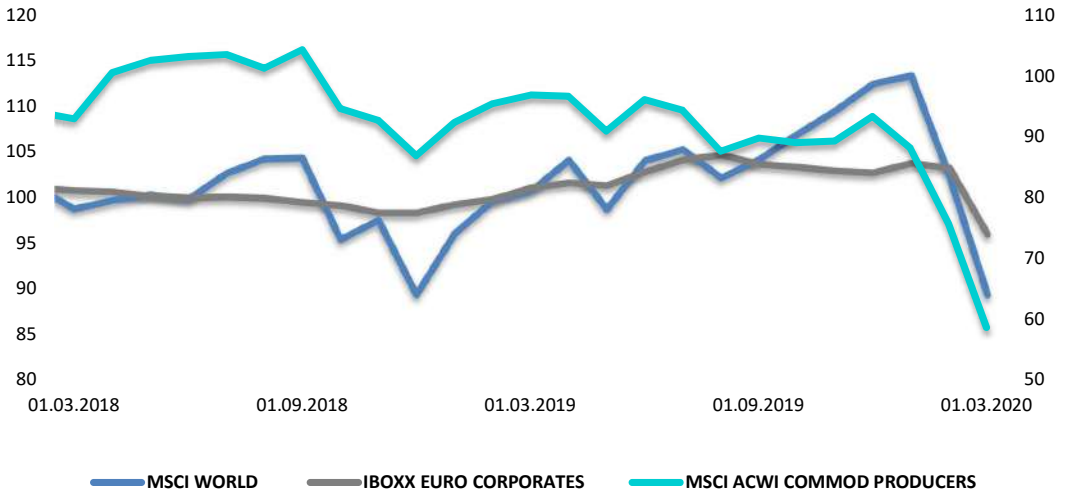
Figure 6 Financial stress indicator – Romania (CLIFS)



Source: European Central Bank

According to the CLIFS indicator (country-level index of financial stress, according to the European Central Bank), Romania is characterized by the largest increase in financial stress among European Union countries related to early 2020, but also by the highest value of the indicator.

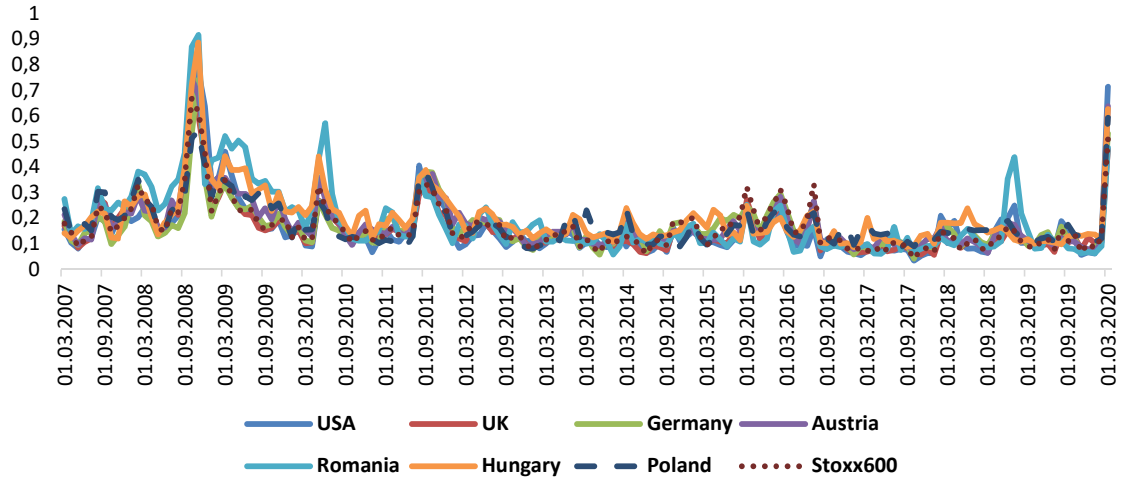
Figure 7 Evolution of volatility on the stock, bond and commodity markets (2018=100)



Source: Bloomberg

In its simplest form, volatility is the level to which the price of an investment fluctuates over a period of time, often being related to risk, so that a higher volatility is characterized by a higher uncertainty. In the first quarter of 2020, the volatility of the Romanian capital market increased to a level very close to the one recorded during the global financial crisis from 2007-2009.

Figure 8 The evolution of stock market volatility in Romania and in the countries of the region



Source: Bloomberg, FSA calculations (model GARCH)

Stock market indices, both local and international, have recorded a negative evolution during the last 3 months, 6 months and 12 months, respectively. The first quarter of 2020 was an extremely difficult period for investors, the international indices recorded decreases between -23.30% (DJIA index) and -39.09% (ASE index). Locally, the decreases recorded were between -17.05% (BET-FI index) and -26.16% (BET-NG index).

Table 7 Stock market returns on March 31 2020

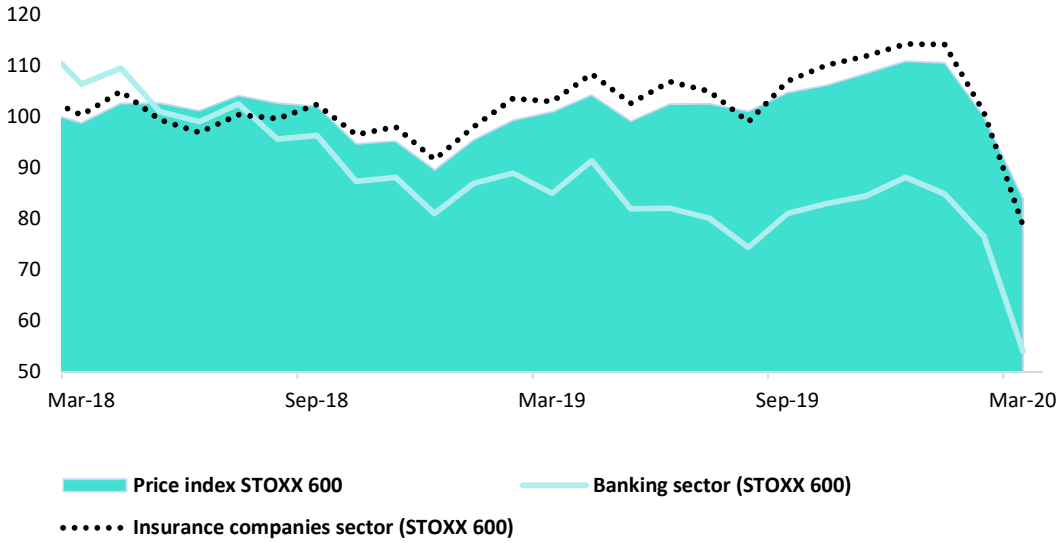
International indices	3 months	6 months	12 months	BVB indices	3 months	6 months	12 months
EA (EUROSTOX X)	-24.95%	-21.09%	-17.38%	BET	-23.57%	-20.36%	-5.22%
FR (CAC 40)	-26.46%	-22.57%	-17.84%	BET-BK	-23.34%	-18.22%	-6.17%
DE (DAX)	-25.01%	-20.05%	-13.80%	BET-FI	-17.05%	-7.44%	10.27%
IT (FTSE MIB)	-27.46%	-22.87%	-19.90%	BET-NG	-26.16%	-25.03%	-15.51%
GR (ASE)	-39.09%	-35.71%	-22.61%	BET-TR	-23.56%	-20.34%	2.88%
IE (ISEQ)	-28.26%	-17.47%	-16.05%	BET-XT	-23.24%	-18.88%	-4.44%
ES (IBEX)	-28.94%	-26.60%	-26.57%	BET-XT-TR	-23.23%	-18.80%	3.09%
UK (FTSE 100)	-24.80%	-23.44%	-22.08%	BETPlus	-23.40%	-20.11%	-4.91%
US (DJIA)	-23.20%	-18.57%	-15.47%	ROTX	-23.76%	-20.18%	-5.34%

Source: Thomson Reuters Datastream, FSA calculations

3M= 31 March 2020/31 December 2019 ; 6M=31 March 2020/30 September 2019; 12M=31 March 2020/29 March 2019

At sectoral level, the index for the European insurance sector, as well as the similar index for the bank segment, showed a sharp negative trend. From a longer-term perspective, these developments highlighted in the first quarter confirm a trend across all classes of assets, both on short-term and on long-term, according to which **investors have economic expectations of decreasing the profitability of the insurance sector, as well as of the bank one.**

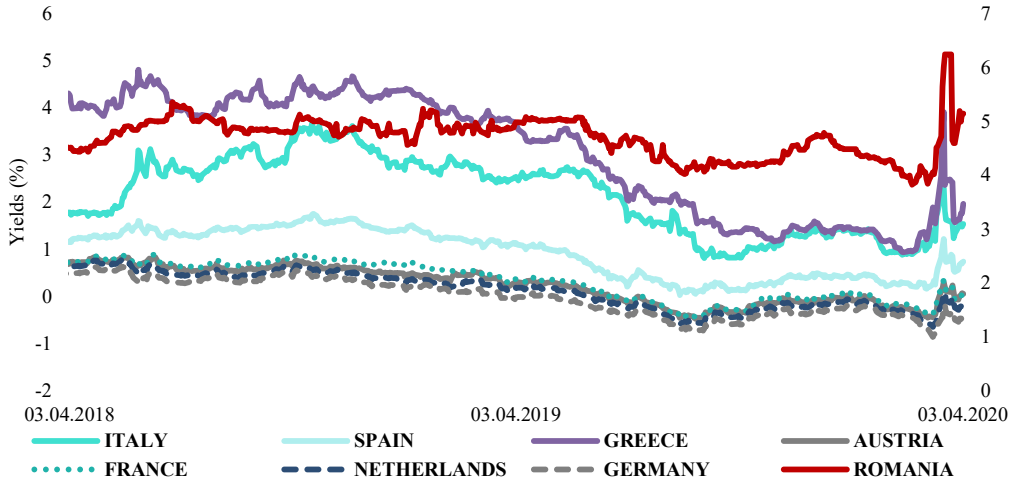
Figure 9 The evolution of the indices of the banking sector and the insurance sector at European level (2018 = 100)



Source: Bloomberg, FSA calculations

On the fixed income instrument markets and in particular on the sovereign bond market, there was a sharp rise in yields in the first quarter of 2020 due to fears of a possible long-term recession.

Figure 10 The evolution of sovereign bond yields with a maturity of 10 years



Source: Bloomberg, FSA calculations

On the investment funds market, the end of 2019 was characterized by an appreciation of net assets in Europe. According to EFAMA (European Fund and Asset Management Association), in 2019 the net assets of collective investment schemes (+ 20.08%) and the alternative investment funds (+ 14.84%) increased compared to the end of 2018.

According to the statistics published by EFAMA, in 2019, the cumulative value of net sales of collective investment undertakings in securities (UCITS) was about EUR 148 billion, compared to 2018 when the European UCITS market registered net outflows amounting to EUR 71 billion. Net sales of

alternative investment funds in Europe increased from around EUR 23 billion (2018) to EUR 43 billion (2019).

The largest increases in net sales were recorded in case of UCITS shares, which recorded in 2019 net inflows of about EUR 61 billion, while at the opposite pole stand the ARIS funds (Absolute Return Innovative Strategies) with net outflows of EUR 7 billion. In case of alternative investment funds (AIF), on the other hand, the highest value of net inflows was found in respect of "other" funds (+ € 41 billion), while bond funds recorded net outflows amounting to EUR 22 billion.

In 2019, 24 of the 29 European countries recorded net inflows into UCITS, including Ireland (EUR 254 billion), Luxembourg (EUR 105 billion) and Norway (EUR +5 billion), in terms of the highest values of net inflows. From the perspective of the net assets of UCITS, there was an increase of 20.08% by the end of 2019 compared to the end of 2018.

In 2019, 16 countries recorded net inflows into the AIF, the largest of which was in case of Germany (+108 billion EUR), Switzerland (+37 billion EUR) and Ireland (+30 billion EUR).

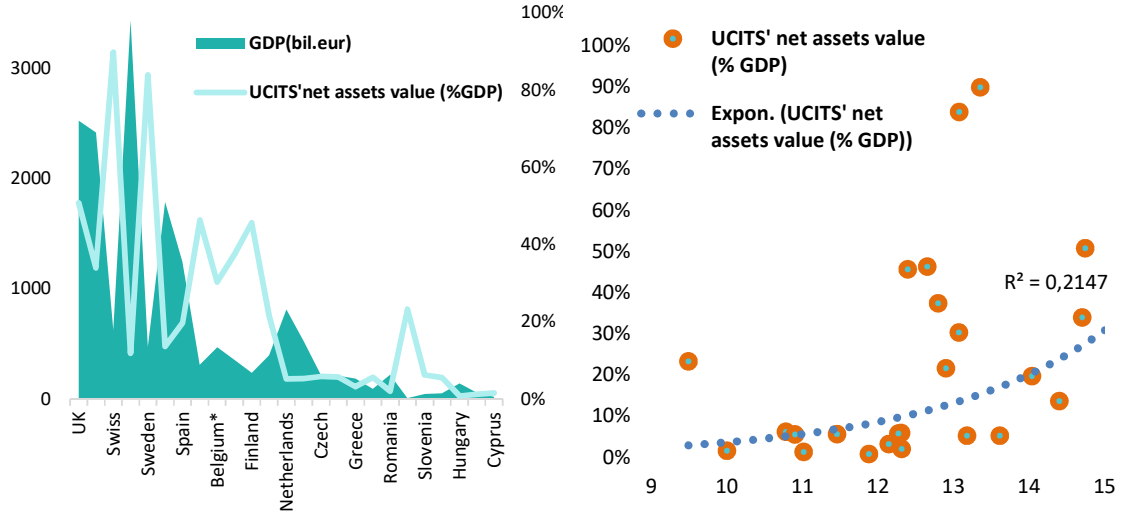
The net assets of alternative investment funds stood at EUR 6.744 billion on 31 December 2019, increasing by 14.84% compared to the end of 2018.

From December 31, 2019, the investment funds market in Europe included 63,080 investment funds (up 1.75% compared to the number by the end of 2018: 61,994), of which 34,133 collective investment undertakings (UCITS) and 28,947 alternative investment funds (AIF), respectively.

By the end of 2019, the value of the net assets of collective investment undertakings in securities relative to GDP for Romania was 2%. Taking into account the countries from Central and Eastern Europe, Bulgaria and Hungary had a share of 1%, Poland 5%, Slovenia and Croatia 6% and Germany 12%.

The highest values were recorded by Luxembourg, followed by Ireland, Switzerland and Sweden. These values are explained by the fact that these countries recorded the most significant net inflows into UCITS.

Figure 11 Net assets (billion EUR) of UCITS (% of GDP, billion euro; left); The elasticity of UCITS holdings towards the GDP increase (right) (dec. 2019)



Source: EFAMA, FSA calculations

1.4. Main vulnerabilities and risks identified by supervisors of non-bank financial sectors at European level

The risk of an low interest rates economic environment has intensified during the second half of 2019 and remained a key challenge for insurance companies and pension funds, affecting both solvency positions and long-term profitability. The combination of slow economic growth, concerns about debt sustainability and high prices on the financial markets was the main risk considered, as it could reduce the risk premium.

Interconnection with credit institutions and local entities has remained high for European insurance companies and could lead to risks in other economy sectors.

The increase in cyber attacks and the climate changes have continued to attract the attention of insurance companies, pension funds and supervisors.

From this perspective, the Risk Dashboard issued by the European Insurance and Occupational Pensions Authority (EIOPA)[9] highlighted the following key comments at the end of 2019:

- The risk exposures of the insurance sector in the European Union are stable as a whole;
- Macro risks continue at high levels. Despite recent monetary easing by central banks, the macroeconomic environment has remained underdeveloped, and low interest rates remain a challenge for the insurance companies;
- Market risks are high, but with a downward trend due to the low volatility of the bond market, starting from October 2019; CDS (credit default swap) spreads have narrowed slightly across most bond segments, except for sovereign bonds, and credit risk continues to exist at medium level;
- Solvency rates for life insurance groups and companies have decreased in the third quarter of 2019, but profitability and solvency risks remain at an average level;
- Interconnections and imbalances are on an upward trend, due to higher Solvency II values reported for exposures by derivative instruments;
- Market perceptions are kept at an average level, the prices of the life insurance companies' shares exceeding the market, and those of the non-life insurance companies being lower.

Table 8 EIOPA risk table, Q3-2019

	Risks	Level	Trend
1.	Macroeconomic risks	High	→
2.	Credit risks	Average	→
3.	Market risks	High	↘
4.	Liquidity and funding risks	Average	→

[9] EIOPA Risk Dashboard, January 2020

5.	Profitability and solvency	Average	→
6.	Interconnections and imbalances	Average	↗
7.	Insurance risks (underwriting)	Average	→
	Market perception	Level	Trend
8.	Market perceptions	Average	→

Source: EIOPA Risk Dashboard, January 2020

The global spread of the COVID-19 epidemic in early 2020 has caused turmoil in the worldwide economies, fluctuations on financial markets and many uncertainties about the duration and intensity of this health crisis. Globally, a number of fiscal and monetary measures have been implemented in order to control the negative effects, some of which are meant to decrease the interest rates, which has put an additional pressure on the insurance and pension market in the European Union.

Insurance companies were exposed on both sides of the balance sheets: on the liabilities side as a result of changes in interest rates as well as on the increase in claims, and on the assets side due to the volatility of financial markets.

Insurance companies have faced difficult conditions, both in terms of market conditions and for maintaining functional operations. Given these circumstances, EIOPA drew the attention over the key elements of the EU insurance market:

- Under the Solvency II Directive, insurance companies are required to have sufficient eligible own funds in order to cover their Solvency Capital Requirements (SCR). SCR requirements allow the insurance companies to absorb significant losses and give policyholders and beneficiaries the confidence that the payments will be made on time;
- The Solvency II framework also contains a ladder of supervisory intervention between the Solvency Capital Requirements (SCR) and the Minimum Capital Requirements (MCR), which is the minimum level of security below which a company's financial resources cannot fall. This allows flexibility in the event of extreme situations, including measures to extend the recovery period for the insurance companies affected;
- Recent stress tests have shown that the insurance sector is well capitalized and able to absorb severe, but plausible system shocks;
- The Solvency II framework includes a number of tools that can be used in order to mitigate the risks and impacts on the sector.
- Given the level of uncertainty about the magnitude and duration of the impact of the COVID-19 pandemic over the financial markets, **EIOPA has asked the (re) insurance companies to temporarily suspend the distribution of dividends and the share buy backs, so as to maintain capital positions in the balance sheets and to protect the consumers.**

- Although the sudden interruption of activities caused by the health crisis has led the insurance companies to focus on plans to continue their activity, a significant role is also played by the correct treatment of consumers.
- An improper consumer approach poses a risk to the whole sector, and EIOPA has recommended the following actions:
    - o providing clear and timely information to the consumers;
    - o informing consumers about the emergency measures implemented;
    - o continued implementation of product surveillance and governance requirements;
    - o exercising some flexibility in treating consumers when it is reasonable and practical.

European stock markets in the second half of 2019 were characterized by episodes of volatility in response to trade tensions between the US and China and the slowdown in the economic growth. Corporate bond spreads remained tight, in a constant search for high yields, while the share of the Euro Areaa bond market with negative yields increased until the fourth quarter of 2019.

Regarding the management of investment funds, there was a transition from equity funds to bond funds in the second half of 2019, the total flows being positive. Investments in monetary funds (EUR 58 billion) and bond funds (EUR 109 billion) exceeded the flows of equity funds (EUR 13 billion). Investments in monetary and bond funds have reflected the orientation towards safe assets, but also a certain tendency to look for returns.

Embedding sustainability elements into investment strategies and business decisions has accelerated during recent years, as reflected in the steady increase in “green bond” issues and the continued integration of ESG (Environment, Sustainability and Governance) assets into the investors’portfolios. "Green bonds" of private sector issuers still represent a small share of the corporate bond market (2%). At the equity level, it is clear that ESG assets have outperformed traditional equities in the last 2 years. Barriers to the development of this market consist in the lack of standardized information and the risk of greenwashing.

Developments in cryptocurrencies, including "stable currencies", continue to pose a number of challenges and risks, and BigTech companies are also being monitored at European level due to their potential to affect the existing market players and the business models. Risk Dashboard for EU securities in the third quarter of 2019[10] was dominated by high risks of the European Union securities markets, characterized by high asset valuations and the prevalence of search for high yields. Credit risk continued to be high due to the deterioration in the quality of corporate debt and the increase in the rating of debt rated at the –BBB rating. The main concerns were the economic outlook dominated by slow economic developments and the uncertainties of global trade negotiations and Brexit.

Developments on the European capital markets underwent significant changes in the first part of 2020, both as a result of relatively predictable events (the conclusion of Phase 1 of the US-China trade agreement in January 2020 and the UK's withdrawal from the EU on 31 January 2020) as well as totally unpredictable shocks (the outbreak of the COVID-19 pandemic in Europe and the US since the beginning of 2020).

[10] ESMA Risk Dashboard, 28 November 2019

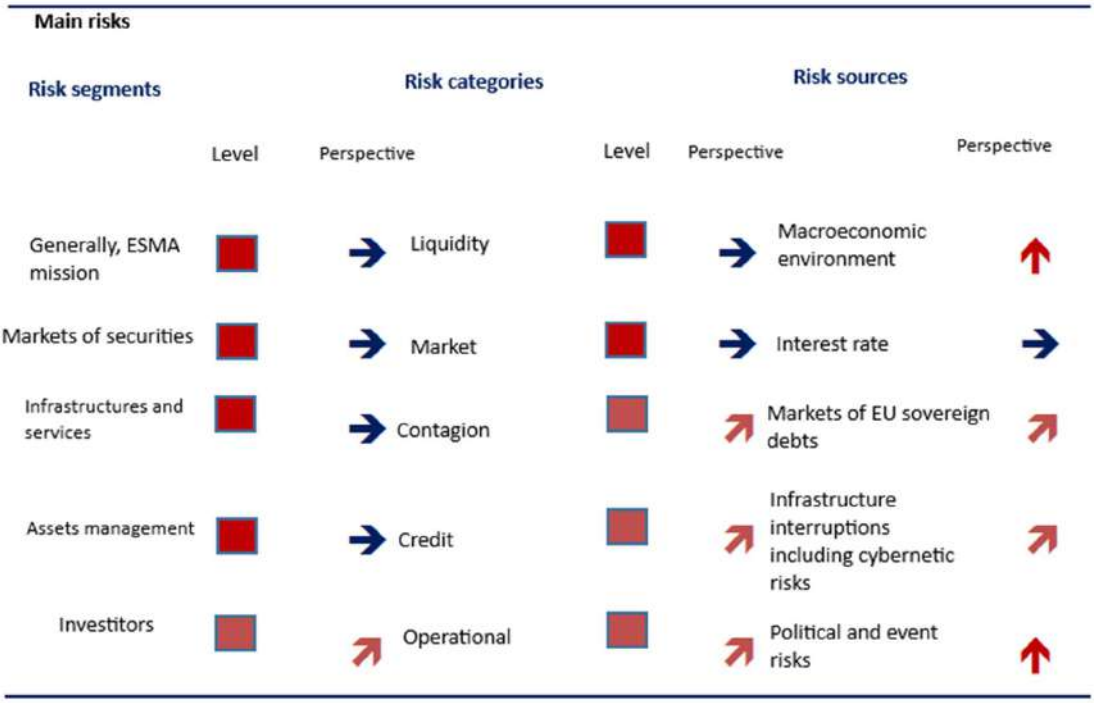
The spread of the COVID-19 pandemic in Europe has caused shocks both on demand (declines in tourism services, transport, recreational activities, etc.) and on supply (declining production, disruption of the supply chain). The effects have multiplied as most European countries have imposed lockdowns in order to limit the spread of the virus and there have been numerous demands for temporary furloughs. The difficulty of this health crisis was related to the uncertainties regarding the duration and intensity of the virus manifestation.

The COVID-19 pandemic, combined with other existing risks, has led to massive declines in the stock markets since mid-February, caused by the sharp deterioration of the picture for consumers, business and the economy. Given these circumstances, the update of the **ESMA Risk Dashboard from April 2020[11] have indicated an increase in the macroeconomic risk, with most international organizations (the International Monetary Fund, the European Commission, the Organization for Economic Co-operation and Development) indicating a global recession in 2020.** Although fiscal and monetary measures taken by Member States offset the negative effects of the COVID-19 pandemic, the uncertainties that persisted generated high levels of volatility on the financial markets.

Liquidity, market, contagion, credit and operational risks have amplified and positioned themselves at high levels. Since mid-February this year, global stock markets have experienced major price corrections, comparable to those during the financial crisis of 2008. Corporate bond markets have shown signs of severe stress, with widening spreads. The same phenomenon was observed in sovereign bonds, which have declined after the ECB's monetary policy measures in mid-March. Trading venues have experienced an increase in trading volumes and there have been numerous circuit breakers amid declining returns below the risk thresholds (*circuit breakers*). In order to support transparency, ESMA lowered the net short position reporting threshold to 0.1%. Several Member States have imposed bans on short sales (Austria, Belgium, France, Greece, Italy, Spain). Large transaction volumes have generated extreme levels of volatility, and certain initial margins were increased in order to meet the high volatility. In terms of investment funds, there has been recorded a decline in performance across classes of assets, and bond funds have experienced capital outflows. Operational risk increased, given the high share of teleworking, even though no incidences of Business Continuity Plans were reported.

[11] ESMA Risk Dashboard Risk up-date, 2 April 2020

Table 9 Trends and risks identified by ESMA on 2 April 2020



Source: ESMA Riskdashboard Update, 2 April 2020

1.5. Measures taken at European level on the stability of non-bank financial markets

In order to stimulate the development of the European Union in the coming years, in December 2019 the European Commission presented the European Green Deal, an ambitious package of measures in order to transform Europe into the first climate-neutral continent by 2050. The European Green Deal was intended to cover all the economy sectors, especially transport, energy, agriculture, construction and various industries (cement, IT, textiles, chemicals, etc.). Achieving the goals of the European Green Deal involves significant investments, approximately EUR 260 billion of additional annual investments, representing 1.5% of GDP for 2018.

At the beginning of 2020, the European Commission advanced the next phase of the project, namely the European Green Deal Investment Plan, which aimed to meet the needs for investments.

In essence, the Plan was meant to mobilize at least EUR 1 trillion in sustainable investments over the next decade. A significant part of expenses on climate and environmental actions of the EU budget was prepared to be redirected to private funding, with a significant role being played by the European Investment Bank. The European Union intended to provide tools for investors so as to place sustainable finance at the core of the financial system and to facilitate sustainable investments by public authorities.

The Just Transition Mechanism has been established as a key instrument in order to ensure that the transition to a climate-neutral economy is carried out in a fair manner, without leaving anyone behind. The mechanism could provide support by mobilizing at least EUR 100 billion for the most affected regions between 2021-2027. The mechanism has created the necessary investments to help

workers and communities that relied on fossil fuel production and was planned in addition to the substantial contribution from the EU budget.

Given this macroeconomic context of the European Union, EIOPA has assigned an important role to sustainable financing by requiring insurance companies and pension funds to manage and decrease ESG (environment, social and governance) risks in the underwriting business, to reflect consumer preferences for sustainable investments and to take a sustainable approach towards their investments. ESMA also recommended integrating risks and sustainability factors into the investment of companies and mutual funds, conducting ESG disclosures by market participants, avoiding short-termism of capital market entities, and establishing new benchmarks based on climate change.

Joint Committee of European Supervisory Authorities[12] has warned in the autumn of 2019 about three major categories of risks and vulnerabilities over the stability of the EU financial system:

- The need for financial institutions to prepare for Brexit. Although there has been a "Brexit fatigue" in the financial sector, supervisors have continued to encourage institutions to prepare continuity plans in the event of a Brexit without an agreement and to take the necessary steps in order to minimize the negative impact over financial markets.

- Risks related to low interest rates have continued to put pressure on the financial sector and concerns have emerged about the focus on high yields. Although the monetary policy response to slow economic growth and low inflation rates has helped to restore confidence in financial markets on short to medium term, this context combined with flat yield curves influences the profitability and earnings of financial institutions, stimulates the focus on high yields and increases the reevalution risks. The search for high returns can be seen in investment funds, which have liquidity problems due to capital outflows and investments in illiquid assets. Risky corporate debt has increased sharply during recent years and the share of low-rated bonds has increased.

- Climate change pose different risks to the financial system. Given that the economy and the environment are interconnected, the intensive use of fossil fuels contributes to the climate change. Floods and other events caused by extreme weather can cause economic losses of billions of euros. An uneven transition to a low-carbon economy could create turbulent scenarios in terms of financial stability and can create challenges for the long-term viability of business models. In this respect, financial institutions could play an important role in ensuring the gradual transition to a more sustainable economy.

In addition to the fiscal and monetary measures applied by the Member States, the European Union provided a coordinated response to the COVID-19 outbreak:

- Establishment of an investment initiative in response to coronavirus, amounting to EUR 37 billion (0.3% of EU27 GDP in 2019) in order to support public investment for hospitals, SMEs, the labor market and the regions affected;

- Activation of the general escape clause of EU budgetary rules , so that Member States no longer have to meet the 3% deficit target;

- Extending the scope of the Solidarity Fund to include the health crisis, in order to mobilize for the most affected countries (up to EUR 800 million are available in 2020);

- Implementing temporary state aid rules so that governments can provide liquidity to the economy in order to support citizens and businesses, especially SMEs, and to keep their jobs;

- Redirecting EUR 1 billion from the EU budget in the form of guarantees for the European Investment Fund in order to stimulate banks to provide liquidity to SMEs and small businesses;

[12] Joint Committee Report on risks and vulnerabilities in the EU Financial System Autumn 2019

- Establishment of a EUR 100 billion solidarity instrument in order to help workers maintain their incomes and help the business community to survive. The new instrument will provide loans amounting to EUR 100 billions , which will be guaranteed by Member States and will be targeted where urgently needed;
- Using the European Stability Mechanism to provide financial support of up to 2% of 2019 GDP to each State Member of Euro Area (based on precautionary credit lines), in order to finance health expenses;
- Granting EUR 25 billion in the form of government guarantees to the European Investment Bank to support EUR 200 billion in financing for SMEs.

1.6. Measures implemented by FSA to mitigate the negative effects of COVID-19 over the stability of non-bank financial markets

The year 2020 began with the emergence of a new risk to the financial markets related to the rapid spread of the new coronavirus, with significant effects over the entire economic activity. Given this context, **the primary goal of the Financial Supervisory Authority has become to mitigate the impact of the COVID-19 pandemic over the stability of the non-bank financial market and, implicitly, to protect consumers of non-bank products and services.** In line with the current situation, several measures were implemented in the first part of 2020 in order to support non-bank financial markets:

- Decrease by 25% of all tariffs, fees, quotas and contributions due to FSA by entities operating on the markets supervised, starting from April 1, 2020 throughout the state of emergency, regardless of its extension. The measure applies to entities authorized, regulated and/or supervised by the FSA, as well as to natural and/or legal persons requesting the FSA to issue individual documents or to provide services. In this sense was issued *Regulation no. 3/2020 for the regulation of some measures regarding the enforcement of the provisions of the FSA Regulation no. 16/2014 on the revenues of the Financial Supervisory Authority during the state of emergency generated by the spread of COVID-19;*

- Publication of *Regulation no. 5/2020 for taking measures regarding the General Shareholders Meetings of issuers during the state of emergency generated by COVID-19,* which aims to avoid physical meetings and ensure the possibility of holding general meetings by remote means;

- *Issuance of Rule no. 21/2020 for the extension of deadlines for reporting, publishing public information and submitting other documents to the Financial Supervisory Authority in the field of insurance, following the situation generated by COVID-19 and establishing a state of emergency in Romania* following EIOPA recommendations on the flexibility of authorities with deadlines for the submission of surveillance reports and the publication of information;

- The possibility for the managers of private pension funds to invest in government bonds issued by the MPF, by EU Member States or belonging to the European Economic Area in a percentage higher than 70% (the change being a temporary one - for a period of one year from the date of entry into force of the rule). In this sense was issued *Rule no. 22/2020 on the temporary change of the maximum limit applicable to investments of private pension funds in government bonds;*

- Enforcement of *Instruction no. 1/2020 on the submission of reports and other documents to the FSA during the implementation of exceptional measures generated by the COVID-19 crisis* through which, while taking exceptional measures, entities authorized, regulated and/or supervised by the FSA will send correspondence, reports, information and other documents provided by the applicable legislation, to the Authority, only in electronic format;

- Communication and collaboration with other public and central government authorities, as well as

coordination with the European bodies responsible for the financial market, in particular with the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA), for a convergent approach in the use of legal prerogatives in order to maintain an orderly functioning on the markets;

- Warning the companies whose securities are traded on the capital market, on the need to carry out an own and specific assessment of the issuer and to take all the necessary measures according to the recommendations issued by authorities in order to prevent/limit the spread of COVID-19;

- Intensifying the communication with the entities regulated, following their actions related to the updating and submission of the Business Continuity Plans, including the impact of COVID-19.

The FSA conducted **a permanent dialogue with the entities supervised**, in order to identify in advance potential risks and possible disruptions of the activity. The dialogue focused in particular on ensuring the existence and implementation of business continuity plans, including additional measures given the current context, and assessing the impact that this phenomenon could have on their business and on the financial stability.

Insurance companies responded to the FSA initiative and provided relevant information on the impact of coronavirus over their activity. Most do not consider a major impact on the risk profile and on the financial position. Some of them performed additional stress tests, and the result was marginal. Also, most companies are well capitalized and liquidity and solvency indicators are above the minimum thresholds. From the perspective of insurance products, most companies either have exclusions for epidemics/pandemics or have a low exposure to this type of risk. In general, the risk can affect the portfolio of: insurances, travel, temporary inability to work, group protection, the risk of non-payment of debts held by the insured, insurance attached to banking products, etc. The companies did not consider it necessary to develop the ad hoc ORSA (Own Risk and Solvency Assessment), but if the situation requires so, they will analyze this opportunity. All companies have submitted business plans or procedures, some of which have already included pandemic scenarios.

On the **capital market**, FSA communicated with FISC *(Financial Investment Services Company),* IMC/AIFM (*Investment Management Company/Alternative Investment Fund Manager),* BVB (*Bucharest Stock Exchange),* CD (*Central Depository*) and ICF (*Investor Compensation Fund*). All entities have business continuity plans or policies. Regarding the **Central Depository**, a systemic institution in the capital market infrastructure, we specify the fact that art. 45 of the CSDR requires central depositories, as for the services they provide, as well as for each settlement system of the financial instruments they manage, to provide, implement and maintain an appropriate business continuity policy and a business plan for recovery after disasters in order to ensure the continuity of their services, the rapid resumption of operations and the fulfillment of CSD obligations in the event of events posing a significant risk of operations disruption.

Thus, the Central Depository implemented the *Business Continuity and Disaster Recovery Plan*, in order to ensure the resumption of current operations in case of a major event that would cause the interruption of the normal operation of the institution's IT system. The computer system of the Central Depository is permanently operational, 7 days a week, 24 hours a day. Ensuring operational continuity, respectively the operation of this IT system under optimal parameters and without accidental interruptions, is a particularly important requirement, given that the instability of the Central Depository's activity may affect the stability of the capital market.

Regarding the resilience of trading venues in case of disruptive incidents, we specify that in *Regulation (EU) no. 584/2017 completing Directive 2014/65/EU of the European Parliament and of the Council as regards regulatory technical standards specifying the organizational requirements for trading venues* there are provisions by which trading venues managers apply business continuity mechanisms in order to deal with various disruptive incidents. At the same time, they have the obligation to develop a business continuity plan, which includes the procedures and ways to manage the disruptive incidents. Given this context, the **Bucharest Stock Exchange SA** has also implemented a plan for operational continuity and disaster recovery that include elements such as: procedures for saving the data stored on each server, including the saving schedule; procedures for storing and accessing data saved/archived; procedures for data restoration; procedures for disaster data recovery and ensuring the operational continuity of the BVB system.

The governance requirements of the entities in **the private pension fund market** also provide the obligation to prepare business continuity plans, which have been updated as to allow the development of the business taking into account the impact of COVID-19.

Warning on the increase in the cybernetic risk

FSA **drew the attention to the increase in cyber risk on the non-bank financial market**, given that the activity of entities regulated/supervised by the Authority is generally carried out remotely, as a measure to prevent the spread of coronavirus infection.

Given the context where some of the entities' employees work remotely, it is possible to multiply the risks, in particular those related to the loss of data or their unauthorized use.

Cyber attacks speculate on the fear of coronavirus and on sending phishing messages through electronic communication channels. They try to mislead or persuade the users to access or connect to a link/website through which data/information/passwords can subsequently be stolen or malware can be downloaded in order to disrupt or damage computer systems/the applications used.

In this situation, the maintenance and good management of information systems are particularly significant in order to effectively protect the historical records, personal data of consumers and cash or asset flows.

FSA recommended to regulated/supervised entities the implementation of the following cyber security measures:

- setting up access accounts and setting solid access passwords, preferably with two authentication factors;
- identification of additional risks and management forms if staff is allowed to use personal work devices (computer/laptop/telephone) - control and visibility by the entity of these devices are more limited and involve robust authentication solutions;
- training the staff on the risks of phishing and on detecting the typical signals of phishing emails, as well as alerting their clients on the ways of communication/confirmation of the services provided;
- training staff on communication/reporting, in the shortest time, of cyber security issues or cyber threats;
- drafting instructions/guides for the use of remote applications and their testing before use, if they are different compared to those used at the headquarters/office;

- activating and configuring the encryption of data used on the computers/telephones used for telework to be protected in case of loss/theft of the working device;
- identification of tools that can be used in order to block unauthorized access to the work device, to delete or copy data stored within it.
- At the same time, the FSA recommended that companies operating on the non-bank financial market should review/identify, in the new context, together with the external IT auditor/outsourced IT service provider, vulnerabilities and identify ways to address the operational risks.

Recommendations on issuers' transparency

FSA brought to the attention of the companies, whose securities are traded on the capital market, the need to carry out an own and specific assessment of the issuer and to take all the necessary measures according to the recommendations issued by the authorities to prevent/limit the spread of COVID-19.

Thus, with regard to corporate events scheduled for the following period, companies must ensure that shareholders are properly informed and facilitate the possibility of expressing the right to vote within the General Shareholders Meeting (GMS) by alternative means of participation directly or through a representative, as provided by law (voting by mail, participation by electronic means of data transmission).

At the same time, given this context, it is essential to ensure that shareholders/investors are properly informed about any inside information.

In this respect, the information communicated publicly by the issuer, through its representatives, as well as the manner of their communication must meet the legal criteria, for example ensuring the quality/validity of the information, as well as informing in an consistent way by using the established communication channels, avoiding the occurrence of asymmetric access situations to relevant information regarding the issuer**.**

FSA encourages the issuers to make their own assessment of the effects that COVID-19 has/may have over their business and to prepare and publish an information document for the shareholder/investor.

Given this context, the FSA will monitor the obligations of issuers to the ensure compliance with shareholders'/investors' rights (shareholders' right to participate and vote within General Meetings and the right to information), providing issuers with full institutional support in order to identify the best practices.

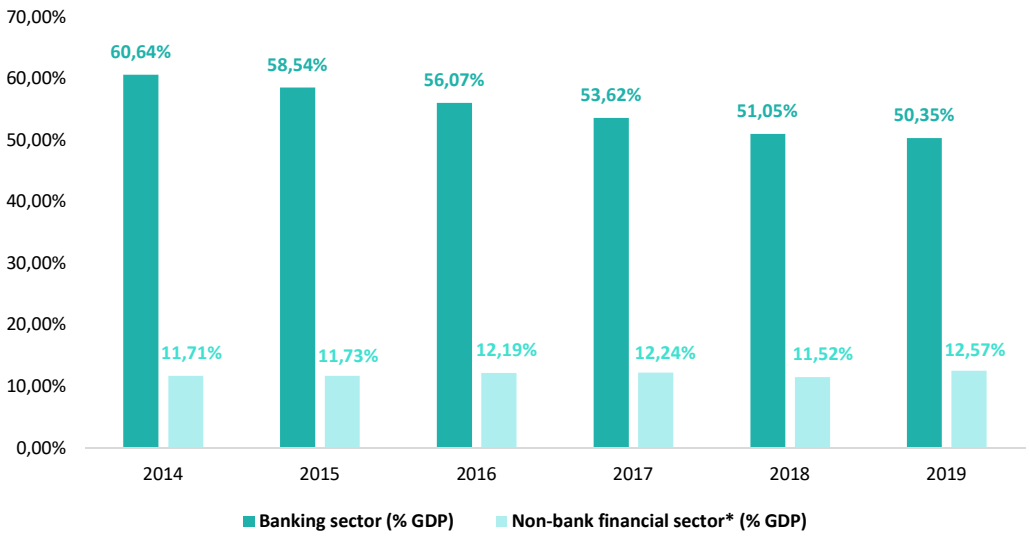
In 2020, FSA will continue to take the necessary measures in order to mitigate the risks posed by the COVID-19 pandemic on the non-bank financial markets.

2. The evolution of non-bank financial markets

2.1.Size of non-bank financial markets

The size of non-bank financial sector assets related to the gross domestic product (GDP) developed a moderate increasing trend, reaching a new peak in 2019. The decrease in 2018 was due to the lower evolution of the value of assets compared to the GDP increase in nominal terms.

Figure 12 Assets of the financial sector related to GDP



Source: NIS, NBR, FSA calculations *NFI not included

The assets of the private pension funds continued to rise given the context of the accumulation period of the pension system, in which the age distribution of participants is still in favor of people active in employment, the number of people over 55 being low (in Pillar II there are no people over 60, and in Pillar III their number is low). The evolution of total assets was determined both by the flow of contributions received monthly and by the positive results achieved by managers following the investment policies, the value of private pension fund assets related to GDP being 6.09% by the end of 2019, increasing compared to 5.80% recorded in 2018.

In second place, in terms of the value of assets related to GDP is the capital market sector, where the return to a positive territory of net underwritings of investment funds in 2019, together with investment results, determined a ratio of 4.39% for assets per GDP. The indicator is slightly decreasing compared to 2018 (when it was 4.62%), due to the higher growth of nominal GDP.

The assets of the insurance - reinsurance sector represented by the end of 2019 a percentage of 2.09% of GDP, slightly declining compared to the last year (2.41%).

Figure 13 Size of non-bank financial markets

Insurances-reinsurances sector	**2.09% PIB**	➔ 13,862,058 Non-life insurances contracts ➔ 1,618,776 Life insurances contracts
Capital market sector	**4.39% PIB**	➔ 53,550 investors according to the Investor Compensation Fund (ICF) ➔ 336,343 investors in Open-End Investment Funds (OEIF) ➔ 88,709 Investors in Closed-End Investment Funds (CEIF)
Private pensions sector	**6.09% PIB**	➔ 7.46 millions of participants to Pillar II ➔ 501,124 participants to Pillar III

Source: FSA

On the capital market, the stock market capitalization increased to Lei 180 billion in 2019, the stock market indices registering appreciations between 29% and 47%. At the same time, the cumulative value of transactions on all markets decreased by 14.55%, from Lei 14.23 billion in 2018 to Lei 12.16 billion in 2019, largely due to lack of public offers developed on the Romanian market.

Figure 14 Indicators on the capital market on 31.12.2019

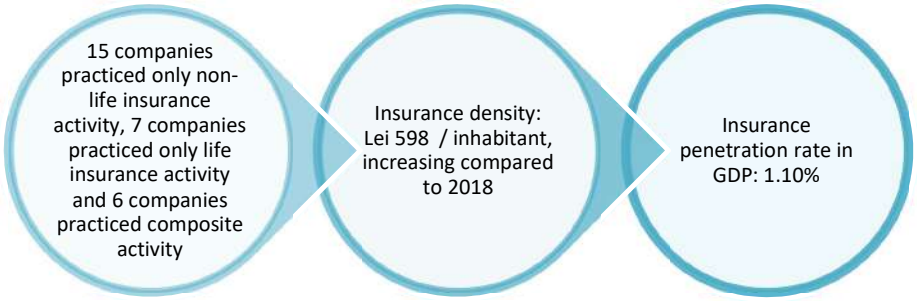
Stock market	
The total value traded on the Bucharest Stock Exchange (BVB) in year 2019	**Lei 12,16 billions**
The predominant class of financial instruments	**Shares – 82%**
Stock exchange capitalization at the end of the year	**Lei 180,85 billions**

Investment funds market	
Total assets of undertakings for collective investment in transferable securities (UCITS)	**Lei 46,57 billions**
18 Investment management companies (IMC) **86 Open-End Investment Funds (OEIF)** **26 Closed-End Investment Funds (CEIF)** **5 Financial Investment Companies (FIC)** **Fondul Proprietatea** **4 Depositaries**	
48% investment in OEIF **3% investment in CEIF** **26% investment in FP** **23% investment in FIC**	

Although the volume of gross written premiums in Romania (including branches) increased significantly in 2019 compared to the previous year, the level of insurance penetration in GDP (calculated as the ratio between the value of gross written premiums and GDP) recorded a value of 1.1% in 2019, slightly lower than the previous year, due to the more emphasized dynamics of GDP compared to the increase in the insurance sector. The density of insurances (calculated as the ratio between the value of gross written premiums from Romania and its population), an indicator that shows how much, on average, a country spends on insurance products, increased by about 10% in 2019, reaching the value of Lei 598 /inhabitant.

From the point of view of solvency requirements, the insurance sector is well capitalized, having eligible own funds to cover the Solvency Capital Requirement (SCR, according to Solvency II) amounting to Lei 5.48 billion, 1.78 times higher than this.

Figure 15 Indicators regarding the insurance-reinsurance sector on 31.12.2019



The private pension system as a whole has recorded positive results in 2019. Net assets in Pillar II reached Lei 61.97 billion , and in Pillar III Lei 2.51 billion. The rates of return obtained by private pension funds were positive, with no private pension fund recording a rate of return below the minimum rate for its risk category.

Figure 16 Indicators on the private pension system sector on 31.12.2019

31 December 2019	17 private pension funds (7 privately managed pension funds and 10 voluntary pension funds)
	10 managers
	3 depositaries
	Lei 61.97 billion net assets of privately managed pension funds
	Lei 2.51 billion net assets of voluntary pension funds
	Pillar II - annualized rates of return between 5.78% - 6.92%
	Pillar III - annualized rates of return between 4.12% - 6.35%

2.2. Private pensions market

Between 2005-2008, Romania laid the foundations for the reform of the pension system, the changes being given by the entry into force of *Law no. 411/2004 on privately administered pension funds (Pillar II) and Law no. 204/2006 on voluntary pensions* (Pillar III). Thus, the legislative framework regulating the organization and functioning of the entities on the private pension market, as well as the prudential supervision of the management of these funds was established and consolidated.

The launching of the private pension system took into account, on one hand, the removal of the pressure put on the social insurance budget and implicitly on the state budget, and on the other hand the stimulation of economic growth by investing the amounts accumulated in the pension funds accounts, investment destined to the increase in the yield expected by participants to the pension system. The assets of privately managed pension funds are thus incorporated into the circuit of the real economy, its increase depending on the rise in the general welfare.

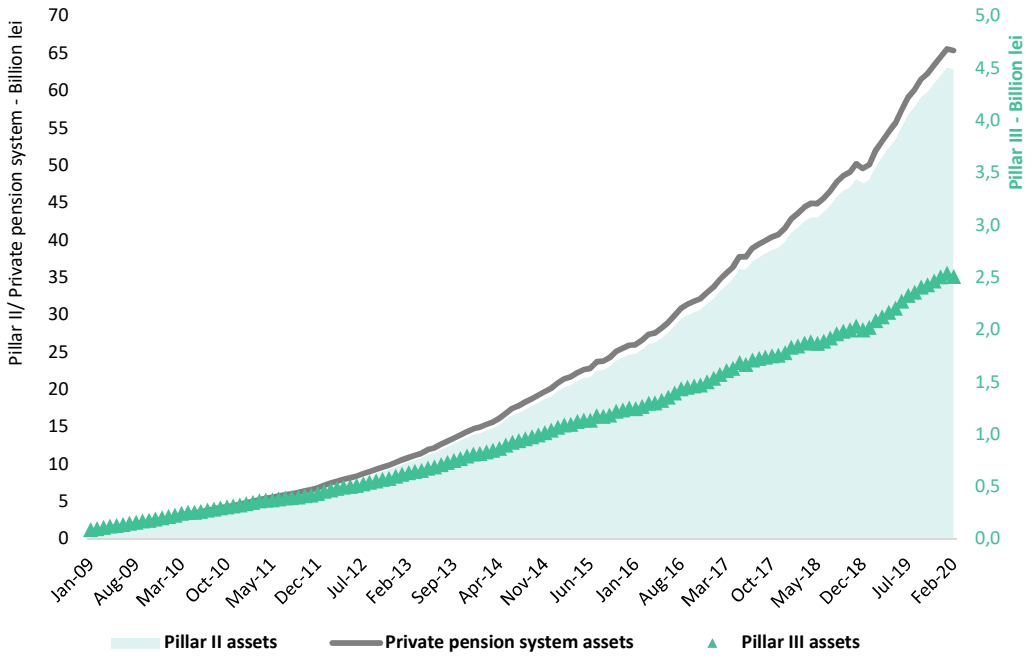
According to the Association for Privately Administered Pensions from Romania (APAPR), the total return achieved by all Pillar II funds from the beginning (May 20, 2008) until the end of 2019 was 154%, namely an average annualized return of 8.35 % for the entire operational period of Pillar II. This indicator is well above the total inflation rate during the period analyzed (41.8%), respectively the average annualized inflation rate for exactly the same period (3.05%).

Given the context of an increasing phenomenon of aging population, which puts an additional pressure over the social protection mechanisms, a fourth pillar of pensions has been established in Romania, namely the occupational pension system. At the beginning of 2020, the Parliament passed *Law no. 1/2020 on occupational pensions, which transposes the provisions of EU Directive 2341/2016 on the activities and supervision of institutions for the provision of occupational pensions* (IORP II). The aim of this new system is to provide an **additional pension component**, financed mainly by employers and in subsidiary by employees.

The operation of the occupational pension funds is based on **the employer's involvement**, as the initiator of an occupational pension scheme for its own employees, by virtue of the fact that it pays contributions to an occupational pension fund. In addition to the employer, employees can contribute to the same occupational pension fund, up to a third of the gross salary, for a more emphasized increase in the value of personal assets. Occupational pension funds are based on a form of social partnership between the employer and its employees, being also a factor of stimulating and rewarding employees, as well as for their retention.

The evolution of the private pension system has been positive throughout its lifetime, the number of participants and the value of their personal assets constantly expanding. The value of total assets under management, at the level of the entire private pension system, reached at the end of February 2020 the level of Lei 65.37 billions (EUR 13.58 billions), with a number of participants of 8,013,785.

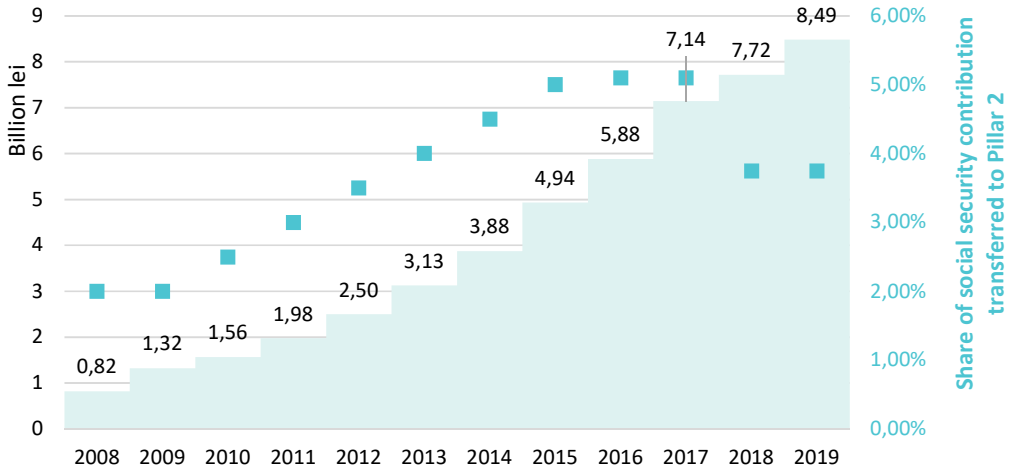
Figure 17 Assets of private pensions system



Source: FSA

The significant and accelerated development in pension fund assets between 2008-2019 was possible mainly due to the mandatory contributions to privately managed pension funds under Pillar II. They have increased over time as an aggregate effect of changes in contribution rates and as a result of the increase in the gross wage volume on which those quotas have been calculated, withheld and paid. The contribution to a private pension fund does not represent additional financial obligations for the participants, but is part of the individual contribution due to the public pension system. In February 2020, the share transferred is 3.75%. In other words, a percentage of 3.75% of gross salary income goes to the privately administered pension.

Figure 18 Annual amount of contributions to Pillar II (billions lei)



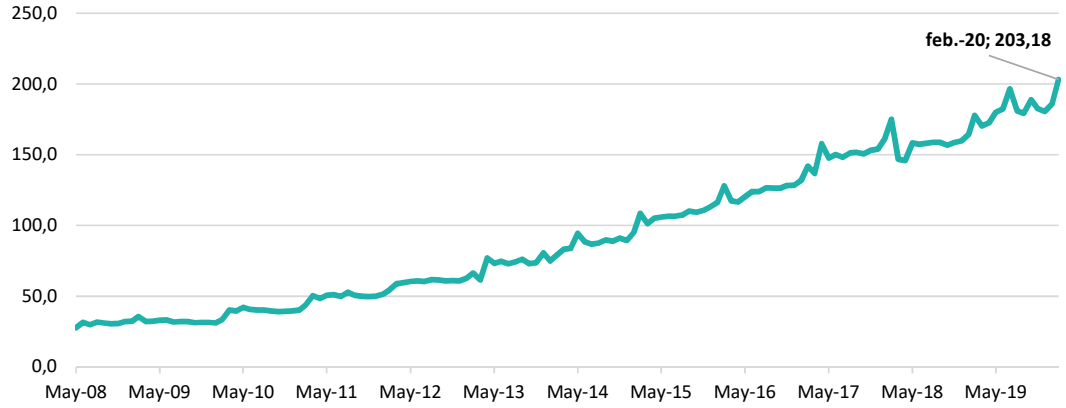
Source: FSA

During the 12 years of operation of the private pension system, two trends with a positive influence on the value of the assets of private pension funds could be observed:

1. increase in contributions as an aggregate effect of surging the number of participants and rising the average contribution (being in turn the aggregate effect of changing contribution rates and increasing the average wage);

2. the positive returns on investments obtained by the funds throughout their operation.

Figure 19 Evolution of the average monthly contribution (lei/participant with contributions)

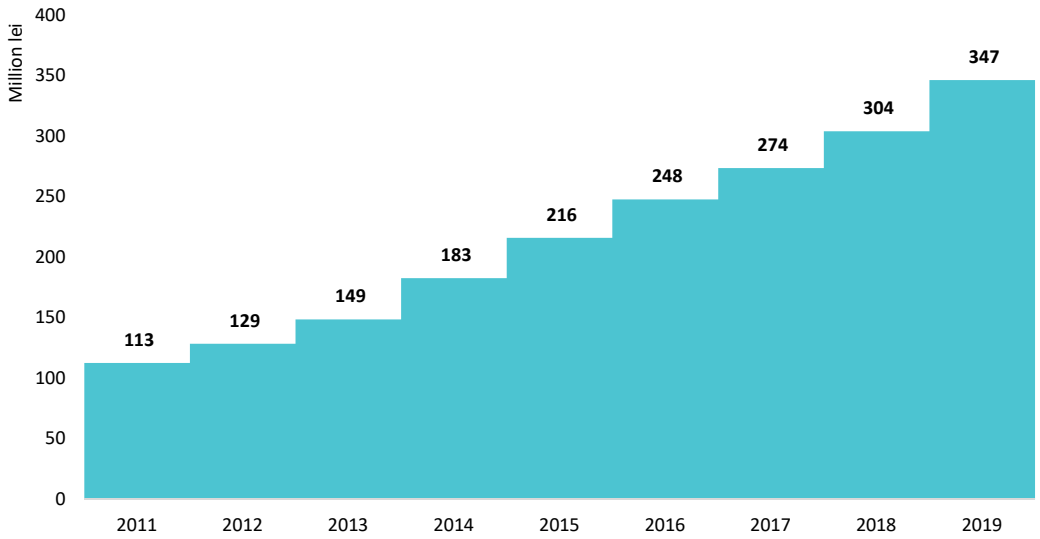


Source: FSA

One observes the positive evolution of the average contribution per participant to Pillar II, from approximately Lei 28 in the first month of operation to about Lei 203 per participant, about 12 years later, in February 2020.

And in case of Pillar III, related to voluntary pension funds, the evolution of contributions was positive, but on a much smaller scale and at a slower pace compared to the private pension funds with mandatory contribution under Pillar II.

Figure 20 Annual amount of contributions to Pillar III (bil. lei)



Source: FSA

By the end of 2008, 14 privately managed pension funds (Pillar II) were active, of which 7 funds currently remained on the market. The personal assets of the participants to the privately managed pension funds who left the Romanian market were permanently in complete safety, being transferred to other pension funds as a result of usual corporate events whose procedural conduct strictly complied with the precautionary law and practices applicable, as it follows:

- In 2009, the BANCPOST Privately Managed Pension Fund was absorbed by the EUREKO Privately Managed Pension Fund (absorbing fund);
- Also in the same year, OMNIFORTE Privately Administered Pensions was absorbed by BCR
- (Romanian Commercial Bank) Privately Administered Pension Fund (absorbing fund);
- In 2010, the KD Privately Administered Pension Fund was absorbed by the EUREKO Privately Administered Pension Fund (absorbing fund);
- Also in 2010, the Privately Administered Pension Fund OTP was absorbed by the BCR Privately Administered Pension Fund (absorbing fund);
- In 2010, the PRIMA PENSIE Privately Administered Pension Fund was absorbed by the BCR Privately Administered Pension Fund (absorbing fund);
- In 2013, the Privately Administered Pension Fund PENSIA VIVA was absorbed by the ALICO Privately Administered Pension Fund (absorbing fund);
- In 2015, the EUREKO Privately Administered Pension Fund was absorbed by the VITAL Privately Administered Pension Fund (absorbing fund).

Figure 21 Evolution of privately managed pension fund assets 2008 - February 2019 (millions lei)

Privately administered pensions fund/ Period	ARIPI	AZT VIITORUL TAU	BANC POST	BCR	BRD	EUREKO	KD	METROPOLITAN LIFE	NN	OMNIFORTE	OTP	PENSIA VIVA	PRIMA PENSIE	VITAL
2008	67	195	5	26	21	41	1	60	322	10	4	56	2	23
2009	193	558		102	58	127	3	169	938		9	158	6	63
2010	349	1.013		222	107	238		307	1.699			285		115
2011	521	1.507		342	167	359		455	2.459			433		177
2012	789	2.242		540	255	540		683	3.654			663		276
2013	1.161	3.188		802	390	790		1.956	5.242					417
2014	1.596	4.246		1.142	572			2.716	7.144					1.711
2015	2.075	5.414		1.524	776			3.492	9.140					2.265
2016	2.673	6.860		1.988	1.044			4.452	11.516					2.948
2017	3.402	8.622		2.601	1.376			5.622	14.353					3.782
2018	4.067	10.322		3.125	1.733			6.787	16.970					4.597
2019	4.386	11.025		3.373	1.880			7.264	18.186					4.968
feb.-20	5.440	13.582		4.253	2.393			8.889	22.071					6.225

Source: FSA

Historically, a similar evolution of market consolidation can be observed in case of voluntary pension funds. Thus, although the number of voluntary pension funds remained the same in 2018 compared to the end of 2008, in the meantime there have been a number of changes in the market structure (issuances of new funds, mergers), as it follows:

▪ The pension funds BRD PRIMO, BRD MEDIO, EUREKO and STABIL started their activity in 2009;

▪ In 2011, the BRD PRIMO Optional Pension Fund was absorbed by the BRD Medio Optional Pension Fund, and the OTP STRATEG Optional Pension Fund was absorbed by the STABIL Optional Pension Fund (absorbing fund);

▪ In 2013, the CONCORDIA MODERATE Optional Pension Fund was deregistered following the withdrawal of the manager's authorization and the transfer of the participants' personal assets within the special management procedure EUREKO - PRIVATE PENSION FUNDS ADMINISTRATION COMPANY S.A. (special management);

▪ In 2016, the EUREKO CONFORT Optional Pension Fund was absorbed by the AEGON ESSENTIAL Optional Pension Fund (absorbing fund).

Figure 22 Evolution of the assets of voluntary pension funds 2008 - March 2019 (millions lei)

Optional pensions fund/ Period	AEGON ESENTIAL	AZT MODERATO	AZT VIVACE	BCR PLUS	BRD MEDIO	BRD PRIMO	CONCORDIA MODERAT	EUREKO CONFORT	NN ACTIV	NN OPTIM	OTP STRATEG	PENSIA MEA	RAIFFEISEN ACUMULARE	STABIL
2008		13	8	22			0		13	19	0	6	3	
2009		31	16	43	1	1	0	0	30	57	0	12	10	0
2010		50	25	59	3	3	0	1	43	105	0	19	17	2
2011		67	31	75	13		1	2	52	148		22	22	4
2012		88	41	102	20		1	3	71	209		29	30	6
2013		117	51	132	36			4	95	294		35	40	8
2014		144	61	171	52			5	120	387		41	50	11
2015	6	167	67	214	65				142	478		45	57	13
2016	6	189	75	263	81				167	588		55	65	15
2017	7	213	85	319	96				199	714		61	73	18
2018	7	229	88	358	107				224	823		65	81	20
2019	9	275	105	449	135				288	1.050		77	97	24
feb.-20	8	275	103	452	135				284	1.055		78	97	24

Source: FSA

One of the trends observed on the market over time has been the increase in concentration. Thus, the top three private pension fund managers together hold about 69% of the market, as it follows:

▪ NN Pensii Privately Administered Pension Fund Management Company SA holds over one third of the total value of the assets of the private pension system (33.76%);

▪ Allianz-Țiriac Pensii Private Private pension fund management company SA with a market share of 21.36%;

▪ Metropolitan Life Privately Administered Pension Fund Management Company SA with a market share of 13.60%;

▪ The other 7 managers accumulate 31.28% of the total value of the managed assets.

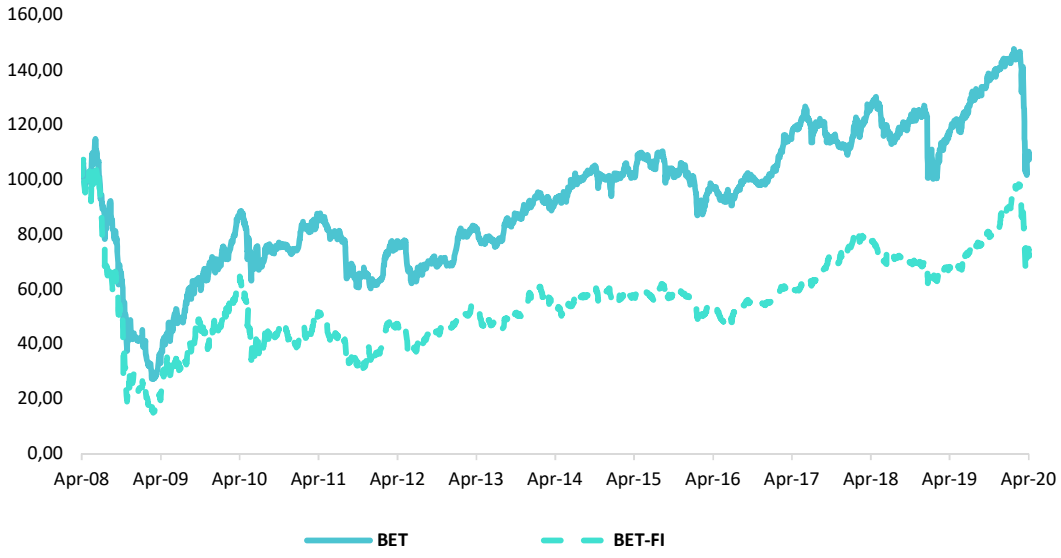
2.3. Capital market

The stock market and the investment fund market represent the two categories of markets that capture the evolution of the capital market. Therefore, the most relevant elements to shape the evolution of the stock market are the value of capitalization, the level and dynamics of stock indices and the value of daily transactions. The evolution of the investment funds market is instead represented by the net capital flows for each category of funds, the volume and dynamics of the funds' assets, the number of investors and the structure of investments, etc.

2.3.1. Stock market

Taking into account the period analyzed, the evolution of local stock market indices was represented by a major decrease caused by the global financial crisis of 2007-2009, followed by a difficult trend of recovery. Compared to the evolutions of the international stock market indices, the indices of the Bucharest Stock Exchange had a slower rate of return. Following the trend of recovery and reaching the psychological threshold of 10,000 points in the first part of January 2020, the end of February and the whole of March were characterized by a major decline in stock market indices due to the spread of COVID-19 virus globally.

Figure 23 The evolution of the indices of the Bucharest Stock Exchange 01.04.2008-01.04.2020 (31.03.2008 =100)



Source: BVB, FSA calculations

Both during the global financial crisis and during the crisis generated by the emergence of the COVID-19 virus in the first quarter of 2020, the sectors with the largest shares in the capitalization of the local stock market, namely the financial sector and the energy sector(including oil, gas, exploitation and transport, utilities) were the sectors that had one of the most volatile developments internationally. This explains part of the relatively low performance of the local market compared to the global trends during the period analyzed.

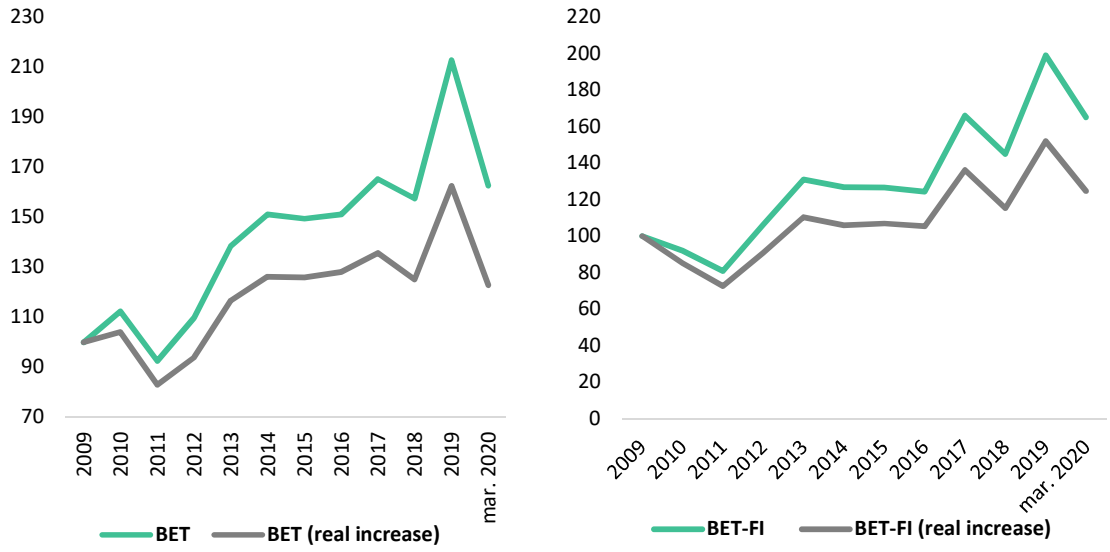
Table 10 The annual variation of the local stock market indices vs. variation of the Consumer Price Index

Date	BET	BET-BK	BET-FI	BET-NG	BETPlus	BET-TR	BET-XT	BET-XT-TR	CPI
2010	12,3%		-8,0%	29,5%			1,9%		8,0%
2011	-17,7%		-12,0%	-20,7%			-13,8%		3,1%
2012	18,7%		31,2%	2,6%			19,9%		4,9%
2013	26,1%	19,1%	23,3%	6,1%			23,4%		1,6%
2014	9,1%	3,7%	-3,2%	5,7%			6,3%		0,8%
2015	-1,1%	2,6%	0,0%	-14,0%	-1,3%	3,1%	0,3%		-0,9%
2016	1,2%	0,2%	-1,9%	-3,0%	1,7%	9,7%	0,5%	8,4%	-0,5%
2017	9,4%	22,8%	33,4%	10,8%	10,7%	19,1%	14,5%	23,8%	3,3%
2018	-4,8%	-11,6%	-12,6%	-7,4%	-4,8%	4,3%	-7,6%	0,5%	3,3%
2019	35,1%	29,7%	37,3%	30,3%	34,3%	47%	34,4%	45,6%	4,0%
2020*	-23,57%	-23,34%	-17,05%	-26,16%	-23,40%	-23,56%	-23,24%	-23,23%	1,2%

Source: BVB, FSA calculations

As it results from the table above, it can be seen that local stock market indices have generally had remarkable developments during the years following the global financial crisis, both in terms of actual dynamics and related to local inflation, the increases registered in 2019 compared to 2018 being the most significant. This is also due to the fact that in 2019 BVB changed to the status of an emerging market. On the other hand, due to the worsening situation regarding the spread of COVID-19 virus, in March 2020, compared to December 2019, the stock market indices registered significant decreases, the BET-NG index (-26.16%) having the highest declines.

Figure 24 Comparative evolution of BET and BET-FI indices (2009=100)



Source: Refinitiv, INSSE, FSA calculations

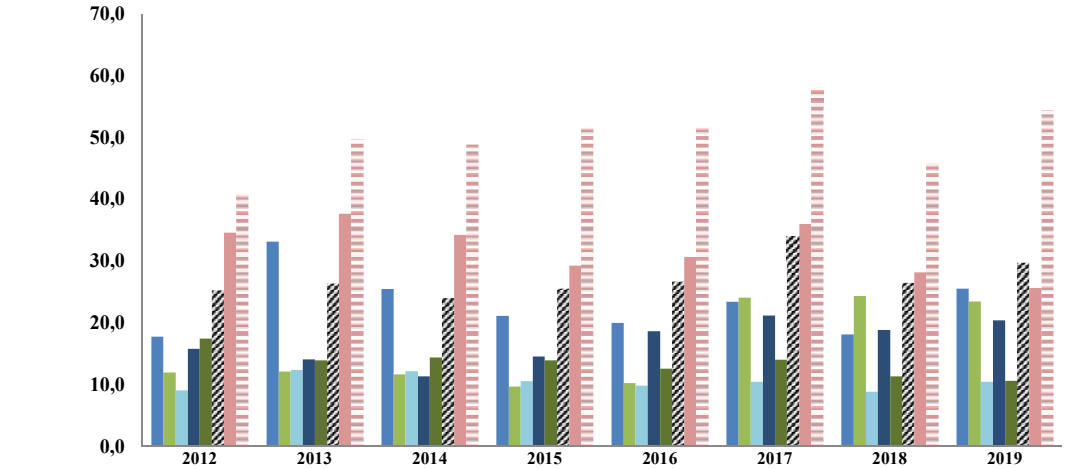
The year 2011, from the perspective of the evolution of the capital market in Romania, was strongly affected by the sovereign debt crisis. The BET index decreased by 8% in 2011, while the BET-FI index droped by about 20%. The BET index increased by 63%, in nominal terms, in March 2020 compared

to 2009, and in real terms (excluding inflation) by 23%, while the BET-FI index rised by 65%, and in real terms by 25%. However, compared to 2019, the graph shows a decline of both indices recorded in March 2020.

All Romanian stock market indices recorded negative evolutions by the end of March 2020, compared to December 31, 2019. The decreases recorded were between -17.05% (BET-FI index) and -26.16% related to the BET-NG sector index, which captures the evolution of companies listed on the regulated BVB market, which have as main field of activity energy and related utilities.

Between 2012-2019, the market capitalization per GDP reached a maximum of 12.4% by the end of 2013, after which it experienced a downward evolution, falling to about 9% of GDP in 2018, following that, in 2019 reached the level of 10.5% of GDP. The factors that contributed to this downward trend in 2014-2018 were the relatively small number of new listed companies and their low market value as well as the performance of stock prices (and thus stock market indices) which was lower than the GDP increase in nominal terms.

Figure 25 Stock capitalization in GDP (%)

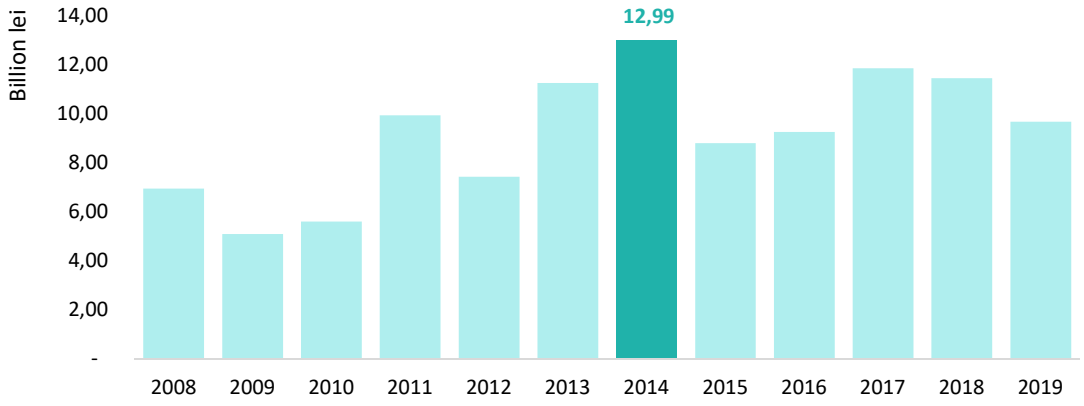


	2012	2013	2014	2015	2016	2017	2018	2019
Greece	17,8	33,2	25,5	21,2	20,0	23,4	18,1	25,5
Bulgaria	12,0	12,2	11,6	9,7	10,3	24,1	24,4	23,5
Romania	9,1	12,4	12,2	10,6	9,9	10,5	8,9	10,5
Hungary	15,8	14,1	11,4	14,6	18,7	21,2	18,9	20,4
Czech Republic	17,5	13,9	14,5	14,0	12,6	14,0	11,4	10,6
Austria	25,2	26,4	24,0	25,5	26,7	34,0	26,5	29,8
Poland	34,6	37,7	34,3	29,3	30,7	36,0	28,2	25,6
Germany	40,9	49,7	48,9	51,5	51,6	57,6	45,9	54,5

Source: FESE, Eurostat, FSA calculations

Compared to 2018, the value traded in 2019 decreased by about 16%. The highest value traded was recorded in 2014, of approximately Lei 13 billions , and subsequently the market liquidity decreased, even if there were several listings of new companies over the next 5 years. The underlying causes of low liquidity are determined by the low capitalization of free-float, the immobilization of significant packages of shares by a number of investors (eg. local investment and pension funds, but also foreign portfolio investors), the lack of functional stock lending mechanisms (and short selling).

Figure 26 Annual evolution of the stock transactions value at BVB



Source: BVB

2.3.2. Brokers

According to the Register of the former National Securities Commission (NSC), by the end of 2009 there were 997 brokers registered, having the right to carry out financial investment services: 63 financial investment services companies authorized by NSC, 15 domestic credit institutions, 802 investment companies from Member States and 117 credit institutions from Member States, of which 4 branches.

During the period analyzed, a significant number of brokers ended their activity due to the increase of costs and the decrease in the level of commissions. The local market for financial investment services has strengthened significantly as a result of the pressure exerted by the continuing trend of diminishing trading costs for investors and the relatively low level of the value traded. Due to the European and international legislative requirements, it has been necessary to increase the compliance costs for intermediaries and the capital requirements in terms of the operational risk.

Although there was an increase in trading volumes in bonds, structured products, units of funds or other financial instruments on the local stock market, stock transactions always accounted for more than half of the total value traded.

Although futures and futures options were traded for a long period of time on the futures market, they were withdrawn from trading due to the decline in investor volumes and interest and the increasing costs caused by the new legislation applicable at European level.

Even if the value of transactions on the main segment of the Bucharest Stock Exchange was higher in 2019 compared to 2009 (+ 89%), it is still low compared to the maximum reached before the global financial crisis in 2007 (-30%) and decreasing even compared to the previous years (eg. 2014: -26%).

Table 11 Main segment traded value (shares + fund units)

Bucharest Stock Exchange	Trading Value (bil. lei)
2009	10.23
2019	19.37

Source: BVB

2.3.3. Collective investment schemes

Authorized collective investment schemes are one of the most significant elements of the local institutional investor segment. They are found under various types of entities with very different forms of organization (eg. companies for investment purposes, associations of persons) and operation (eg. collective investment schemes - UCITS according to the European legislation -, respectively alternative investment funds - AIF).

The evolution of this market was influenced during the period analyzed both by structural factors (legislative changes, eg. MiFID2 Directive on markets of financial instruments), and cyclical (eg. interest rate increases) and circumstantial (eg. asset recovery and share redemption policy of Fondul Proprietatea, legislative changes regarding the FIC's operation, etc.).

By the end of 2009, a number of 51 open-end investment funds (OEIF) were authorized, divided into 5 categories: 5 monetary, 9 bonds, 17 diversified, 9 shares and 11 in the "other" category. Compared to the end of December 2009, the number of OEIF by the end of December 2019 increased by 61%, respectively 31 new funds were registered. They are structured into five categories: equity funds (25), bond funds (30), diversified funds (16) and mixed funds (11: stock-bond combination).

If at the beginning of the analyzed period, the investors had a preference for investments in equity and diversified funds, the bond funds subsequently gained a significant market share, becoming dominant in terms of total assets. In the fourth quarter of 2019, it is also noticeable the maintenance of investors' preference for investment strategies oriented towards fixed income instruments and/or money market instruments.

By the end of 2009, the open and closed investment funds were managing net assets amounting to Lei 3,488 million , their value increasing approximately 7 times by the end of 2019 (Lei 24,096 million).

2.4. Insurance market

The insurance market has evolved positively during the recent years in terms of the volume of gross written premiums and the structure of the insurance market, with a tendency to emphasize the diversification of the consumer interest for insurance products, especially for the life and health insurance segment.

The analysis of the evolution of the volume of gross written premiums shows the resumption of the trend of increase for the gross premiums written by the companies authorized and regulated by FSA starting from 2015, after the decreases recorded for two consecutive years (2013, respectively 2014). In 2019, the volume of gross written premiums approaches the threshold of Lei 11 billion , increasing by over 8% compared to the previous year, respectively by about 24% more than the value recorded in 2009.

Figure 27 Evolution of the total volume of gross written premiums (non-life and life insurance) in period 2009 - 2019

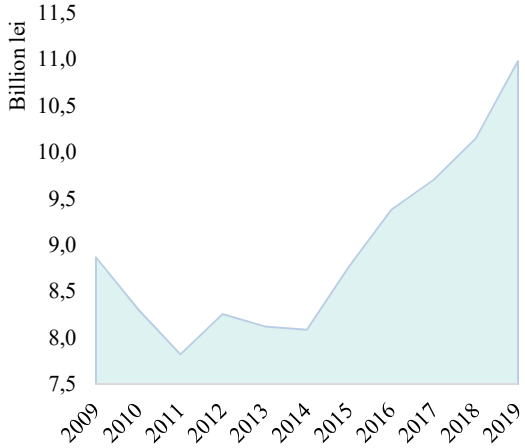
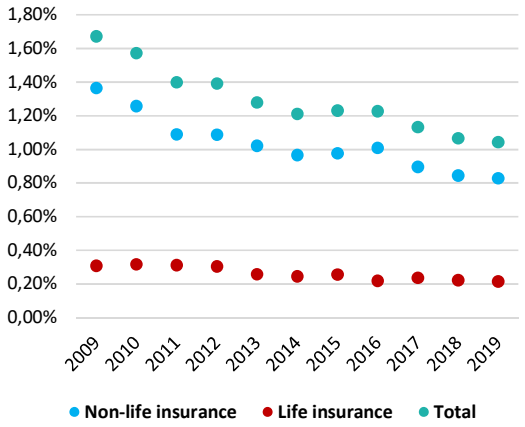


Figure 28 Degree of insurance penetration level in GDP



Source: FSA

The level of insurance penetration in GDP, one of the indicators of the level of development of the insurance market, calculated as the ratio between gross premiums written by companies authorized and regulated by FSA (not including gross premiums written by branches) and GDP of Romania, was recorded in 2019 at a value of 1.04%.

Although the Romanian insurance market has increased, the indicator has decreased during recent years amid a faster appreciation of gross domestic product. Even if the penetration of life insurance in GDP remains low, there is still a steady evolution in this case - as opposed to the decreasing trend in case of the non-life insurance segment - due to the significant growths recorded especially during the last years on the life insurance segment.

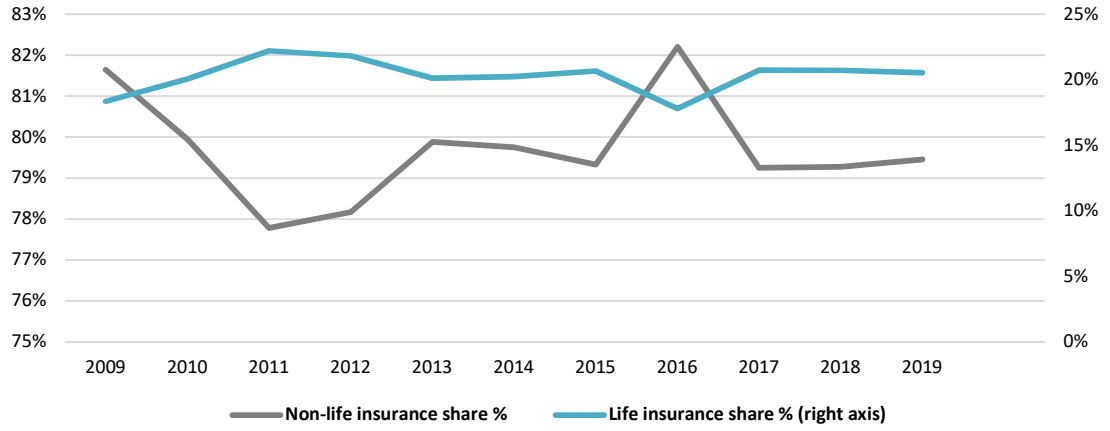
2.4.1. Insurance market evolution

The insurance market remains dominated by the non-life insurance segment, with a significant share in the total volume of gross premiums written by insurance companies authorized and regulated by FSA, which varied between 79% and 82% between 2009 - 2019.

However, there is a slight decrease in the share of this category of insurances during the last three years (2017-2019), amid the background of an increasing interest from Romanians in life insurance products.

After a minimum of the last ten years in terms of the share of total gross written premiums recorded in 2016 (18%), the life insurance segment has recovered recently, in 2017 exceeding for the first time after the financial crisis the volume written in 2008.

Figure 29 Evolution of the share of insurance activity from the perspective of the volume of gross premiums written in the period 2009 - 2019 by categories of activities

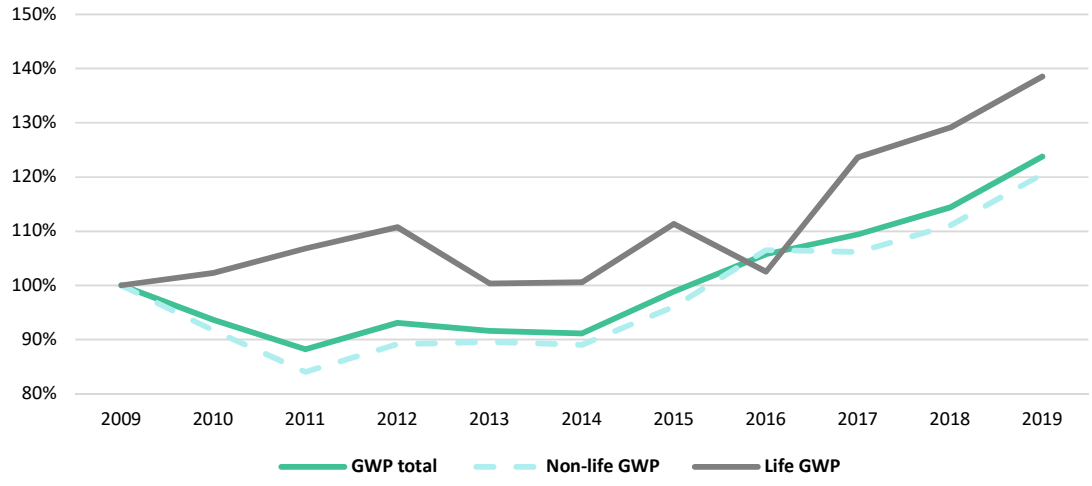


Source: FSA

2.4.2. Gross written premiums

The volume of gross written premiums has recorded mixed evolutions during the last ten years, with depreciations between 2009 - 2011 in case of non-life insurance activity, which led to declines at the level of the entire insurance market, considering that the non-life insurance segment dominates the local insurance industry. Subsequently, the trend was upward compared to the reference year (2009), noting from this point of view the period 2017-2019, when the local insurance market recorded the highest appreciations in terms of the volume of gross premiums written by companies authorized and regulated by the FSA.

Figure 30 Evolution of the volume of gross written premiums (2009=100%)

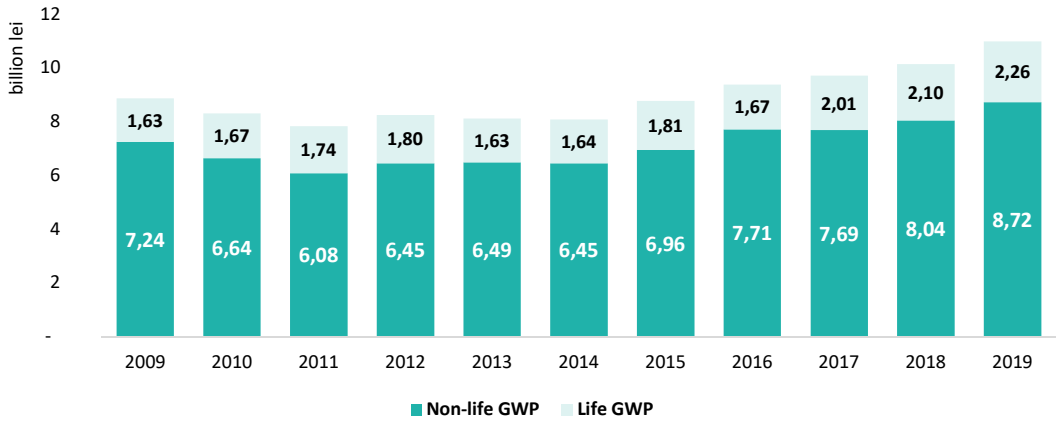


Source: FSA

Compared to 2009, in 2019 there was recorded the highest increases of both insurance segments, noting the evolution of life insurance business which appreciated by 39% compared to the reference year and thus continuing the trend of consolidation of this segment.

The volume of gross written premiums reached in 2019 the highest level in the last ten years for both categories of insurances (non-life and life).

Figure 31 The evolution of the volume of gross written premiums for the non-life insurance activity, respectively for life insurances between 2009 - 2019

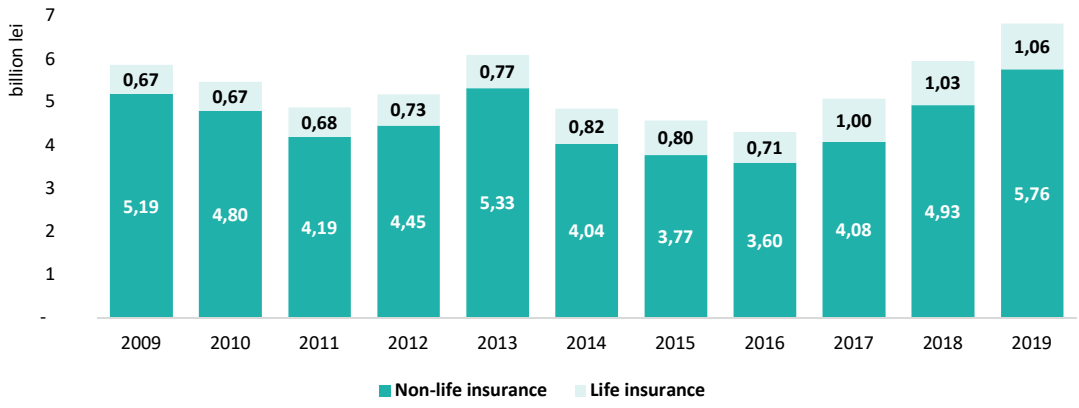


Source: FSA

2.4.3. Gross claims paid

The total volume of gross claims paid has increased compared to the previous years, the appreciation trend emphasizing especially between 2017-2019, recording in 2019 a maximum of the period analyzed, with the extension in the volume of gross premiums written by companies and implicitly of risks taken over by insurers during this period.

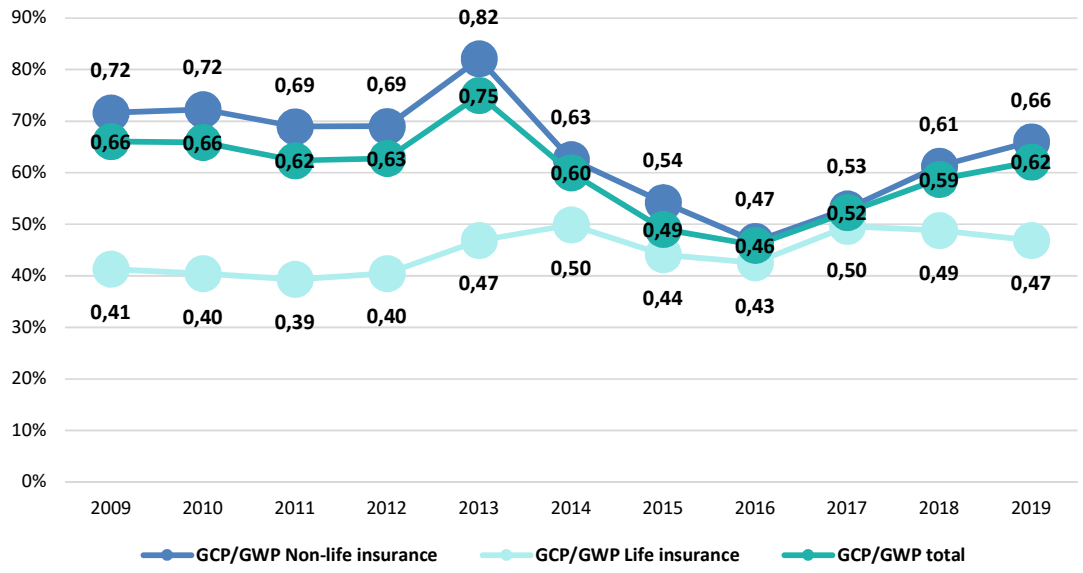
Figure 32 Evolution of the volume of gross claims paid for the activity of non-life and life insurances between 2009 - 2019



Source: FSA

A more emphasized increase in claims paid is found for non-life insurance activities, which had in 2019 a share of 66% of the total volume of gross written premiums, while in case of life insurance the ratio between gross paid and gross premiums written was 47%, decreasing compared to the period 2017-2018.

Figure 33 Evolution of the ratio between the gross claims paid by the insurance companies and the gross written premiums between 2009 - 2019



Source: FSA

2.4.4. Insurance market concentration

If the insurance market from Romania is generally characterized by a medium to high level of concentration, in case of the life insurance segment and that of compulsory motor insurance (MTPL) there is a high level of concentration.

There is a concentration on the insurance market in terms of market shares held by insurers according to the volume of gross written premiums , as well as on the insurance classes.

The insurance market remains dominated by the motor insurance sector which holds a significant share of the total gross written premiums for the non-life insurance business, of about 72%. Thus, the first 3 classes from the perspective of GWP volume have a cumulative share of about 86%, and the other 15 insurance classes are at a level of about 14%.

Among the insurance companies currently operating, the level of concentration of market shares has increased significantly during the recent years, so that the top five companies achieved in 2019 about 77.3% of total gross written premiums compared to 72.3% in 2018.

Table 12 Market shares of the top 10 insurance companies by volume of gross premiums written for non-life insurance business

Company	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
CITY INSURANCE	0.39%	0.95%	3.28%	4.09%	4.70%	5.61%	7.52%	10.24%	16.33%	18.47%	21.82%
OMNIASIG VIG	7.95%	7.86%	7.25%	12.32%	13.58%	13.34%	14.04%	14.05%	13.77%	14.58%	14.98%
EUROINS ROMANIA	3.88%	4.53%	4.80%	6.89%	7.78%	7.36%	10.33%	11.23%	14.14%	12.53%	14.67%
ALLIANZ - TIRIAC	16.55%	14.14%	13.35%	12.50%	12.70%	13.77%	13.71%	14.52%	14.22%	14.58%	13.75%
GROUPAMA	6.81%	10.79%	10.71%	11.78%	10.41%	10.35%	10.90%	11.68%	11.57%	12.07%	12.07%
GENERALI ROMANIA	4.52%	3.27%	3.27%	5.40%	5.46%	5.96%	5.96%	7.44%	7.11%	6.53%	6.37%
ASIROM VIG	7.69%	6.71%	8.98%	7.94%	7.01%	7.41%	9.16%	12.39%	10.92%	9.10%	4.90%
UNIQA ASIGURARI	6.86%	6.51%	6.30%	7.82%	8.79%	6.38%	5.23%	6.18%	5.05%	4.38%	4.30%
PAID	0.00%	0.45%	0.58%	0.37%	0.93%	1.96%	1.94%	1.90%	1.94%	1.91%	1.83%
GOTHAER ASIGURARI	0.16%	0.26%	0.30%	0.59%	1.03%	1.31%	1.18%	1.27%	1.55%	1.92%	1.03%

Source: FSA

Also on the life insurance segment, the level of concentration is high, both by insurance classes and by companies.

Classes C1 (*life insurance, annuities and supplementary life insurances) and C3 (life insurances and annuities related to investment funds*) have a cumulative share of about 93% of the total volume of gross written premiums for the entire life insurance business, and the total market shares of the first 3 companies (*CR3* according to the indicators used by the Competition Council) depending on the value of the gross written premiums accumulate a share of approximately 66%.

In terms of the evolution of gross written premiums by classes of life insurances, there is a decrease in the share of the traditional life insurance segment, the share of class C1 (*life insurance, annuities and supplementary life insurance*) decreasing from 71% (2018) to 63% (2019), simultaneously with a trend of increasing the share of class C3 (*life insurance and annuities related to investment funds*) from 24% to 30%.

There is also recorded an increase in consumer interest in health insurance similar to life insurance, class A2 (*health insurance*) accounting in 2019 for a share of 7% of total gross premiums written for life insurance compared to 2009, when it represents only 0.3%.

Table 13 Market shares of the first 5 insurance companies according to the volume of gross premiums written for the life insurance business

Company	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NN ASIGURARI DE VIATA	32.4%	32.6%	31.9%	30.2%	34.2%	37.5%	35.6%	39.6%	36.6%	36.7%	36.6%
BCR ASIGURARI DE VIATA VIG	15.7%	18.5%	19.8%	23.6%	13.1%	8.8%	14.8%	14.9%	17.5%	17.4%	16.4%
BRD ASIGURARI DE VIATA	0.1%	1.1%	2.5%	3.4%	4.3%	4.7%	5.1%	7.1%	6.6%	8.7%	13.1%
ALLIANZ - TIRIAC ASIGURARI	5.4%	4.9%	5.0%	5.2%	5.8%	5.9%	5.7%	6.5%	6.7%	6.9%	7.3%
GENERALI ROMANIA	0.0%	0.0%	1.9%	4.6%	5.2%	4.8%	4.0%	4.1%	3.3%	5.4%	6.7%

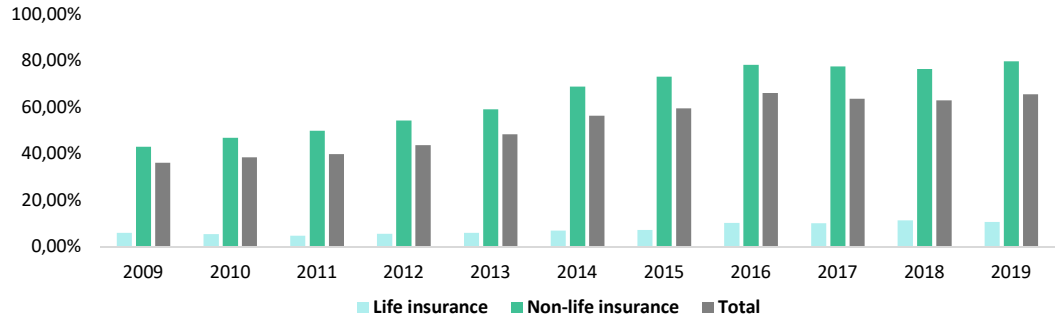
Source: FSA

2.4.5. Brokers

The share of premiums brokered of the total gross written premiums for both categories of insurance activities has had a relatively steady evolution during the last years (2016-2019), ranging between 63%-66%.

Regarding the brokerage by classes of non-life insurances, there is recorded, starting from 2013, an increase in the value of the premiums brokered for class A10 (*motor third party liability, for the use of land motor vehicles, including the carrier's liability*), which has the largest share of the total volume of premiums brokered for the non-life general insurance activity. In case of life insurances, the highest value of premiums brokered is held by class C1.

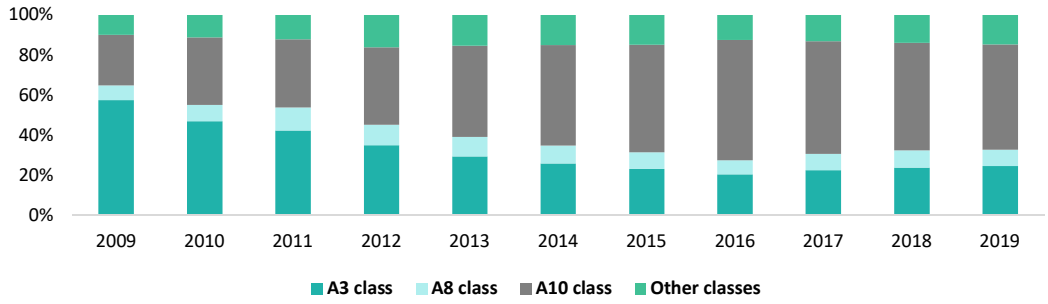
Figure 34 Share of brokered premiums of the total gross written premiums for non-life and life insurances



Source: FSA

The very high level of brokerage on the non-life insurances market is atypical for the European insurance market and is largely determined by the low market diversification (high share of motor insurances and distribution policy predominantly through brokers, practiced by the main companies operating on this market).

Figure 35 Premiums brokered by classes of non-life insurances[13]



Source: FSA

[13] A3 - land vehicles, excluding railway rolling stock; A8 - fire and natural disasters (for other goods than those insurable in classes A3-A7); A10 - motor third party liability, for the use of land motor vehicles, including the carrier's liability

3. Stability of private pensions market

During 2019, the private pensions market remained the most significant segment of the non-bank financial market supervised by FSA from the perspective of assets value. Thus, as of December 31, 2019, the total value of the assets of the private pension system was Lei 64.5 billion , a significant continuous increase compared to the previous years.

The risks to pension funds for both Pillar II and Pillar III maintained very low due to the diversification and quality of investments held by funds through investments in fixed income instruments and the appropriate level of liquidity.

Table 14 Managers and depositories of private pension funds on 29 February 2020

Manager	Depositary	Pensions fund (PII)	Market share on 29 February 2020
NN PENSII PRIVATE ADMINISTRATED PENSION FUND MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Privately Administered Pension Fund NN	35.12%
ALLIANZ-ŢIRIAC PENSII PRIVATE PRIVATE ADMINISTRATED PENSION FUND MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Privately Administered Pension Fund AZT VIITORUL TĂU	21.61%
METROPOLITAN LIFE PRIVATE ADMINISTRATED PENSION FUND MANAGEMENT COMPANY SA	UNICREDIT BANK S.A.	Privately Administered Pension Fund METROPOLITAN LIFE	14.14%
AEGON PENSII PRIVATE ADMINISTRATED PENSION FUNDS MANGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Privately Administered Pension Fund VITAL	9.90%
GENERALI PRIVATE ADMINISTRATED PENSION FUND MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Privately Administered Pension Fund ARIPI	8.65%
BCR PENSII, PRIVATE ADMINISTRATED PENSION FUND MANA GEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Privately Administered Pension Fund BCR	6.77%
BRD PRIVATE ADMINISTRATED PENSION FUND MANAGEMENT COMPANY SA	ROMANIAN COMMERCIAL BANK SA	Privately Administered Pension Fund BRD	3.81%

Manager	Depositary	Pensions fund (PIII)	Market share on 29 February 2020
NN LIFE INSURANCES SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund NN OPTIM	42.00%
BCR PENSII, PRIVATE PENSION FUNDS MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund BCR PLUS	18.02%
NN LIFE INSURANCES SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund NN ACTIV	11.30%
ALLIANZ-ŢIRIAC PENSII PRIVATE PRIVATE PENSION FUNDS MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund AZT MODERATO	10.93%
BRD PRIVATE PENSION FUNDS MANAGEMENT COMPANY SA	ROMANIAN COMMERCIAL BANK SA	Optional Pension Fund BRD MEDIO	5.38%
ALLIANZ-ŢIRIAC PENSII PRIVATE PRIVATE PENSION FUNDS MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund AZT VIVACE	4.11%
SAI RAIFFEISEN ASSET MANAGEMENT SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund RAIFFEISEN ACUMULARE	3.86%
CERTINVEST PENSII OPTIONAL PENSION FUNDS MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund PENSIA MEA	3.10%
GENERALI PRIVATE PENSION FUNDS MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund STABIL	0.97%
AEGON PENSII - PRIVATE PENSION FUNDS MANAGEMENT COMPANY SA	BRD - GROUPE SOCIETE GENERALE SA	Optional Pension Fund AEGON ESENŢIAL	0.34%

Source: FSA

The participants' contributions to the private pension funds are transferred directly to the account of the pension fund registered with the depository bank, the latter being authorized, regulated, supervised and controlled by the National Bank of Romania. Therefore, depositories are responsible together with the pension fund managers for the assets of the participants.

The latest data on the pension funds market show that asset depository services are provided by three credit institutions authorized by the National Bank of Romania (NBR): BRD, which has the highest share of assets, of approximately 83% , Unicredit, 14%, and Romanian Commercial Bank, 4%.

The level of concentration remains high in this market segment, both due to structural causes related to the operating mechanisms of the system and its characteristics, as well as due to its evolution over time. The high level of concentration is the main concern from the perspective of operational risks for this market segment.

3.1. Pension Funds investment structure

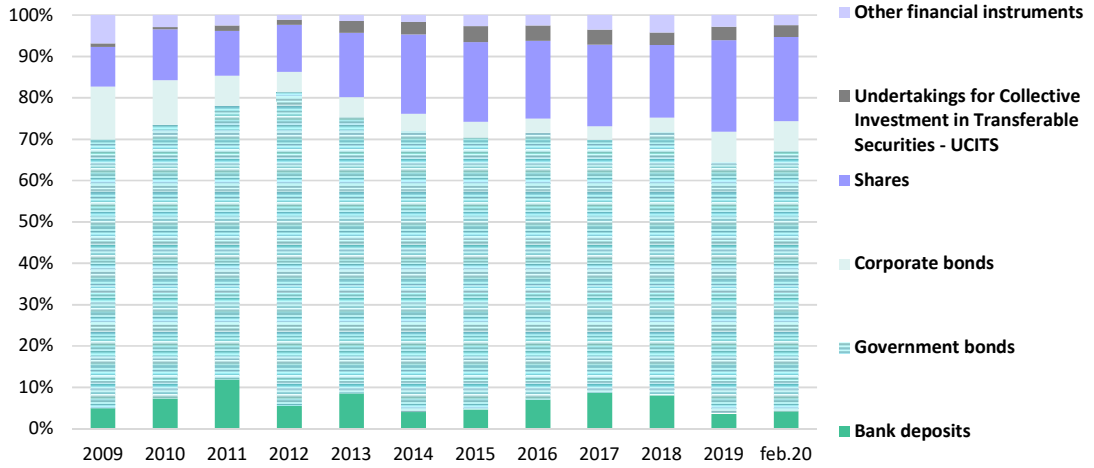
The private pension system in Romania has over time complied with the requirements of prudence, quality and security of portfolios, so that the contributions of participants are safe. The investment policy aims at diversifying the portfolios of private pension funds, thus reducing the market risk of an asset class, at a time when there are declines in the prices of financial assets.

Pension funds invest in a mix of financial assets such as shares, corporate bonds, municipal bonds, supranational bonds, government bonds, investments in mutual funds, bank deposits, etc.

The largest share in the portfolios of private pension funds was permanently held by fixed income financial instruments (especially government bonds, followed by supranational, municipal and corporate bonds). Local pension funds benefited from the higher level of interest rates in Romania compared to the Western European states, from the perspective of significant bond holdings.

Although during the recent years the structure of investments has experienced a slight diversification, the share of fixed income instruments still exceeds the level of 72% of the total.

Figure 36 Structure of assets of the pension funds (% total asset)



Source: FSA, for 2020 one used data from 29 February 2020

In 2013, private pension funds started to assess bond portfolios by mark to market , abandoning the linear valuation model based on the calculation of interest due and not yet collected, which was used in the first 5 years of the system operation. This change added transparency and harmonization with the best practices in the field at European and international level, and due to the prudent investment structure, the volatility of the fund unit did not increase significantly.

Most pension fund investments are made locally, at a rate of 87% by the end of February 2020 and denominated in lei at a rate of 91%. For the most part, Romanian financial instruments are represented by Romanian government bonds, shares listed on the Bucharest Stock Exchange and bank deposits, and investments in financial assets denominated in lei were mainly in government bonds, shares listed on the Bucharest Stock Exchange (BVB), corporate bonds or bank deposits. Therefore, the generally higher level of bond yields denominated in lei compared to the similar instruments issued in other currencies, aggregated with the predominantly positive performance of the local stock market, led to private pension funds obtaining consistent returns generally higher than the inflation.

At the aggregate market level, the structure of privately managed pension fund investments (Pillar II) remains predominantly government securities -oriented (over 63% by the end of February 2020). The next class of assets as significance in the funds' portfolios is represented by investments in listed shares with a share of about 20%. Therefore, from the investment perspective, the main types of risks to which pension funds are exposed are credit risk and market risk:

- Credit risk is low due to the high quality of issuers of fixed income instruments held by the funds, the vast majority being sovereign bonds and bonds issued by international financial institutions. The share of deposits with credit institutions and corporate bonds (with investment rating) is about 11%.
- Market risk is mainly composed of interest rate risk, spread risk (the risk that the value of the bond investment will decrease in value due to the deterioration of the market perception of the issuer's quality), the equity risk and currency risk. In its turn, the equity risk is composed of systematic market risk and individual risk related to issuers whose shares are held in the portfolio.

While the interest rate risk and the systematic market risk depend on elements of the overall investment climate, locally and internationally, outside the sphere of influence of fund managers, the components of spread risk and individual risk ("idiosyncratic") are managed at an appropriate level through the portfolio diversification policies applied by the fund managers, in accordance with the applicable law and good practices in the field.

On February 29, 2020, from the perspective of the country of origin of the issuers of financial instruments held in the portfolios of private pension funds (Pillar II + Pillar III), a share of about 87% is related to the investments of some issuers from Romania.

Given the limited exposure by currency-denominated financial instruments (most of which relate to EUR-denominated instruments, about 8%) and the active hedging policies used by fund managers, foreign exchange risk is, at the beginning of 2020, at a very low level.

3.2. Pension Fund units returns

In order to better reflect the long-term horizon of Pillar II pension funds, starting from 2020, the method of calculating the rate of return has been changed by increasing the annualization period from 24 months to 60 months. Thus, FSA issued Rule no. 3/2020 for the amendment of the *Rule no. 7/2010 on the rates of return of privately managed pension funds, approved by the Decision of the Supervisory Commission of the Private Pension System no. 9/2010* which provides that the rate of return on privately managed pension funds shall be measured for the period of the last 60 months prior to the calculation, according to the following formula:

$$R_{Ra}^{fx} = \sqrt[5]{(1 + R_{R\ 60^{months}}^{fx})} - 1$$

R_{Ra}^{fx} : annualized rate of return on a privately managed pension fund measured for the last 60 months prior to calculation;

$R_{R\ 60_{months}}^{fx}$ = the rate of return on a privately administered pension fund measured for the period of the last 60 months prior to calculation, being equal to $\ln \left[\frac{VUF_{zt}^{fx}}{VUF_{zo}^{fx}}\right]$, where:

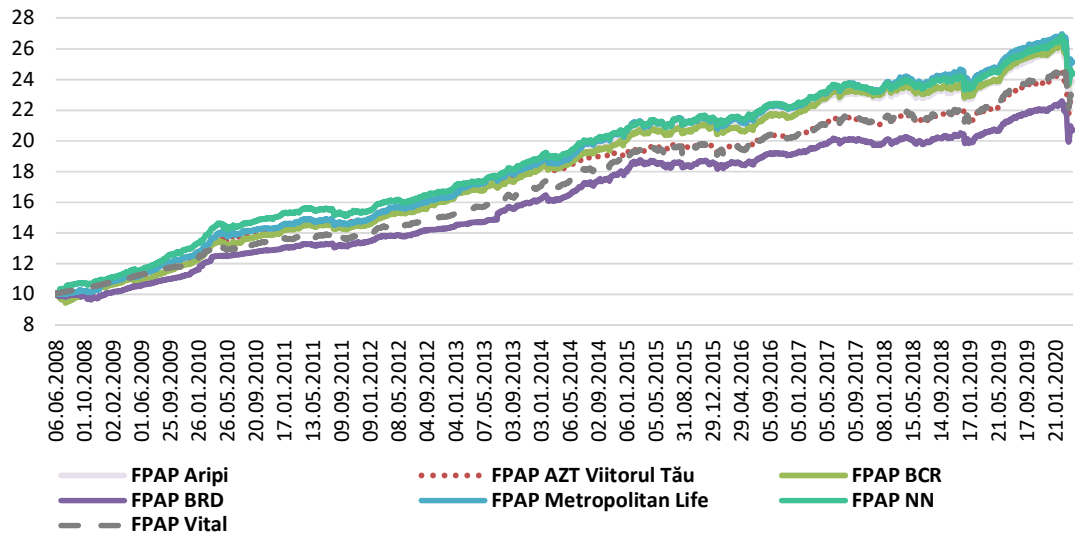
- VUF_{zt}^{fx} = *the value of the unit of the pension fund x on the last business day of the period for which the calculation is being carried out;*
- VUF_{zo}^{fx} = *the value of the unit of the pension fund x on the last business day preceding the calculation period.*

The new regulation also modifies the calculation of the weighted average rate of return of all privately managed pension funds, the novelty being that the adjusted average weight of each fund of the total privately managed pension funds, measured over a period of 60 months, will continue to be used, as well as the annualized rate of return of the respective fund, measured over the same period.

The rates of return on the privately managed pension funds, calculated according to the new formula, will apply from 2020 and will be reported quarterly by the managers.

The main performance indicator of the private pension funds, calculated according to the legislation applicable to the period analyzed, is the weighted average rate of return for the last 24 consecutive months. Its average for all privately managed pension funds, shown in the chart below, reached a maximum peak in October 2010 (16.52%), followed by a downward trend in line with the evolution of the local financial market indicators, to a minimum level of 2.18%, recorded in January 2019. After this episode, the trend of the weighted average rate of return of privately managed pension funds follows an upward trend until the end of 2019, and in the first two months of 2020 decreases, registering 4.41% at the end of February 2020.

Figure 37 Evolution of the Unit Values of the Net Assets of the pension funds from Pillar II (lei)

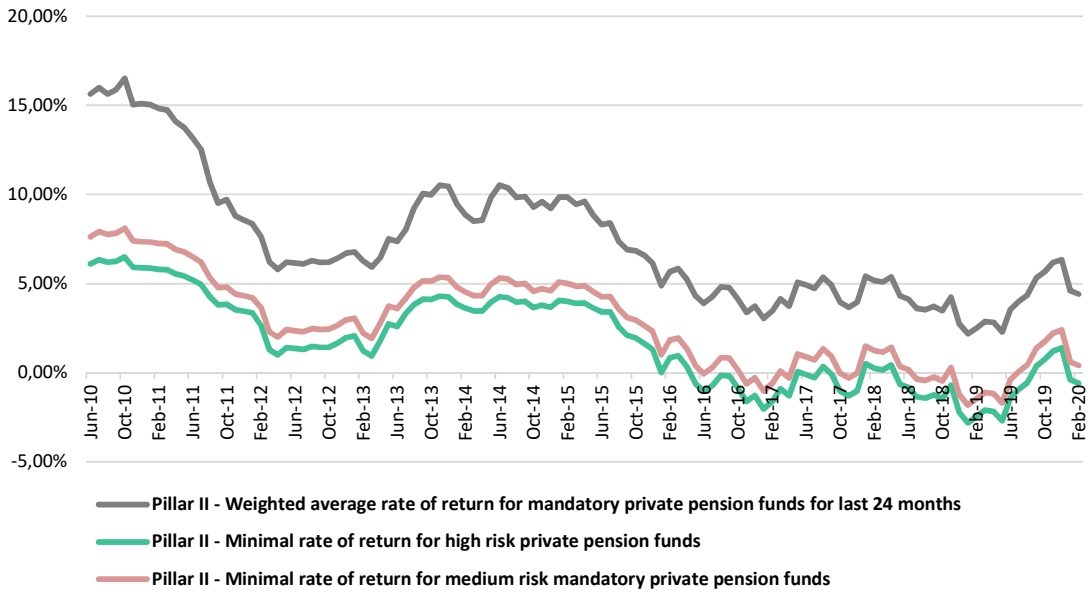


Source: FSA

Once with adopting the mark to market valuation in 2013, the main elements influencing the (annualized) returns of private pension funds are the evolution of market prices of bonds and shares.

Thus, even if a bond has a certain fixed coupon rate and is held until maturity, in addition to the interest periodically collected by the fund as a result of this holding, the amount at which the bond is valued in the fund assets fluctuates daily depending on its market price. This market component has a significant influence on the short- and medium-term variation in the return on funds, similar to that of share prices held in relation to dividends received for them.

Figure 38 Evolution of the rate of return of privately managed pension funds



Source: FSA

That is why, the recent increase in the financial market volatility also has an influence over the evolution of fund unit values, but mitigated by three very important factors: good diversification of equity and bond portfolios, short (average) duration of bond portfolios and continuous and significant flow of the monthly net contributions received by the funds.

Corroborating those above with the recent trends in financial markets, it was possible to observe during the first two months of 2020 an increase in the volatility of unit fund values for pension funds and a continuation of the moderation trend of annualized rates of return, which, however, remained positive.

On long term, for the entire lifetime of the private pension funds, their annualized14 return remains high, as shown in the table below.

Table 15 Annualized return of NAV in Pillar II from its establishment until March 31, 2020

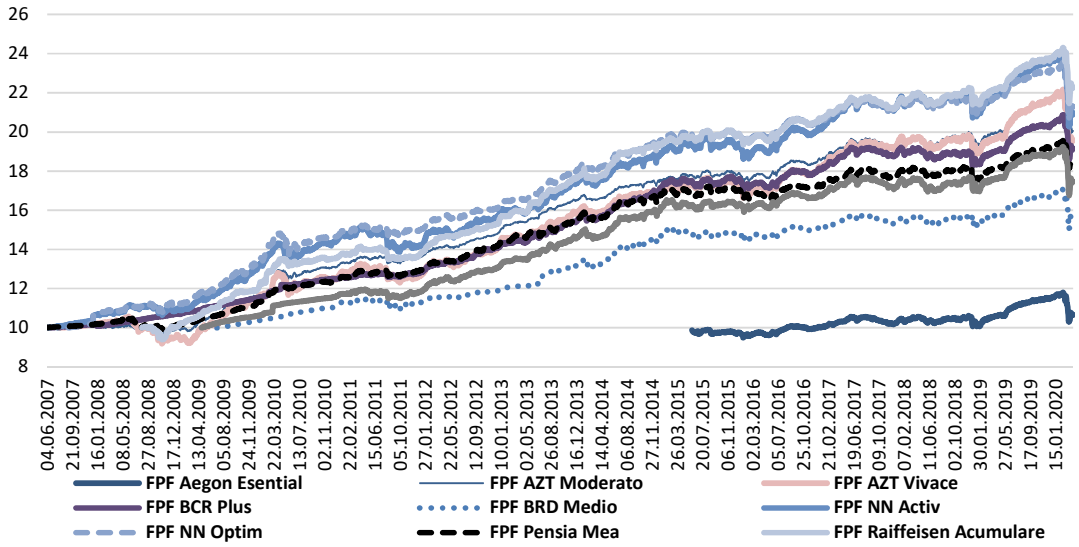
FPAP Aripi	FPAP AZT Viitorul Tău	FPAP BCR	FPAP BRD	FPAP Metropolitan Life	FPAP NN	FPAP Vital
7.45%	**7.01%**	**7.62%**	**6.27%**	**7.97%**	**7.71%**	**7.10%**

Source: FSA

Due to the similar structure of investments, the evolution of the returns of fund units related to voluntary pension funds under Pillar III follows the same trend presented within Pillar II funds, noting that some funds were released more recently and therefore the long-term performance history in their case is different.

On short term, however, the yields evolutions are very close as trends on the entire market of private pension funds.

Figure 39 Evolution of the Unit Values of the Net Assets of the pension funds from Pillar III



Source: FSA

[14] The annualized return is the average annual return calculated on long term, from the establishment of the private pension system to the present

Table 16 Annualized return of NAV in Pillar III from its establishment until March 31, 2020

FPF Aegon Esential	FPF AZT Moderato	FPF AZT Vivace	FPF BCR Plus	FPF BRD Medio	FPF NN Activ	FPF NN Optim	FPF Pensia Mea	FPF Raiffeisen Acumulare	FPF Stabil
1.63%	**5.51%**	**5.38%**	**5.13%**	**4.20%**	**5.89%**	**6.13%**	**4.82%**	**7.00%**	**5.15%**

Source: FSA

3.3. Guarantee of the participants' rights

The private pension system from Romania includes multiple mechanisms to protect participants that address risk limitation from different perspectives: assets segregation, prudential limitations of investment policy, the significant role of safeguarding assets and verifying the legality of the depositary operations, supervision by the FSA, prudential requirements for fund managers, existence of a guarantee fund for participants, etc.

Of these, the Private Pension System Rights Guarantee Fund plays a significant role, which compensates for the losses of participants and/or beneficiaries of the private pension funds, both during the period of accumulation of contributions and after the opening of the right to pension, derived from the inability of the managers or pension providers to honor the obligations undertaken and ensures the payment of the rights of the participants or of the beneficiaries of the private pension funds, in case of impossibility to ensure them by the managers or providers of private pensions, as the case may be.

Compensation will be paid only if fund managers and pension providers do not have the capacity to meet their obligations. However, pending the use of the resources of the Guarantee Fund, the legislation underlying the private pension scheme provides the taking of certain preventive measures, namely special supervision, the minimum rate of return, but also resources to compensate the possible losses of net assets, such as the technical provision, consisting in the own resources of the managers.

Law no. 187/2011 on the establishment, organization and operation of the Private Pension System Rights Guarantee Fund and Rule no. 21/2017 for the amendment of Rule no. 2/2013 on the actuarial calculation of the annual contribution due by the managers of private pension funds to the Private Pension System Rights Guarantee Fund , are the main regulations that establish the rules for calculating and establishing the framework to compensate the losses of participants and beneficiaries of privately managed pension funds and voluntary pension funds.

According to the law, private pension funds cannot go bankrupt, only their managers can get into this situation. However, **due to the separation of the fund money from from the manager money , the fund will not be affected by a possible bankruptcy of the management company.**

The managers have the obligation to set up technical provisions, proper for the liquidity volume, corresponding to the financial commitments undertaken, which will cover the biometric risks: death, disability and longevity and/or the pension levels established, if they are provided in privately administered pension schemes.

The fund is intended to cover unforeseeable risks that are not covered by the technical provision. Any person who meets the specific eligibility conditions may participate to more than one voluntary pension fund, as long as the total monthly contributions do not exceed 15% of the gross salary income. In the Pillar II system, one can contribute to a single privately managed pension fund.

3.4. Technical provisions and financial indicators of the managers

The architecture of the protection mechanisms for participants to the Romanian private pension system also includes the prudential financial requirements applicable to fund managers: the minimum level of share capital and the obligation to set up an actuarial calculated technical provision to cover the risk that on retirement the participant's individual assets may be less than the amount of the net contributions made. This risk varies depending on the evolution of market volatility during the contribution period, the structure of the fund's assets, as well as the duration and time structure of the contributions made.

According to the applicable law, the calculated level of the provision must be covered by eligible assets (which have a high quality and liquidity), in this case government bonds, deposits and current accounts.

The obligation to calculate and establish the provision belongs to all pension fund managers under Pillar II. In case of Pillar III, the obligation applies to voluntary pension fund managers who offer to the participants the guarantee of the net contributions.

The tables below show the positive evolution over time of the value of the assets established by the managers in order to cover the calculated value of the technical provisions and their high quality. The level of these assets is significantly lower in case of Pillar III both due to the lower value of the assets of the funds and to the fact that only two of them grant the participants the guarantee of the net contributions made.

Table 17 The value of assets covering the technical provision in Pillar II (lei)

	Dec. 2016	Dec. 2017	Dec. 2018	Dec. 2019	Feb. 2020
Deposits and current accounts	33,513,619	47,816,564	86,828,757	32,958,709	92,168,814
Government bonds	77,310,015	127,711,851	207,333,695	446,597,631	497,429,773
Total Pillar II	**110,823,634**	**175,528,415**	**294,162,452**	**479,556,340**	**589,598,587**

Source: FSA

Table 18 The value of assets covering the technical provision in Pillar III (lei)

	Dec. 2016	Dec. 2017	Dec. 2018	Dec. 2019	Feb. 2020
Deposits and current accounts	1,081,254	856,658	1,216,837	1,260,071	2,426,270
Government bonds	5,055,913	7,678,075	9,079,528	17,849,238	25,216,067
Total Pillar III	**6,137,168**	**8,534,733**	**10,296,366**	**19,109,308**	**27,642,336**

Source: FSA

3.5. Potential risks and vulnerabilities in the private pension market

The economic turmoil caused by the COVID-19 pandemic is reflected on the financial markets, the prices of financial assets decreasing sharply. Given the fact that the private pension system is characterized by long-term investment and savings, it remained the least affected.

Balanced and prudent diversification has helped the private pension system to overcome several episodes of high volatility in the past (see August 2015, January 2016, June 2016, June 2017 and December 2018). Despite temporary episodes of high volatility, pension fund assets increased year-by-year, with an increase rate of over 19% in all years since its establishment (the lowest increase rate was recorded in Dec. 2018.– 19,40%).

As a result of *GEO no. 114 from December 28, 2018 on the establishment of measures in the field of public investment and fiscal-budgetary measures, amendment and completion of regulations and extension of deadlines*, a person participating to privately managed pension funds may choose, but not earlier than 5 years of contribution to the respective fund, to be transferred to the public pension system (the personal assets of the participant will remain in his private account until the opening of the right to private pension). By February 2020, only 573 people had requested the transfer of future contributions to Pillar I, the liquidity risk remaining stable. Subsequently, by *GEO 1/2020 on some fiscal-budgetary measures and for amending and completing some normative acts*, the article on the possibility of transferring contributions to the public system was repealed.

Interest rate risk and systematic market risk depend on elements of the overall investment climate, locally and internationally, outside the sphere of influence of fund managers, while spread and individual risk ("idiosyncratic") components are managed at a proper level through the portfolio diversification policies applied by the fund managers.

Risks related to the stability and proper operation of pension funds remain low, given the mechanism of operation of the private pension system of contributions defined with guarantees (at the level of the contributions amount), excluding from the beginning the solvency risk which is the main concern in case of benefit-based pension schemes (still predominant in Europe both in number and assets).

Also, a number of other risks relevant to this area (eg. the risk of a possible insufficient replacement rate of income during the active period with that of private pension or liquidity risk) are not yet applicable in case of the private pension system in Romania, due to its low maturity and the still insignificant share of participants close to the age of retirement.

The assets of the privately managed pension funds have several security elements, among which we mention: the minimum rate of return, guarantee of net contributions, separation of the fund's assets from those of the manager, prudential supervision and the Guarantee Fund.

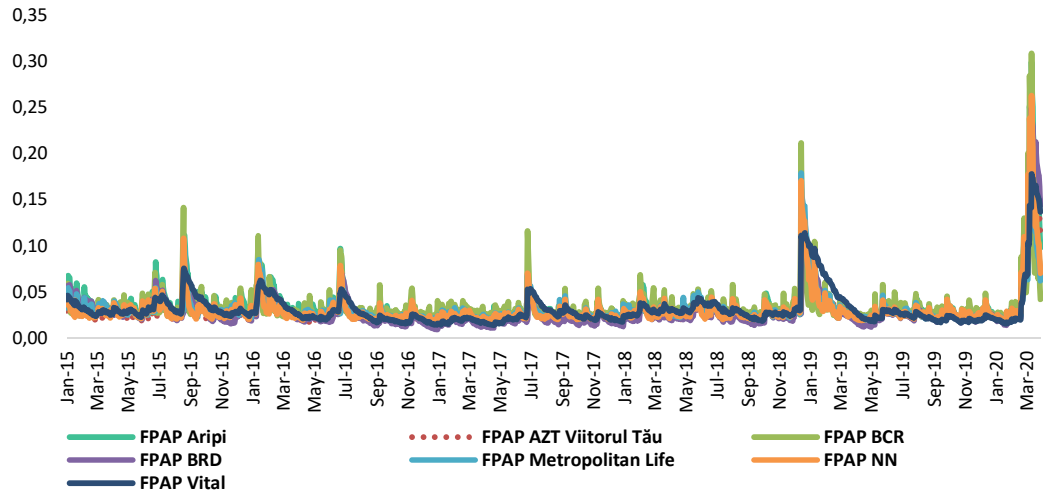
3.6. The impact of the coronavirus epidemic on the stability of the private pension system

The global economy slowed due to the COVID-19 pandemic impacts the prices of financial instruments, with the private pension system being the least affected given the long-term savings

and investment. Over time, there have been episodes of high volatility that have marked the private pension funds, but their assets have increeased from year to year.

The beginning of 2020 (February-March) was marked by uncertainty in the financial markets generated by the current epidemiological context. The annualized volatility of the fund units of Pillar II has recorded the highest level during the period analyzed, on March 20, as a result of the propagation of the drop in prices of the financial instruments over the unit value of net assets. The highest volatility values were recorded for FPAP BCR (approx. 31%), FPAP Aripi (30%) and FPAP NN (26%).

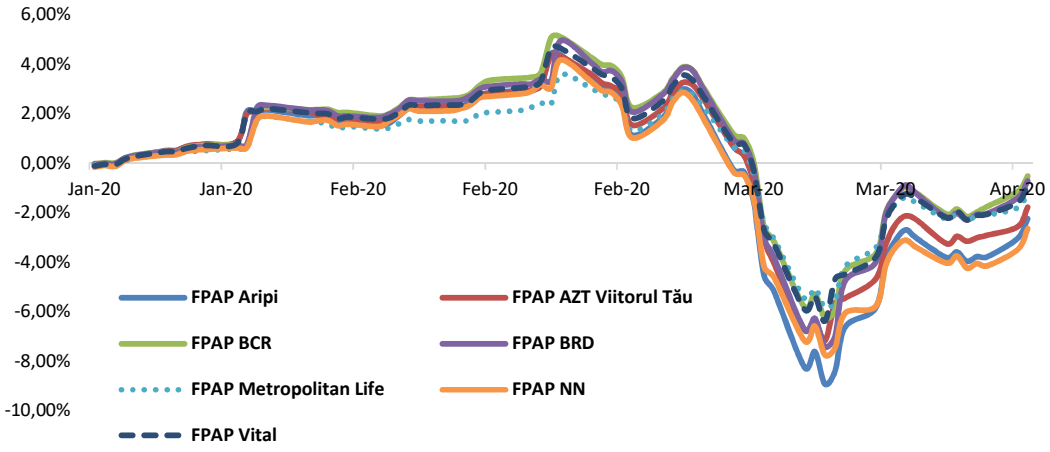
Figure 40 The evolution of the annualized daily volatility of the pension funds of Pillar II



Source: FSA, FSA calculations (Garch model)

Total assets related to privately managed pension funds (Pillar II) started an upward trend at the beginning of 2020, but later, starting from March 20, all pension funds decreased in total assets compared to the value from the beginning of the year. The most dramatic decrease was registered on March 18, the most affected funds being FPAP Aripi, FPAP NN and FPAP BRD.

Figure 41 Evolution of the total assets of privately managed pension funds (6 Jan=100%)

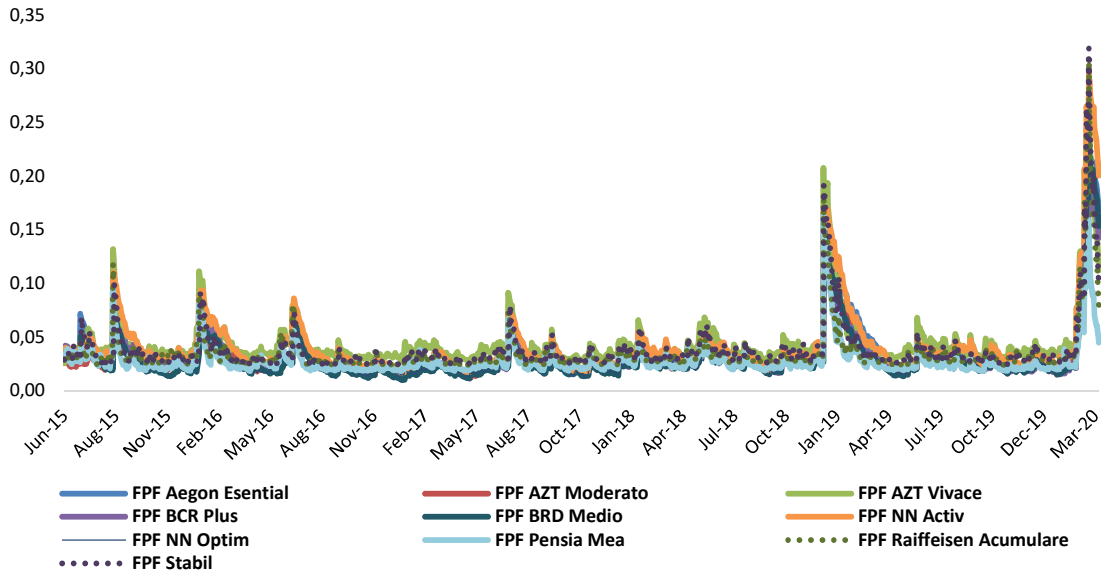


Source: FSA, FSA calculations

The annualized volatility of the fund units related to the voluntary pension funds reached its maximum on March 17, 2020, the highest volatilities recorded were FPF Stabil (approx. 32%), FPF Raiffeisen Accumulare (31%) and FPF NN Activ (30%). The most affected voluntary pension funds, in terms of decrease in total assets, were FPF NN Activ, FPF AZT Vivace and FPF Aegon Esential.

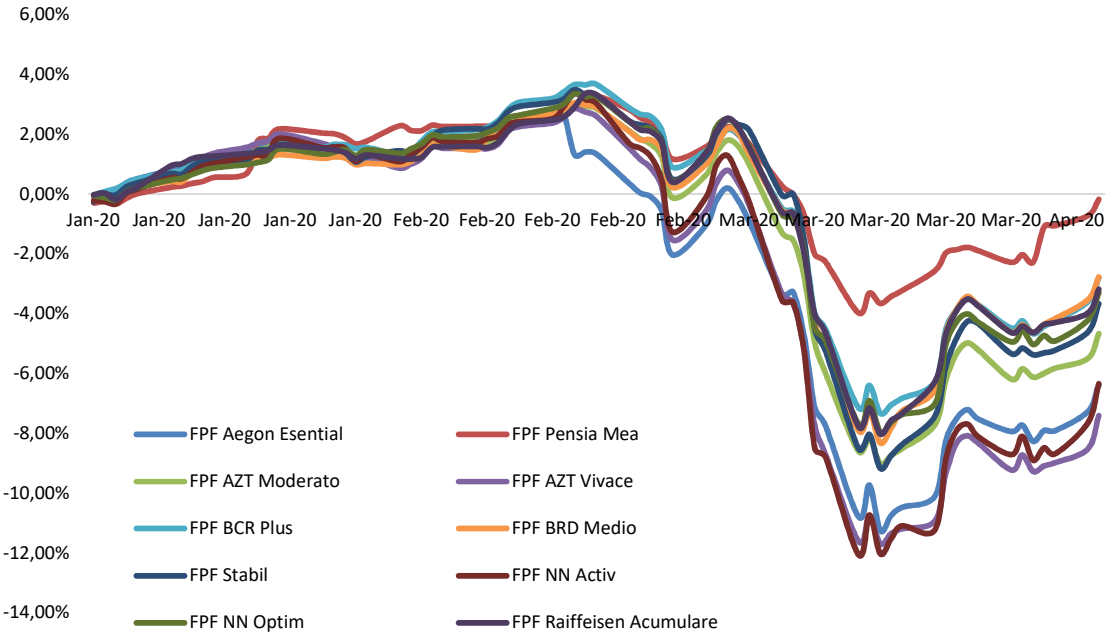
The beginning of April this year started with a calming in the volatility of the private pension system, which proves that short episodes of turbulence do not affect long-term private pensions.

Figure 42 The evolution of the annualized daily volatility of the pension funds of Pillar III



Source: FSA, FSA calculations (Garch model)

Figure 43 Evolution of total assets of voluntary pension funds (6 Jan=100%)



Source: FSA, FSA calculations

The circumstantial depreciations of financial assets generated by the coronavirus pandemic crisis will not affect the future pensions of the participants, as they are the result of long-term investments. Despite the fluctuations in the prices of financial instruments, the total assets of the private pension scheme remain above the value guaranteed.

One of the measures taken in order to stop the contagion effect over the pension funds is the fact that the maximum limit applicable to investments of private pension funds in government bonds has been temporarily changed (for a period of one year from the date of entry into force of the rule), so that it can exceed 70%.

Corroborating the operational difficulties with the negative financial effects of the crisis, another measure taken by the FSA was to lower the fees, commissions and taxes due by entities by 25%, starting from April 1, 2020 until the end of the state of emergency.

4. Stability of capital market

The capital market is the second largest market supervised by FSA (4.9% of GDP), in terms of the value of assets of the supervised entities, but also the most complex in terms of the large number of types of entities operating on this market, their very different mechanisms of operation, very rich and varied legislation at European, international and, implicitly, local level.

On the capital market, we identify at least the following significant types of entities authorized, supervised and regulated by FSA:

- collective investment schemes[15] (CIS) together with their managers, depositors and distributors. Within this very broad category there are significant differences between:
    - undertakings for collective investment in trasferable securities[16] (UCITS) - usually open-end investment funds of various types, including money market funds[17] or funds traded on the stock exchange[18])and
    - alternative investment funds[19] (AIF – can be both open-ended and closed-end funds, this category includes the 5 Financial Investments Companies and Fondul Proprietatea);
- the stock market, managed by the Bucharest Stock Exchange, together with all the related sections and trading systems, as well as with the Central Depository, a key institution within the clearing and settlement infrastructure;
- stock market brokers, both financial investment services companies (FISCs) and local credit institutions and investment firms from other Member States;
- issuers of traded credit instruments or securities that are subject to authorization by the FSA and to the monitoring of the fulfillment of the transparency requirements towards investors.

This market as a whole, but especially the stock market component, are extremely significant for the stability of the non-bank financial market due to the fact that most entities operating on the other components of this market hold investments in traded instruments.

Also, the stock market is dynamic and sensitive to external factors, reacting quickly to local and international economic, social, geopolitical news and events. The stock market is also one of the few components of the non-bank financial system where the group psychology of the participants may have a major and decisive impact over the evolution of the main market variables, which may lead otherwise to unjustified economic or fundamental trends that may affect the financial stability due to the significant interconnection with other segments of the system.

[15] „collective investment schemes - CIS" in the specialty literature and European legislation

[16] „undertakings for collective investment in trasferable securities" - UCITS

[17] „money market funds" – MMFs

[18] „exchange traded funds" - ETFs

[19] „alternative investment funds" - AIF

4.1. Collective investment schemes

The level of concentration on the market of investment fund asset depositary services is high, and in case of closed-end investment fund managers, the level of concentration is medium.

Table 19 Number of CIS and IMC

Entity category	31.12.2009	31.12.2018	31.12.2019
	No. of entities	**No. of entities**	**No. of entities**
Investment management companies	20	18	18
Open-end investment funds	51	78	82
Closed-end investment funds	16	24	26
Financial investments company	5	5	5
Fondul Proprietatea	1	1	1
Depositaries	9	4	4

Source: FSA

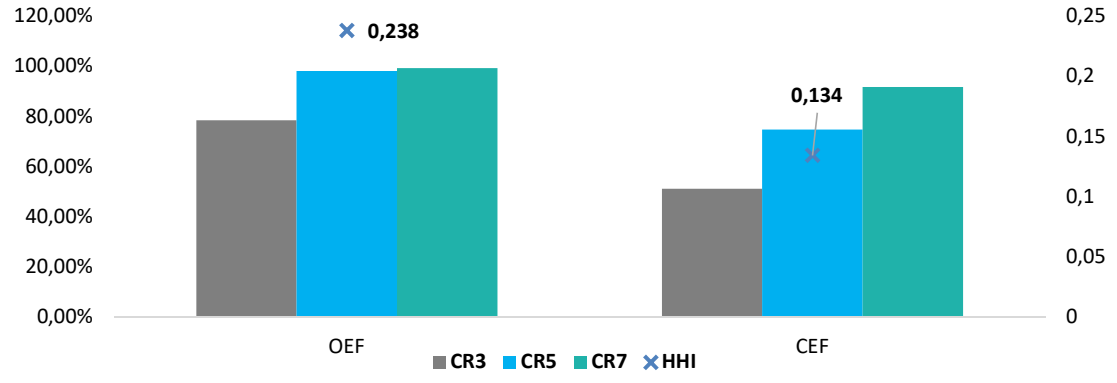
Table 20 Depositaries of CIS assets

Depositary	Total assets 31.12.2019 (lei)
BRD – Groupe Société Générale SA	28.464.284.239
Banca Comercială Română SA	10.190.395.995
Raiffeisen Bank SA	7.643.118.796
Unicredit Țiriac Bank SA	270.276.539
TOTAL ASSETS	**46.568.075.570**

Source: FSA

For the open-end investment fund market, analyzed from the perspective of assets managed by IMC, the Herfindahl-Hirschman index has a value of 0.238 at the end of 2019, which shows a high level of concentration. This is also confirmed by the CR indicators („concentration rate").

Figure 44 Level of concentration on the investment funds market from Romania (by net assets on 31.12.2019)



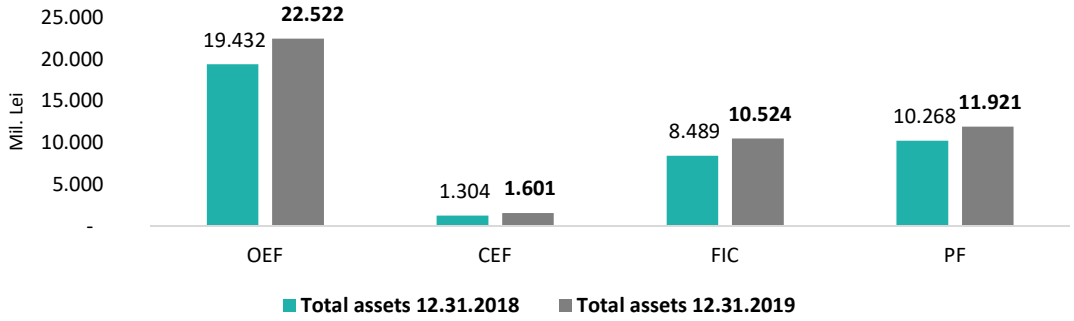
Source: FSA

Depending on the object of activity, an investment management company may manage open and closed end investment funds as well as individual investment accounts. Across the market, open-end investment funds are more numerous than closed-end and accumulate significantly higher assets.

The total value of the assets of collective investment schemes (mutual funds) in Romania was Lei 46.57 billion as of December 31, 2019, increasing by about 18% compared to the level at the end of December 2018.

An analysis by categories of collective investment schemes shows that at the end of the fourth quarter of 2019, the total assets of open-end investment funds (OEIF) increased by approximately 16%, namely Lei 3,089 million compared to the end of December 2018. Investment companies records an increase in total assets by approximately 24%, and in case of Fondul Proprietatea there was an increase in total assets of about 16% compared to the end of 2018.

Figure 45 Evolution of total assets by categories of CIS (millions lei)



Source: FSA

In 2019, all categories of mutual funds registered increases compared to the same period of 2018, and among the most significant increases we mention the FIC (+24%) and CIF (+23%).

From the perspective of the investment structure, OEIF are mainly oriented towards fixed income instruments (government bonds and bonds), while CIF, FIC and FP have a dominant orientation towards equity investments.

On the market as a whole, the consolidated investment structure of all collective investment undertakings indicates, however, a preference for fixed income instruments/money market instruments which total value is about Lei 22.69 billion, accounting for a share of about 49% of cumulative assets of the CIS. Investments in shares at the level of the entire market amount to Lei 22.34 billion, representing approximately 48% of the total assets of the CIS.

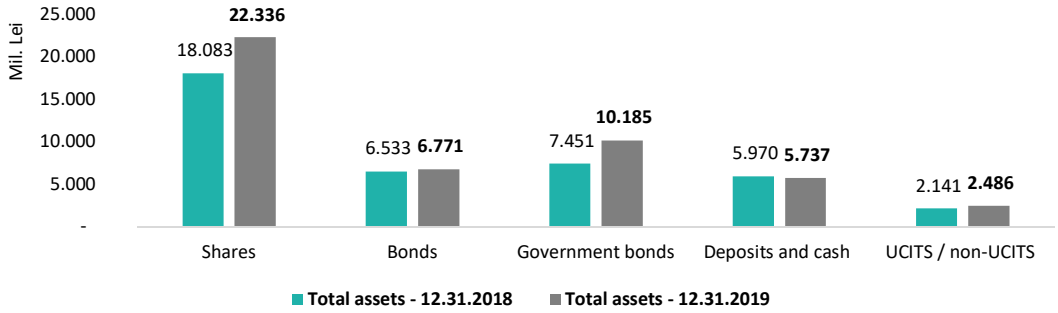
Table 21 Structure of investment portfolios by mutual fund categories and classes of assets (lei)

Total assets - 31.12.2019	Open-end funds	Closed-end funds	FIC	FP	TOTAL
Shares	1,060,245,382	1,196,568,846	8,666,205,090	11,413,076,834	**22,336,096,152**
Bonds	6,491,366,700	53,876,516.21	225,708,196	0	**6,770,951,412**
Government bonds	10,047,411,380	0	0	137,303,498	**10,184,714,877**
Deposits and cash	4,865,170,599	109,139,326.46	391,985,220	370,265,162	**5,736,560,307**
UCITS/OCIS securities	1,122,505,576	168,517,868.37	1,195,405,981	0	**2,486,429,426**
Other	-1,064,880,869	73,095,194.84	44,434,268	674,802	**-946,676,605**

Source:FSA

On December 31, 2019, compared to the end of 2018, there was an increase in investments made in shares (+23.5%), government bonds (+36.7%) and investments in UCITS/non-UCITS (+16,1%), simultaneously with a depreciation of deposits and cash with -3.9%.

Figure 46 Evolution in the strategic allocation of CIS portfolios



Source: FSA

By the end of December 2019, 82 open-end investment funds were operating, structured into five categories: equity funds (25), bond funds (30), diversified funds (16) and mixed funds (11: stock-bond combination). Given the high number of bond funds and the value of their net assets, it is found that investors' preference is maintained in the fourth quarter of 2019 for investment strategies aimed at fixed income instruments and/or money market instruments.

Bond funds hold the largest share in this market segment. Equity and diversified funds are also well represented, which shows that investor interest in these two classes of assets (bonds and equities) is significant.

Table 22 The structure of net assets by categories of Open-End Investment Funds

OEIF depending on the investment policy	Net asset 31.12.2018 (lei)	Net asset 31.12.2019 (lei)
Shares funds	598,334,414	881,052,086
Diversified funds	3,919,533,165	3,212,103,191
Bonds funds	14,224,982,174	17,972,448,926
Monetary funds	234,108,591	-
Mixed funds	432,323,219	433,418,300
TOTAL	**19,409,281,562**	**22,499,022,503**

Source: FSA

The highest share in OEIF accumulated net assets is held by bond funds, about 80%. Diversified funds rank second in terms of market share, accounting for about 14% of OEIF cumulative net assets.

Regarding the structure of OEIF portfolios, it is mainly oriented towards fixed income financial instruments. Of these, the most significant share in the total assets of open-end funds is held by government bonds (44.61%), followed by listed corporate bonds (26.32%). Also, bank deposits still have a high share in total assets (19.81%).

The main risks to which the mutual fund market is exposed remain the market risk, credit risk and counterparty concentration risk. Credit risk is managed at a low level, given the high share of sovereign bonds in the fixed income instrument portfolios of investment funds.

However, the market risk is a normal concern given the institutional investor profile of these entities, which is mainly managed through diversification and hedging operations in case of currency risk.

The number of closed-end investment funds was 26 at 31 December 2019. In terms of the number of funds, diversified funds rank first (12).

The total number of participants to closed-end investment funds (individuals and legal entities) was 88,709 investors at the end of December 2019, being much lower than that of participants to OEIF (336,343), due to the fact that the structure of closed-end investment funds (CEIF) also includes less liquid instruments that involve a higher risk level, so they are addressed to knowledgeable investors and involve more limited possibilities to liquidate the contributions. At the same time, the regulation and supervision of open funds are much stricter, which gives more confidence to the investors.

However, some of the closed-end funds are listed on the Bucharest Stock Exchange, similar to open-ended funds of Exchange Traded Funds (ETF) type, which balances the lower liquidity specific to closed-end funds.

Of the categories of closed-end investment funds, diversified funds are the best represented in terms of the value of net assets (they hold a share of over 46% in the cumulative net assets of the CEIF), which shows that the interest of investors in closed-end funds for this class of assets is significant. In terms of market share, diversified funds are followed by equity funds (34.12% of net assets).

Thus, at the end of the fourth quarter of 2019, about 80% of the total net assets managed by CEIF were coordinated by equity and diversified funds. The net assets of the closed-end bond fund, amounting to Lei 1.64 million, represent only 0.10% of the cumulative net assets of the CEIF.

From the perspective of the structure of investments of Closed-End Investment Funds (CEIFs), it is found that they are mainly oriented towards investments in shares, which hold a share of approximately 75% of total CEIF assets, of which about 71% of total assets are investments in listed shares.

There is also a much lower preference for fixed income instrument-oriented investment strategies. Thus, investments in bonds hold a share of 3.36% of total assets, being significantly lower compared to the share of investments in OIF shares.

At the end of the fourth quarter of 2019, compared to the end of 2018, the cumulated net assets of FIC increased by about 26%, and the financial investment company that had the highest appreciation of net assets is FIC Transilvania (FIC3), of about 29%. At the same time, at the end of December 2019, compared to the end of the previous year, there is an appreciation of the market price for the 5 financial investment companies.

At the end of 2019 compared to the end of 2009, the accumulated net assets of FIC increased by about 35%, and the financial investment companies that recorded appreciations of net assets are FIC1, of about 77%, FIC2, of about 86%, FIC 4, about 5% and FIC5, about 42%. At the same time, the companies that recorded decreases in net assets were FIC3 (-23%).

Table 23 The synthetic evolution of the five financial investment companies

DATE	Indicators	FIC1 Banat-Crișana	FIC2 Moldova	FIC 3 Transilvania	FIC4 Muntenia	FIC5 Oltenia
31.12.2009	VUAN (lei)	2.8087	2.2684	1.4905	1.8310	2.8327
	Market price	1.1300	1.1400	0.680	0.710	1.270
	Discount (%)	59.77%	49.74%	-54.38%	-61.22%	-55.17%
	Net asset (lei)	1,541,528,936	1,177,520,257	1,627,806,279	1,477,676,967	1,643,350,549
31.12.2019	VUAN (lei)	5.2946	2.2397	0.5818	1.9712	4.0311
	Market price	2.7300	1.6100	0.3920	0.844	2.5600

	Discount (%)	48.44%	28.12%	32.62%	57.18%	36.49%
	Net asset (lei)	2,724,317,526	2,195,271,025	1,258,169,565	1,546,730,323	2,338,715,162
	No. of issues shared	514,542,363	980,157,563	2,162,443,797	784,645,201	580,165,714

Source: FSA, BVB, FIC Reports

By the end of 2019, the cumulative level of net assets of FIC was Lei 10.06 billions, increasing by approximately 26% compared to the value of net assets recorded in 2018.

By the end of December 2019, investments in shares have the highest share in the total cumulative assets of FIC (approximately 82%), this being a long-term feature, which is in line with the investment profile of FIC and Fondul Proprietatea.

The total value of net assets managed by Fondul Proprietatea was Lei 11.87 billion , by the end of December 2019, increasing by approximately 16% compared to December 2018. FP assets were mainly concentrated in Romania.

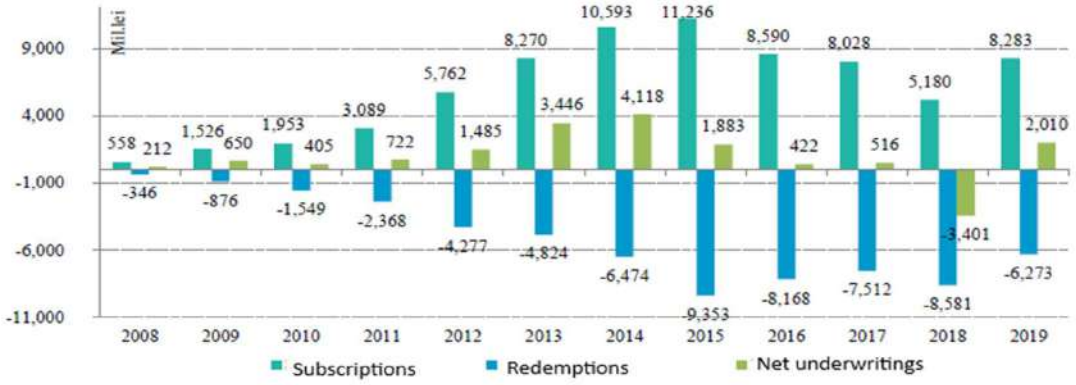
Table 24 The synthetic evolution of Fondul Proprietatea

Portfolio elements	31.12.2018	31.12.2019
Number of issues shared	9,101,963,263	7,613,970,697
Net asset (lei)	10,232,198,304	11,871,445,440
NAV	1.4095	1.7339
Closing price (lei)	0.8830	1.2100
Discount (%)	37.35%	30.22%

Source: Fondul Proprietatea

The graph on the evolution of net subscriptions (based on data published by the Association of Fund Managers from Romania) shows the evolution of net subscriptions (purchases - redemptions) of investment funds sold on the local market (both authorized in Romania and abroad). It is noted that for almost 9 years (2008-2017) the local investment and financial markets climate has generally been favorable for the fund industry, benefiting annually from net capital inflows, even during the years of the global financial crisis and the sovereign debt crisis from Europe. Recently, however, starting with October 2017, the cyclical position of the industry became unfavorable, the climate characterized by the increasing interest rates (decreasing bond prices) and stock market volatility leading in 2018 to net outflows for investment funds. The trend was reversed in 2019, when net subscriptions re-entered on a positive territory.

Figure 47 Evolution of net subscriptions (OEIF, CEIF and foreign funds)



Source: FAA

4.2. Stock market

In 2019, the cumulative value of transactions for the main market and SMT[20] decreased by 14.55%, from Lei 14.23 billion in 2018, to Lei 12.15 billion in 2019. Lack of public offers on the Romanian market largely led to this decline in stock exchange transactions.

The number of transactions carried out on the Bucharest Stock Exchange (BVB) decreased by 10.52% in 2019 compared to 2018.

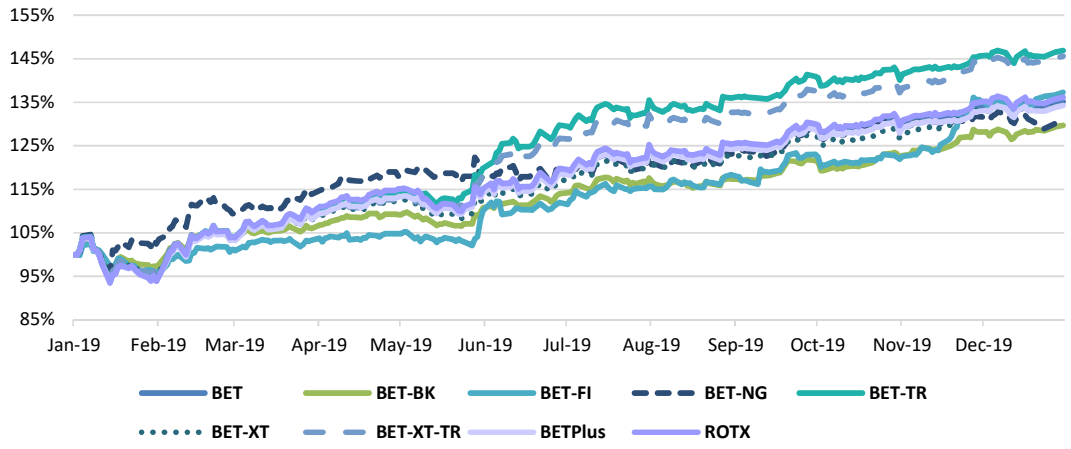
Table 25 Structure of transactions carried out on BVB (BVB and SMT market), according to the value corresponding to each type of instrument

Type of instrument	31.12.2019			Variations 2019 vs. 2018 (%)	
	No.of transactions	**Amount (lei)**	**Total value share (%)**	**Number of transactions**	**Amount**
Shares, including rights	512,807	9,910,960,145	81.54%	-9.49%	-15.09%
Other bonds, including EUR-BOND, EUR-TBILLS	6,218	2,047,364,629	16.84%	125.45%	-1.23%
Structured products	56,861	185,899,982	1.53%	-23.48%	-44.59%
Government bonds	91	4,090,043	0,03%	-70.93%	-96.96%
Fund units	2,719	7,017,125	0.06%	-1.02%	-26.40%
Total	**578,696**	**12,155,331,923**	**100.00%**	**-10.52%**	**-14.55%**

Source: BVB

All the Romanian stock market indices have recorded positive evolutions, of over 28%, by the end of 2019, compared to 2018. The BET reference index, which captures the evolutions of the most traded companies on the BVB regulated market, had an increase of approximately 35% on December 31, 2019 compared to the end of 2018.

Figure 48 The evolution of BVB indices between January 3, 2019 and December 31, 2019 (2018 = 100%)



Source: BVB

[20] multilateral trading system

The BET-TR index, the first total return index released by BVB, registered on December 31, 2019 the highest increase, of approximately 47%. Also, the ROTX index, developed by BVB together with the Vienna Stock Exchange, advanced by 36.12% on December 31, 2019 compared to the end of 2018.

Towards the end of 2019, an increase in indices can be observed, the BET index approaching the psychological threshold of 10,000 points, the maximum BET index of 9,977.47 points being reached in December, this being due to gaining the status of emerging market for the Bucharest Stock Exchange.

The BET index ended March 2020 at 7,625 points, equivalent to a decrease of 25% compared to the end of December 2019. On the local stock market volatility has increased significantly reaching the values of December 2018, and in case of the BET index we see an increase in the volatility, so that the volatility regime of the index remains high-medium for the time being.

BVB regulated market

The regulated market is the trading place of equity securities (shares and rights issued by entities from Romania and from abroad), debt securities (corporate, municipal and state bonds issued by entities in Romania and international corporate bonds), collective investment schemes units (shares and fund units) and structured products.

The total value traded with equity securities has decreased significantly in 2019 compared to 2018, and the number of transactions has decreased by about 48%.

The value of transactions in equity securities (shares, rights and fund units) decreased by 15% in 2019, compared to the value recorded in the previous year, while the value of operations with government bonds decreased by about 97%.

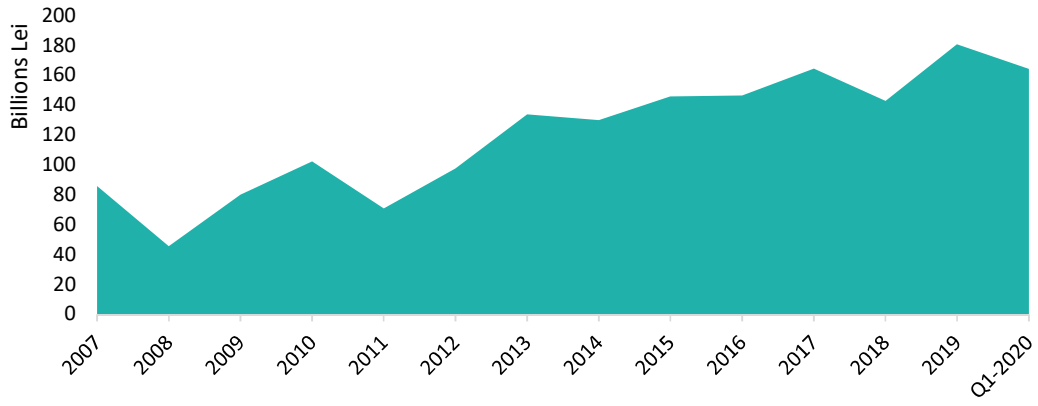
The highest value traded in the last two years remains in December 2018, the traded volume being supported by the public offer for sale issued by ALRO amounting to approximately Lei 723 million.

The Ministry of Public Finances issued government bonds amounting to 0.03% of the total transactions carried out in 2019. The shares remain the dominant class of financial assets, with a share of 81.54% of the total value traded on the BVB in 2019.

On the first 5 places in the ranking of the most liquid companies which shares were traded on the main market of BVB were still TLV (Transilvania Bank SA), FP (Fondul Proprietatea), BRD (Romanian Bank for Development - Groupe Societe Generale SA), SNG (SNGN ROMGAZ SA) and SNP (OMV PETROM SA), cumulating transactions of over 77% of the total value traded on the main BVB market.

In nominal terms, the evolution of the stock market capitalization was predominantly positive during the period analyzed. Thus, the general overview is that, although the capital market has been increasing over the last 11 years, it has been too slow related to its potential, the size and structure of the local economy and compared to the region. Stock capitalization marked a return in 2019 (+ 26%) compared to the end of 2018 which was influenced by the political framework from Romania. Due to the economic expectations related to the effects of the pandemic caused by coronavirus and BVB was affected by these uncertainties, so at the end of the first quarter of 2020 there was a decrease in capitalization of about 33% compared to the end of 2019.

Figure 49 Evolution of BVB capitalization (shares)



Source: BVB

Multilateral trading system (MTS) within BVB

According to the latest legislative definitions in force, the term "alternative trading system" (ATS) is replaced by the term "multilateral trading system" (MTS).

By the end of 2019, there were 299 instruments available for trading on MTS: 284 instruments tradable on the XRS1 market and 15 instruments tradable on the XRSI market. The number of instruments available for trading is declining.

For the whole year 2019, approximately 50 thousand transactions on MTS were carried out in a total value of about Lei 267 million, increasing by 13% compared to the value registered in the previous year. In the fourth quarter of 2019, the instruments preferred by investors on MTS were shares which value represents about 71% of the total value traded.

The companies which shares were most often traded in 2019 were BNET (Bittnet Systems SA Bucharest), SINA (SINATEX SA Bucharest) and DBK (Deutsche Bank AG).

4.3. Brokers

By the end of December 2019, a total of 26 brokers were operating on the regulated market within BVB, of which 18 Financial Investment Services Companies (FISC), 3 local credit institutions and 5 entities authorized in other EU Member States.

Within the multilateral trading system, MTS, a total of 20 brokers were active by the end of December 2019, of which 16 Financial Investment Services Companies (FISC), 3 local credit institutions and one investment company authorized in another EU Member State.

Table 26 Categories of brokers on the regulated market managed by BVB and MTS

Category	Registered in NSC in 2009*	BVB-2019	MTS- 2019
Financial Investment Services Companies (FISC)	63	18	16
Local credit institutions	15	3	3
Investment firms from other EU states	802	2	1

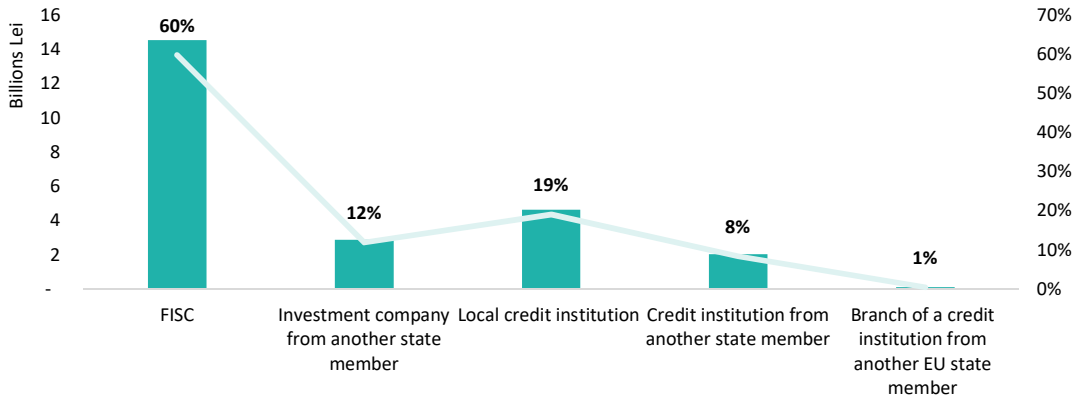
Category	Registered in NSC in 2009*	BVB-2019	MTS- 2019
Credit institutions from other UE states	117	2	
Branch of a credit institution from other EU Member States		1	
TOTAL	**997**	**26**	**20**
** registered in the NSC Register (Bucharest Stock Exchange and the Sibiu Monetary-Financial and Commodity Exchange)*			

Source: BVB, FSA calculations

Among the brokers that have ended their activity during this period can be found significant names with significant market shares, which took the strategic decision to withdraw as a result of the pessimistic forecasts regarding the future evolution of the activity indicators.

For example, out of the top 10 brokers at the end of 2008, a number of companies significant at that time no longer operated by the end of 2018: ING Bank NV Amsterdam - Bucharest Branch, Intercapital Invest, UniCredit CAIB Securities Romania, etc.

Figure 50 Value traded on spot markets by categories of brokers on 31 December 2019



Source: BVB, FSA calculations

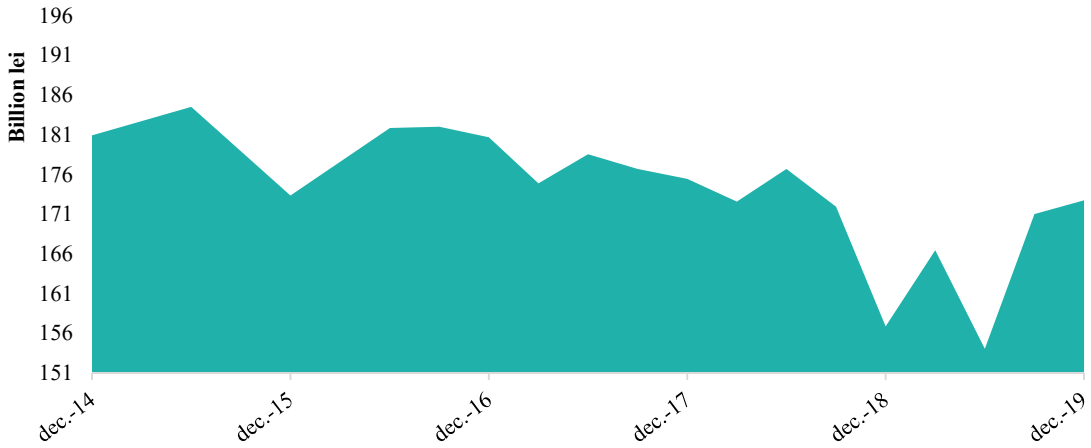
By the end of 2019, the most active brokers on the spot markets (regulated and MTS) were the Financial Investment Services Companies (FISC), the value traded by them being approximately Lei 14.55 billion. Local intermediaries (FISC and credit institutions) accounted for about 79% of the total value brokered.

Among the brokers authorized in other EU Member States that traded on spot markets, the most active were the investment companies, which accumulated a market share of 12%.

The top 10 companies hold approximately 89% of the total brokered value in 2019. Of these, 6 are Financial Investment Services Companies (FISC), one local credit institution, 2 are investment firms authorized in another EU State Members and one is a credit institution from other EU Member States.

The cumulative value of FISC own funds has increased significantly compared to December 2018 by approximately 10%, reaching the level of Lei 173 million and temporarily reversing the downward trend in the value of this indicator.

Figure 51 The accumulated value of FISC own funds

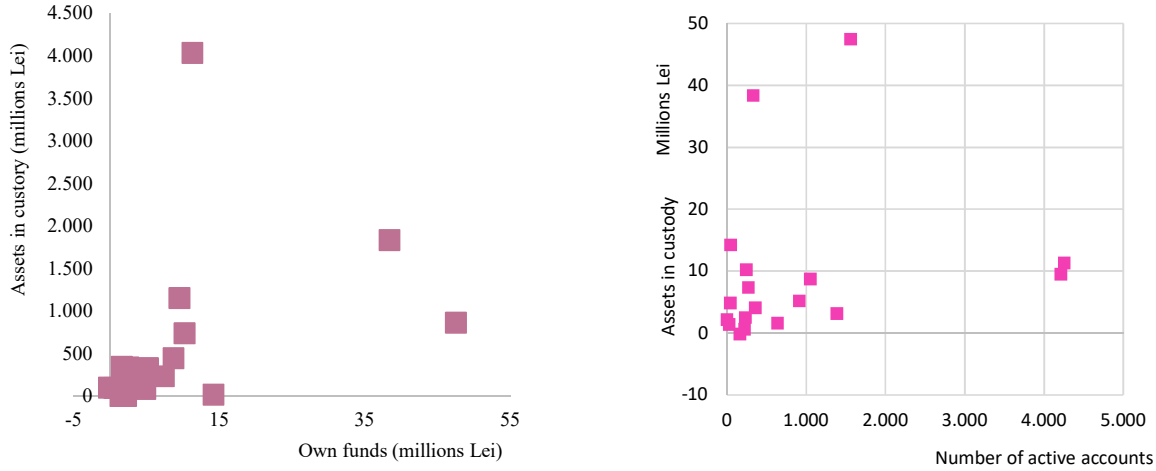


Source: FSA

By the end of December 2019, the FISC had in custody a cumulative value of assets of Lei 11.02 billion (approximately EUR 2.31 billion), representing both the availability of customers and the financial securities held by them.

The cumulative number of FISC active customer accounts by the end of December 2019 was 16,009 (an investor can have accounts open with several brokers simultaneously). The graphs below show that the value of the assets in custody is generally correlated with the number of active accounts.

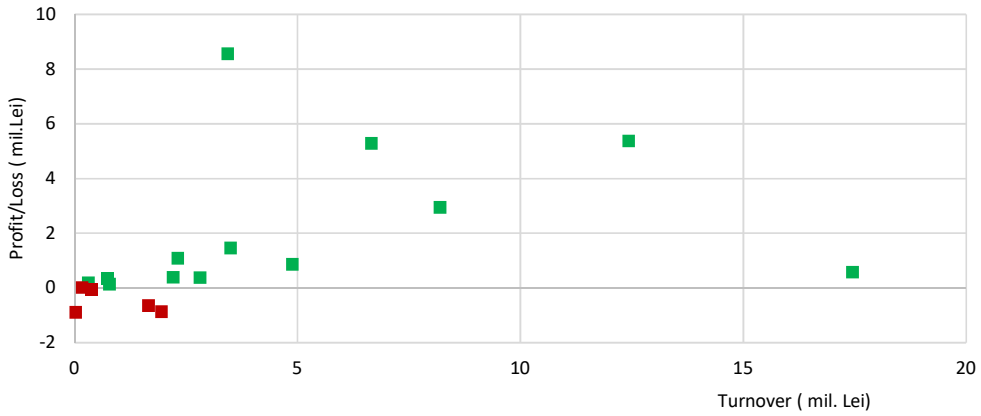
Figure 52 The value of the assets in custody reported at the level of own funds (left), related to the number of active accounts (right)



Source:FSA

Out of a total of 18 financial investment services companies (FISC), a number of 14 FISC recorded profit[21] in 2019, the cumulated value of their profits being about Lei 27.56 million. The cumulative loss of the 4 FISC that had negative results was approximately Lei 2.46 million. These values indicate the maintenance of the profitability risk at the level of the entire market for this category of entities.

Figure 53 FISC financial results



Source: FSA

4.4. Market infrastructure institutions. Central Depository

Along with Bucharest Stock Exchange, the Central Depository is the most significant infrastructure institution on the local capital market. It fulfills multiple roles, of which the most visible and important are those of recording the holdings and ensuring the completion of clearing and the settlement processes. By the end of 2019, the Central Depository was authorized by the Financial Supervisory Authority (as competent authority), the National Bank of Romania and the European Central Bank (as relevant authorities) in accordance with *EU Regulation no. 909/2014 (CSDR) of the European Parliament and of the Council from 23 July 2014 on improving the settlement of securities in the European Union and on central securities depositories*, and entered in the ESMA Central Depository Register. The authorization confirms that the Central Depository meets the CSDR requirements, has a significant role in creating an unitary post-trading framework in the European Union by introducing a set of common rules and reducing the complexity of regulation in the European financial market, caused by different national rules.

The new European regulations aim to increase the transparency, security and efficiency of the Central Depository's settlement operations and registry services. The improvement of the post-trading infrastructure took place under the context of the classification of the Bucharest Stock Exchange as an emerging market by FTSE Russell in 2019.

[21] The results presented are in accordance with the preliminary balance sheets for December 2019, the audited financial results not being available at the date of preparing the report.

At the same time, the Central Depository is the only institution in Romania authorized to issue LEI codes[22] for legal entities from Romania.

The Central Depository is a fundamental institution of the Romanian capital market, which ensures the infrastructure of the financial market, having the role of manager of the financial instruments settlement system (RoClear) and fulfilling the function of registrar for joint stock companies.

The Central Depository also provides the participants with a multitude of other related services, being constantly concerned about their harmonization with the European practices, at high standards, with minimal risks and low costs, through:

- ✓ Stability by ensuring safe and efficient services that facilitate the access to the Romanian capital market for both domestic and international investors;
- ✓ Impartiality, as a guarantee of equal treatment and fair competition between all participants and issuers;
- ✓ Innovation and development of the financial instruments market together with the Bucharest Stock Exchange, the Financial Supervisory Authority, the National Bank of Romania, the Brokers' Association, etc .;
- ✓ Development - increasing the visibility of the Central Depository.

Table 27 Synthesis of net local settlement compensation activity in national currency

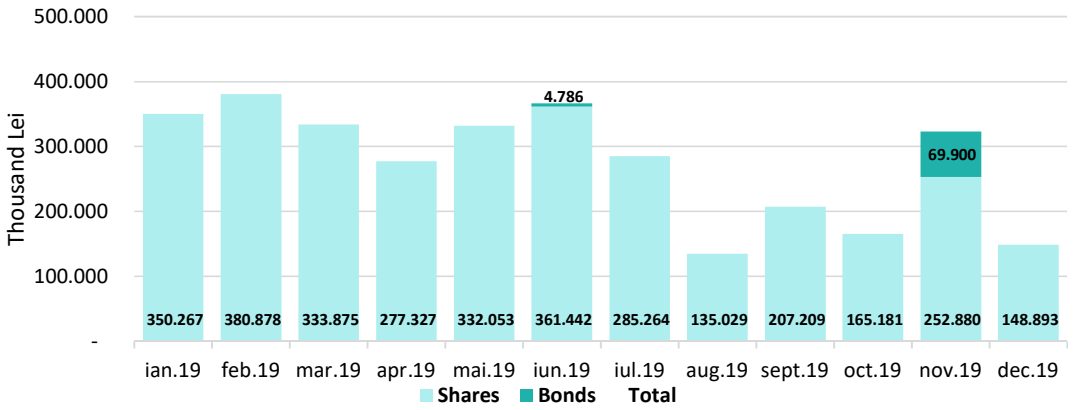
Year	Number of transactions settled	Amount of transactions settled (thousands lei) ATS	Transactions amount post settlement (thousands lei) (TAS)	Settlement level (%) =100x(1-TAS/ATS)
2020*	126,334	3,660,540.29	653,960.09	82.13%
2019	598,986	27,133,713.55	5,541,291.42	79.58%
2018	669,299	28,269,201.66	4,177,188.24	85.22%
2017	1,045,162	31,942,174.32	5,317,097.26	83.35%
2016	1,015,204	24,822,286.01	4,250,144.82	82.88%
2015	1,095,125	26,497,347.64	5,370,408.35	79.73%
2014	1,070,648	18,605,874.87	7,065,873.51	62.02%
2013	902,016	13,787,999.97	6,408,785.38	53.52%
2012	936,613	9,762,948.10	3,308,301.18	66.11%
2011	1,123,195	11,563,021.96	4,370,001.03	62.21%
2010	1,114,257	8,728,071.33	2,032,601.00	76.71%
2009	1,506,052	6,973,808.87	1,712,406.17	75.45%
2008	1,719,301	8,818,206.30	2,238,866.21	74.61%
2007	2,220,388	18,962,303.66	5,204,793.66	72.55%

Source: Central Depository, * *until February 2020*

The statistics include all transactions concluded at trading venues, including buy-in and sell-out operations, as well as allocation transactions. The statistics are presented by using the single counted principle.

[22] Legal Entity Identifier

Figure 54 Transactions amount (thousands RON) for the year 2019



Source: Central Depository

4.5. Guarantee scheme for investors

The Investor Compensation Fund (ICF) covers investors in the event of the inability of ICF members to return the funds and/or the financial instruments due or belonging to investors, which were held on their behalf, during the provision of financial investment or management services of individual investment portfolios.

Starting from January 1, 2012, ICF has the obligation to compensate investors equally and on a non-discriminatory basis within a maximum limit representing the RON equivalent of EUR 20,000/individual investor.

The damages caused by the investment companies whose operating licenses were withdrawn, namely Eurosavam and Harinvest (2014) and FISC Mobinvest SA (2017), were taken over by the Investor Compensation Fund which performed payments within the legal limit.

All brokers authorized to provide financial investment services and investment management companies that manage individual investment portfolios must be members of the Fund. Brokers and investment management companies from other Member States of the European Union, as well as their branches that provide, as the case may be, financial investment services or services for managing individual investment portfolios in Romania, based on the free movement of services may become members of the Fund, if the limit level and the extent granted by the Fund exceeds the level and coverage provided by thecompensation scheme of investors from the native state member, in order to complete the coverage that its investors already benefit by virtue of their membership of the compensation scheme in the native State Member, according to *Law no. 297/2004 on the capital market*.

4.6. Potential risks and vulnerabilities on the capital market

The COVID-19 pandemic has affected the world's economies and, implicitly, the capital markets, an event from which the local capital market cannot make a discordant note. Macroeconomic forecasts predict a global recession for 2020, with Europe particularly being affected. While monetary and

fiscal policy actions have been taken or are ongoing, uncertainty about the economic impact of COVID-19 is expected to turn into further volatile financial market conditions.

According to the International Monetary Fund (IMF), the global economy has entered a recession more difficult than that from 2009, with an expected recovery in 2021. In fact, there will be a substantial recovery, but only if the virus is contained and liquidity issues are prevented so that they do not become a solvency problem. A major concern about the long-term impact of this sudden economic downturn is the risk of a wave of bankruptcies and layoffs affecting the recovery. G20 leaders have reported fiscal measures totaling USD 5 trillions or more than 6% of global GDP. There is a wide range of issues for emerging markets due to stopping economies, such as capital outflows and, for commodity exporters, a price shock. IMF estimates that the financial needs of the emerging markets are totaling USD 2.5 trillions. Given this context, the measures proposed by the IMGFare: doubling the financing capacity under emergency conditions and simplifying the processes; reviewing the lending instruments to see what is missing so as to respond appropriately and changes in the implementation of the Catastrophe Containment and Relief Trust (CCRT) so as to provide debt relief for the poorest countries.

The two components of the capital market (stock exchange and collective investment shemes), due to their specific role and operating conditions, face different sets of risks.

Thus, for collective investment schemes the most relevant are investment risks, credit risk and liquidity risk., They are still generally properly managed across the market, by diversifying and complying with the investment policies undertaken within the funds prospectuses. The low complexity of the market means that, for the time being, these risks are not amplified by the use of financial leverage, as complex financial instruments (eg. derivatives, structures, securization bonds, etc.) do not have a significant share in the total assets. The high level of concentration of depositary services is high at the end of 2019, for the same structural reasons as in the case of pension funds.

For the second component of the capital market, the local stock market, market risk and liquidity risk are relevant. From this perspective, the year 2019 was characterized by an average level of stock price volatility and a low average daily value of transactions, compared to the values observed in recent years, which is indicative for the level of these risks.

However, in the first quarter of 2020 there was recorded a significantly higher level of volatility on the stock market, compared to 2019, these being determined by the economic spillovers caused by the COVID-19 pandemic. On the local stock market, the volatility has increased significantly reaching the values from December 2018, and in the case of the BET index we notice an increase in the volatility, so that the volatility regime of the index remains high-medium for the time being.

Also related to the stock market, the profitability risk of a category of brokers on this market (these are the local financial investment services companies – FISC) has been maintained for a long time at a high level, which has contributed to the orderly exit from the market of some entities and the increase in the level of concentration. The low profitability has not yet had repercussions over the solvency risk for these entities, the level of capitalization being comfortable.

It is also important to remember the contagion risk - according to the IMF it represents the impact of changes in the price of assets from one region (stock market) over the prices from another region (stock market) - which has increased rapidly in February and March and has reached its highest value

since 2011, following the economic expectations related to the effects of the pandemic caused by COVID-19.

The effects of fears about the spread of COVID-19 virus and commodity markets have been affected by the investor behavior. Thus, the price of Brent oil is below the level of 30 USD/barrel, recording a decrease of about 60% compared to 65 USD/barrel at the beginning of 2020. The price of Brent oil is declining since the end of December 2019, as as a result of the decrease in demand in the transport industry and as a result of the slowdown in manufacturing activity caused by COVID-19. The price of gold has been on an upward trend since the COVID-19 outbreak, registering some significant spikes in the second half of February. This development is due to the reduction in the monetary policy rate by the US FED, as well as to the high sentiment of fear of investors, weightening the impact of of coronavirus over the global economy.

From the perspective of the local stock market, as a whole, the most significant risk is that of remaining at a low level of development (from the perspective of capitalization, liquidity, level of diversification of issuers and instruments, etc.), which would have a negative impact on other components of the financial market (eg. insurers, pension funds, collective investment undertakings) and the economy as a whole (limited access to market financing as an alternative to bank financing).

5. Stability of insurance market

In 2019, the insurance market did not experience significant fluctuations in the parameters aimed at financial stability and at the evolution of specific risks. There was an upward trend on the market in terms of gross written premiums, for all main classes of activity, and overall the market structure has remained strongly dominated by non-life insurances and, in particular, motor insurances. The level of concentration (by insurance classes, but also for insurance companies) and the level of brokerage have remained at high levels. Also, at the market level, the combined ratio (indicator of cost and profitability risk) has remained high, but did not affect the levels of solvency and liquidity that remain in a comfortable area related to the legal requirements.

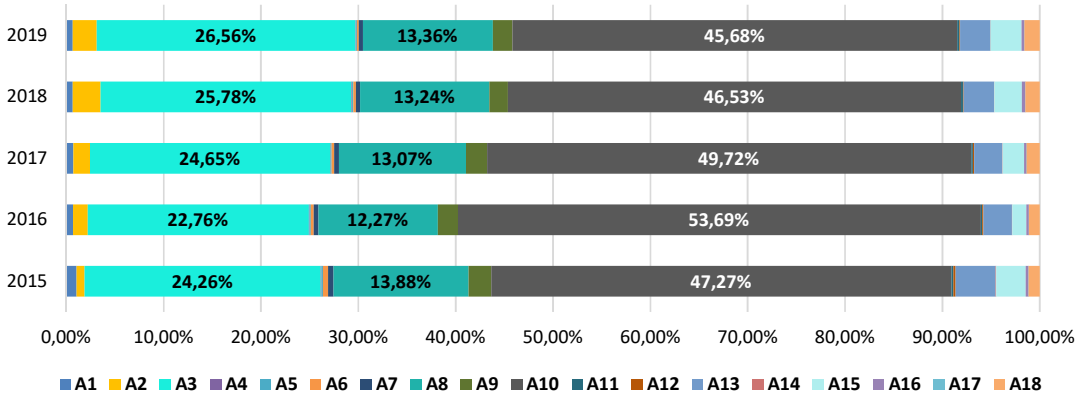
5.1. Market diversification level

The insurance market had a positive evolution in 2019, with an increase of over 8% in gross written premiums for both categories of insurances, non-life and life, compared to the value recorded in 2018. The volume of gross written premiums was on December 31, 2019 at approximately Lei 11 billion, of which 79% (approximately Lei 8.7 billion) represent gross written premiums for the non-life insurances activity.

Unlike the European insurance market, where the life insurances segment is better represented, in Romania, it still has a share of only 21% of the gross written premiums, the market being dominated by non-life insurances, respectively motor insurances.

However, there is a tendency to consolidate the life insurances segment, which registered a significant increase during 2019 (over 7% compared to 2018), and compared to the period 2014 - 2016 there is a raise in the share of life insurances of the total volume of gross written premiums.

Figure 55 Share of gross written premiums by insurance class of total gross written premiums for non-life insurances [23]

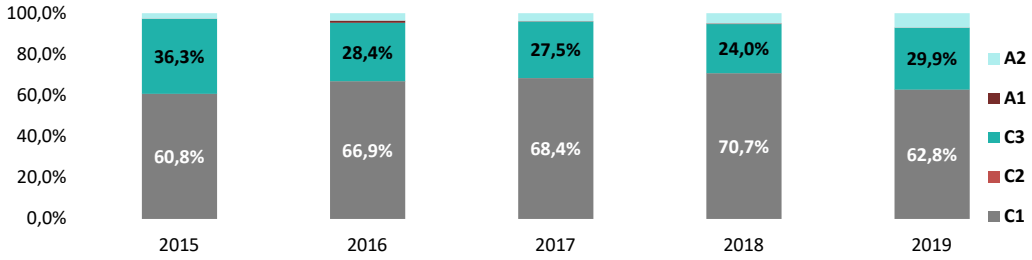


Source: FSA

By classes of non-life insurances there is a concentration of insurance activity in Romania, due to the fact that there is an increased interest in motor insurances (classes A3 and A10) in 2019. Compared to 2016, when the share of the motor insurances segment was at the highest value during the period analyzed, there is a slight decrease in this share during the last two years (2018 - 2019), currently standing at a value of approximately 72% of the total gross premiums written for the non-life insurance activity.

Another change in trends on the insurance market is the increase in the share of health insurances, both in terms of the volume of gross written premiums for non-life insurances and for life insurances, which shows an increase in the level of diversification on the insurance market from Romania.

Figure 56 Share of gross written premiums by classes of insurances of total gross written premiums (Life insurance)[24]



Source: FSA

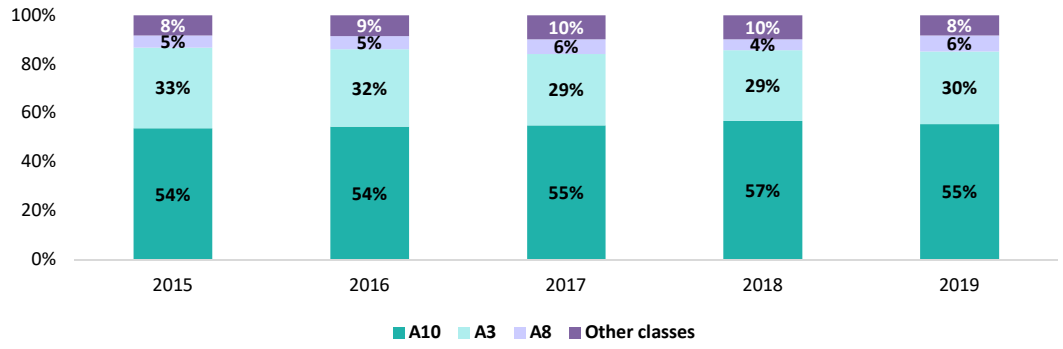
[23] A1 - accidents; A2 - sickness; A3 - land vehicles, other than e railway rolling stock; A4 - railway rolling stock; A5 - aircraft; A6 - sea, lake and canal vessels; A7 - goods in transit; A8 - fire and natural forces (other than property included in classes A3-A7); A9 - hail, frost and other risks than those specified in class A8 (other than property included in classes A3-A7); A10 - motor vehicle liability, for the use of motor vehicles, including the carrier's liability; A11 - liability for the use of aircraft, including the carrier's liability; A12 - liability for the use of sea, lake and canal vessels, including the carrier's liability; A13 - general liability, excluding the one mentioned in classes A10-A12; A14 - credit; A15 - Suretyship; A16 - Miscellaneous financial losses; A17 - legal expenses; A18 - assistance for people in difficulty during traveling, while away from their home or theirhabitual residence

[24] C1 - life insurances, annuities and additional life insurances; C2 - marriage and birth insurances; C3 - life insurances and annuities related to investment funds; A1 - accidents; A2 - sickness

5.2. Claims

In 2019, there was recorded an increase in gross claims paid (excluding maturities and partial and total redemptions) by insurance companies authorized and regulated by FSA, up to the amount of Lei 5,994,188,760, of which 96% are related to non-life insurance contracts (increasing by 17% compared to 2018), the remaining about 4% representing gross life insurance indemnities (which rate of increase was 26% compared to 2018).

Figure 57 Dynamics of structure by classes of gross claims paid (GCP)[25]



Source: FSA

Gross life insurance indemnities are added to maturity, partial and total redemptions, all cumulated being in the amount of Lei 824,865,541, a value slightly decreasing compared to that recorded in 2018 (Lei 841,782,304).

5.3. Technical provisions

The technical provisions established by local insurers increased in 2019, mainly as a result of the positive trend in underwriting. By the end of December 2019, the insurance companies had established gross technical provisions in total amount of Lei 17,702,614,503, growing by approximately 7% compared to the end of 2018 (Lei 16,484,005,543), distributed over the two insurance categories as it follows :

- for the non-life insurance gross technical provisions established, with a volume of Lei 9,746,818,249, representing 55% of the total technical provisions. In their structure, premium provisions (39.86%) and reported but not settled reserves (40.42%) continue to dominate, followed by gross incurred but not reported reserves (15.44%).
- for life insurances, the companies established reserves amounting to 7,955,796,254 lei, a level corresponding to a share of 45% of the total technical provisions. Among these, the technical provisons related to class C1, Life insurances, annuities and additional life insurances, and those related to class C3, Life insurances and annuities, related to investment funds, together represent approximately 98.9% of the total.

[25] A10 - motor vehicle liability, for the use of motor vehicles, including the carrier's liability; A3 – land vehicles, excluding rolling stock; A8 - fire and natural forces (for other than property included in classes A3-A7)

Table 28 Structure of gross technical provisions for non - life insurances on 31.12.2019

	31.12.2019	Total share	A10	A3	A8	Share of significant classes
	Lei	(%)	Lei	Lei	Lei	(%)
Premium provision	3,885,474,873	39.86%	1,398,914,038	1,203,915,764	586,425,436	82.08%
Reported but not settled reserves	3,939,711,818	40.42%	2,458,945,848	607,847,161	296,418,004	85.37%
Incurred but not reported reserves	1,505,273,923	15.44%	1,249,011,125	70,807,617	56,922,965	91.46%
Other technical provisions	416,357,635	4.27%	38,579,150	100,326,394	191,399,591	79.33%
Total reserves	**9.746.818.249**	**100.00%**	**5,145,450,161**	**1,982,896,936**	**1,131,165,996**	**84.74%**

Source: FSA

Table 29 Structure of gross technical provisions for life insurances on 31.12.2019

	31.12.2019 (lei)	Total share (%)
Premium provision	647,409,233	8.14%
Mathematical provision	6,934,376,667	87.16%
Benefits and discounts reserve	114,816,381	1.44%
Other technical provisions	259,193,973	3.26%
Total technical provisions related to Life Insurance	**7,955,796,254**	**100.00%**

Source: FSA

Under the Solvency II regime, in force in all European countries from 1 January 2016, the technical provisions of insurers are calculated by taking into account all the available information, including actuarial estimates of the frequency and severity of claims.

5.4. Reinsurance

For a significant part of non-life insurance products (eg. catastrophe insurance, liability insurance), as part of their own risk management strategy, insurers frequently resort to various forms of reinsurance ceding contracts, thus limiting the maximum claim incurred in case of insured events with a significant financial impact.

Thus, reinsurance programs are a tool to limit/mitigate the risk exposure of insurers, thus decreasing the capital requirement and improving the solvency. To this end, insurers transfer to reinsurance companies part of the gross written premiums and of the technical provisions established, and will receive part of the indemnities paid in case of risks insured.

The extent of reinsurance programs is often measured by the ratio of gross written premiums, reserves and indemnities paid, respectively.

By the end of 2019, approximately 37.48% of the gross written premiums were transferred to reinsurances, the level being slightly lower compared to 2018 (39.63%) which indicates the maintenance of a relatively similar level of reinsurance policies by local companies.

Table 30 Evolution of GWP and net reinsurance premiums for the period 2015-2019 for Non-Life Insurance

Period	GWP (lei)	Reinsurance net premiums (lei)	Level of retention	Level of reinsurance ceding (%)
2015	6,957,416,634	4,740,024,497	68.13%	31.87%
2016	7,711,487,926	5,107,110,220	66.23%	33.77%
2017	7,688,478,353	4,768,913,085	62.03%	37.97%
2018	8,042,071,138	4,854,789,137	60.37%	39.63%

Period	GWP (lei)	Reinsurance net premiums (lei)	Level of retention	Level of reinsurance ceding (%)
2019	8,724,892,308	5,455,079,899	62.52%	37.48%

Source: FSA

As a result of the protection they received through reinsurance treaties, a similar percentage of the total gross claims paid, approximately 41%, were recovered by the local companies from the reinsurers during 2019.

Table 31 Evolution of GCP and net reinsurance GCP for the period 2015-2019 for Non-Life Insurance

Period	GCP (lei)	Net reinsurance indemnities (lei)	Level of retention	Level of reinsurance ceding
2015	3,773,614,760	2,673,254,225	70.84%	29.16%
2016	3,601,564,194	2,475,723,280	68.74%	31.26%
2017	4,076,896,562	2,585,224,017	63.41%	36.59%
2018	4,930,614,341	2,982,419,464	60.49%	39.51%
2019	5,761,135,599	3,413,492,173	59.25%	40.75%

Source: FSA

Of the gross technical provisions existing at the end of March 2019, about 41% were related to reinsurance ceding.

Traditionally, there are significant differences in the reinsurance policy between life insurances and non-life insurances activities.

In case of life insurances, insurance companies generally take on a much larger share of the risk undertaken.

Due to the fact that insurance premiums are generally advanced and the indemnities, in case of occurrence of the event insured, are fixed by contract for each event, thus more predictable, life insurance companies do not resort to reinsurance ceding as often as general insurances.

Table 32 Evolution of GWP and net reinsurance premiums for the period 2015-2019 for Life Insurance

Period	Gross written premiums (lei)	Reinsurance net premiums (lei)	Level of retention	Level reinsurance ceding
2015	1,572,329,376	1,526,029,132	97.06%	2.94%
2016	1,669,447,247	1,609,342,959	96.40%	3.60%
2017	2,013,265,250	1,927,259,324	95.73%	4.27%
2018	2,102,455,293	1,988,520,144	94.58%	5.42%
2019	2,255,941,294	2,106,781,915	93.39%	6.61%

Source: FSA

Table 33 Evolution of GCP and net reinsurance GCP for the period 2015-2019 for Life Insurance

Period	GCP (lei)	Net reinsurance indemnities (lei)	Level of retention	Level reinsurance ceding
2015	144,585,430	122,677,151	84.85%	15.15%
2016	154,068,416	137,086,260	88.98%	11.02%
2017	155,899,045	137,664,909	88.30%	11.70%
2018	184,615,224	158,003,409	85.59%	14.41%
2019	233,053,161	205,452,101	88.16%	11.84%

Source: FSA

5.5. Insurance companies liquidity

The rationale for prudential liquidity requirements for insurers is that they must be able to mobilize in a timely manner the financial resources needed to pay compensations, for which there are generally mandatory (relatively short) deadlines required under applicable law.

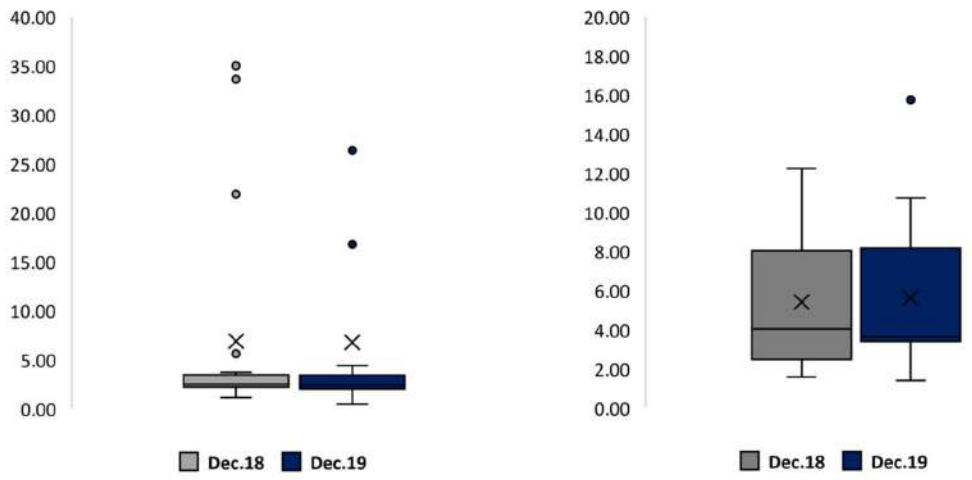
The liquidity ratio is determined as the ratio between the legal liquid assets and the short-term liabilities of insurers towards policyholders. According to the prudential requirements, its value must be over-unitary. Traditionally, liquidity is much higher for life insurance activities where risks are easier to model and have fewer structural changes over time (mortality table values are generally stable on the short and medium term and changes on the long term are gradual). Therefore, in general, life insurance companies with a proper level of reserves and solvency are unlikely to encounter liquidity problems.

However, the level of liquidity is very relevant in case of non-life insurance companies, where the duration of inflows (premiums collected) and outflows (possible claims paid) is generally about 1-2 years, risks are more difficult to model and the claims to be paid are harder to estimate. Given these circumstances, both the structure of the investments and the liquidity and volatility of the market are relevant for the ability of companies to dispose in a timely manner of the amounts necessary to pay on time and at a fair value the compensation for the claims reported.

The graphs below highlight the distribution of liquidity coefficient values at the level of 2018 - 2019 for the insurance companies , which show the proper level of liquidity according to the legal requirements and good practices.

However, there is a slight decrease in the average liquidity ratio for both insurance activities on December 31, 2019 compared to the same period of the previous year. However, the liquidity ratio remains over-unitary within this period for all companies and for both insurance segments (non-life and life), except for one company.

Figure 58 Distribution of the liquidity ratio for the non-life insurance business (left) and for the life insurance business (right)



Source: FSA

Given the above-mentioned purpose of the liquidity reserve, it must be made up of high-quality assets with an active, liquid and transparent market. The structure of assets held for liquidity purposes (according to the applicable legal provisions) by local insurers is presented in the table below and is dominated by investments in government bonds.

Table 34 The liquidity ratio on each of the insurance categories on December 31 2019

	Government bonds (mil. lei)	Municipal bonds (mil. lei)	Securities traded (mil. lei)	Deposits (mil. lei)	Current account and cash (mil. lei)	Short-term obligations (mil. lei)	Liquidity ratio
Non-life	4,726	34	414	441	921	2,917	2.24
Life	3,830	61	1.435	224	167	1,286	4.44

Source: FSA

5.6. Solvency of insurance companies

The Solvency II regime aims to establish a single set of rules at European level applicable to all insurers, reinsurers and supervisors on the European internal market. The main goal of the legal framework is to increase the protection of policyholders by harmonizing the regulation and supervision of the sector, in order to increase the contribution to the economic development.

Being a risk-based prudential regime, Solvency II uses specific models for the evaluation of assets, liabilities and the capital requirements for the insurance activities. Their application shows significant differences compared to the values calculated according to the statutory regulations, in particular as regards technical provisions and prudential financial requirements (capital requirements).

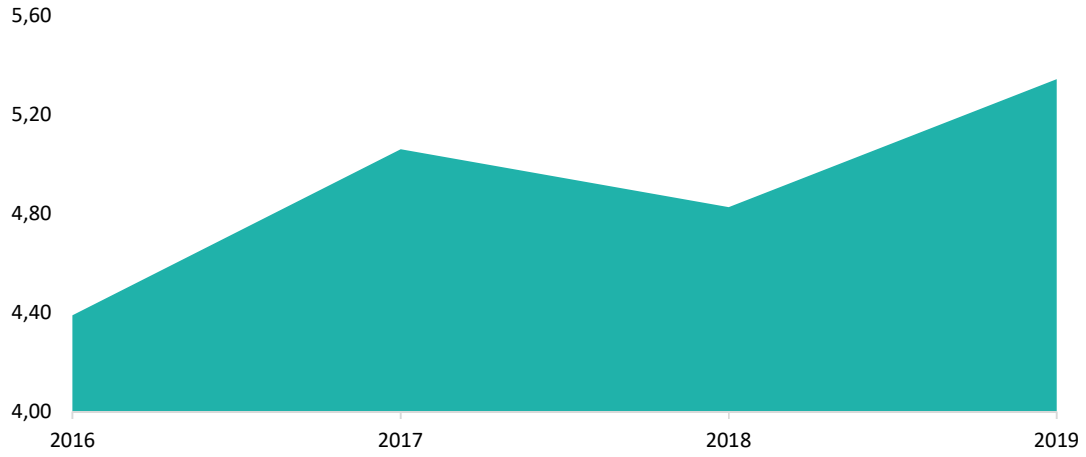
With regard to the solvency of insurance companies, there are significant differences between own funds and capital requirements calculated according to the two supervisory regimes. Starting from 2016, the transition to the new supervision regime, Solvency II, meant an increase in the capital requirements of the insurance companies, as a result of taking into account in the calculation of capital requirements all the risks to which the companies are exposed. We have thus seen a doubling of capital requirements in 2016 (the first year of the Solvency II regime) compared to 2015 and a significant increase in the eligible own funds to cover capital requirements.

The establishment of the eligible own funds to cover the capital requirements according to the applicable legal provisions (the new Solvency II regime) represents an important risk management mechanism that contributes to ensuring the financial soundness of insurance companies and implicitly to the financial stability of the insurance market.

Although the solvency ratio calculated at the market level for 2016 was lower than the rate for 2015 (calculated under the Solvency I regime), the transition to the new regime meant a consistent improvement in terms of solvency of insurance companies, in view of the fact that the companies are better capitalized and better able to cope with the materialization of several categories of risks.

By the end of the fourth quarter of 2019, both the value of assets and liabilities of insurance companies (measured according to the principles of the Solvency II regime) has increased compared to the values recorded during the same period of the last three years. Total assets increased by 8% and total liabilities of insurance companies raised by 7% in 2019 compared to the value recorded in the previous year.

Figure 59 The evolution of the excesss of assets over liabilities (billions of lei) of insurance companies



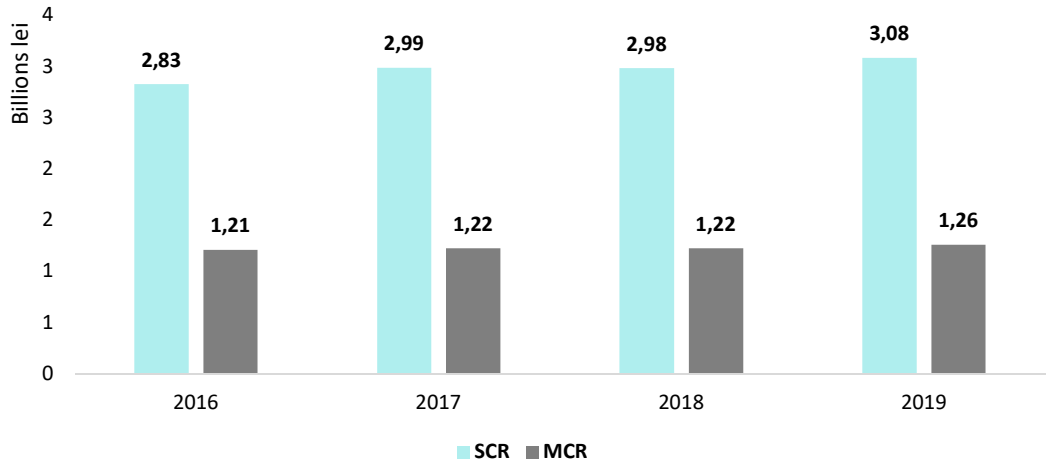
Source: FSA

The excess of assets over liabilities was Lei 5.35 billion on 31.12.2019, increasing by 11% compared to the value recorded on 31.12.2018, the highest level from 2016 (the first year of implementing the Solvency II regime).

The Solvency Capital Requirements (SCR) calculated under the Solvency II regime varied during the fourth quarter of the period 2016-2019 between Lei 2.8 billion and Lei 3.1 billion , increasing over time due to the risks to which the insurance companies are exposed. A comparative analysis between the situation recorded on 31.12.2019 and the one existing on 31.12.2018 indicates a slight increase in the Solvency Capital Requirement (SCR) of approximately 3%, similar in the case of the Minimum Capital Requirement (MCR).

However, it can be seen that at the level of the insurance market, the excess of the assets over liabilities (insurance companies' own fund) have, since the first year of implementing this scheme, recorded values such as to cover the capital requirement calculated in accordance with Solvency II regime, which is a measure of the financial stability of the insurance system.

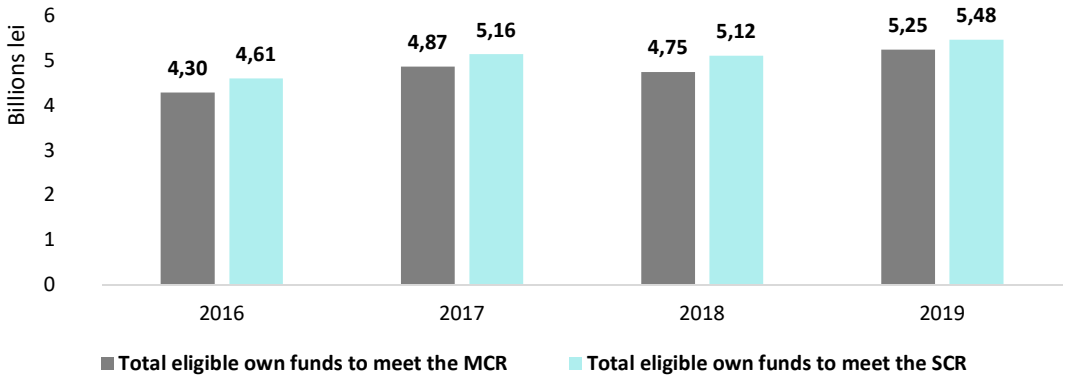
Figure 60 Evolution of the Solvency Capital Requirement (SCR) and the Minimum Capital Requirement (MCR)



Source: FSA

The value of own funds eligible to cover the solvency capital requirement was on 31.12.2019 at the level of 5.48 billion lei, increasing by 7% compared to the value registered on 31.12.2018 and higher by about 19% compared to 31.12. 2016.

Figure 61 Evolution of own funds eligible to cover the Solvency Capital Requirement, namely the Minimum Capital Requirement

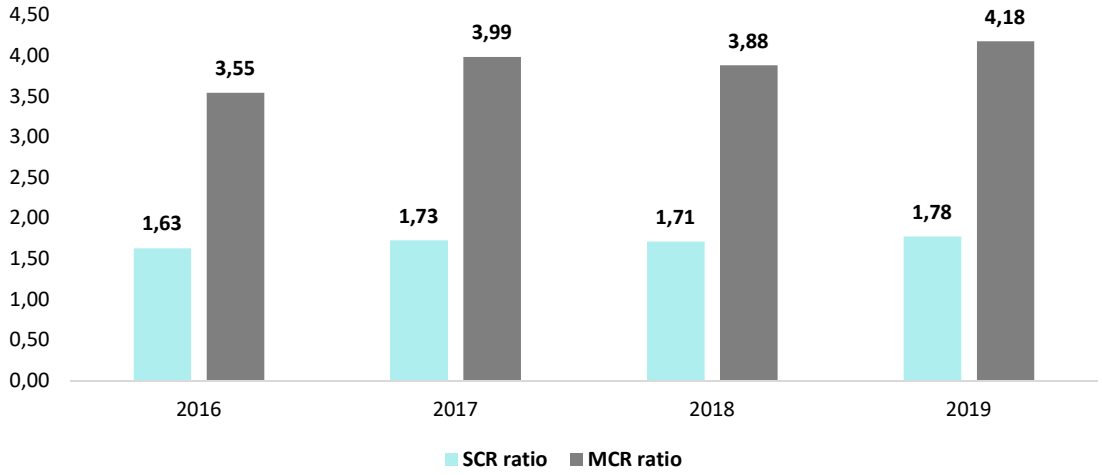


Source: FSA

The aggregate value of the own funds eligible to cover SCR is formed by summing the own funds of the company classified on the 3 ranks defined by the Solvency 2 regime according to quality criteria.

At the level of the entire market, the SCR and MCR rates were over-unitary both on 31.12.2019 and in the years 2016, 2017 and 2018. Compared to the previous year, on 31 December 2019, both the SCR rate at the market level and the MCR rate at the level of the whole market increased by approximately 8% and 4%, respectively, as shown by the following figure.

Figure 62 SCR and MCR ratios at market level



Source: FSA

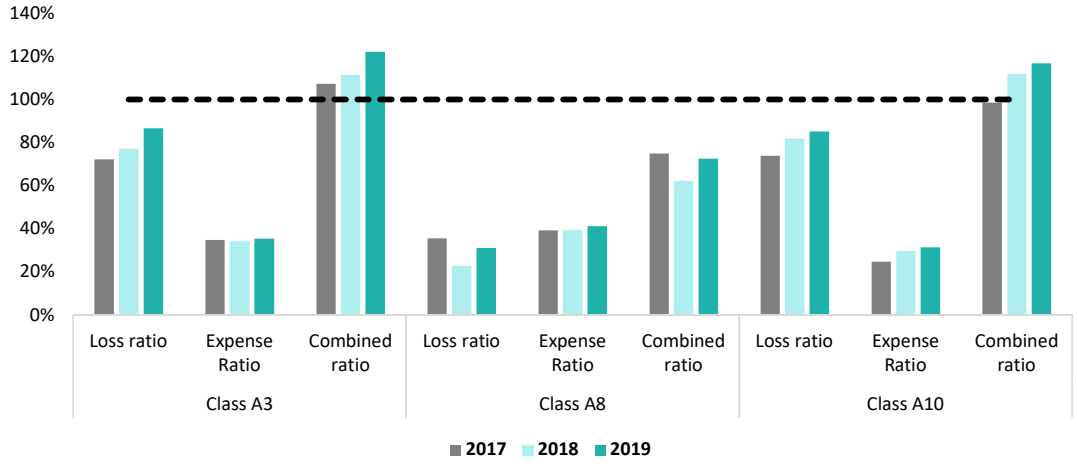
5.7. Profitability and costs

The combined ratio is a significant indicator of the profitability of insurance companies, in terms of the total costs they have for the policies (claims incurred costs + distribution and administrative expenses). A combined over-unit combined ratio indicates losses for insurers (cumulative costs in excess of gross premiums).

The combined ratio calculated on cumulative data for all classes of non-life insurances stood at 108.26% in 2019, increasing compared to the indicator for 2018 which recorded a value of 102.28%. Therefore, there is a deterioration of the profitability situation at the level of the local insurance market, from the perspective of this indicator

The figure below shows the rates calculated on cumulative data for classes A3[26], A8 și A10, the main classes of non-life insurances, which together have a significant share on the total market.

Figure 63 Evolution of the loss ratio and the combined ratio for the main classes of non-life insurances between 2017 - 2019



Source: FSA

In 2019, there is an increase in the combined ratio for motor insurance (class A3 and A10) compared to the previous year. All 14 insurance companies that practice CASCO insurance registered in 2019 a combined ratio of more than 100%. The average combined ratio remained at about the same level as in 2018, so that 7 of the 14 companies have a combined ratio below 131%. The maximum level of the combined damage rate for class A3 was recorded by a company with a rate of 203%.

In 2019, the combined ratio for class A10 has increased compared to 2018 both at the cumulative level, on the total market, and at the individual level for approximately all insurance companies. All the companies among those practicing MTPL also have registered a combined ratio for class A10 above the level of 100% on December 31, 2019, 5 of the 10 insurance companies that practice class A10 insurance recorded combined ratios below the value of 118%.

[26] A3: land vehicles, excluding rolling stock; A8: fire and natural forces; A10: motor vehicle liability for the use of motor vehicles, including carrier's liability

5.8. Policyholders rights guarantee

In order to protect the insurance system from the consequences of the insolvency of some insurers, FSA has at its disposal a series of macroprudential instruments, including the Policyholders Guarantee Fund. The Fund makes payments of indemnities/compensations resulting from optional and compulsory insurance contracts, under the law, in case of bankruptcy of an insurer, in compliance with the guarantee limit provided by law, of Lei 450,000 on an insurance creditor of the bankrupt insurer.

Thus, the claims related to the insurance portfolios of the companies whose operating license was withdrawn, Astra (in 2015), Carpatica and Forte (in 2016), LIG Insurance (2017) were taken over by the Policyholders Guarantee Fund which makes payments within the legal limit.

The Fund may also carry out the activity of special administrator in the procedure of financial recovery of insurers and of liquidator in the procedure of voluntary liquidation of insurers.

Insurers authorized by the Financial Supervisory Authority, including their branches operating on the territory of another State Member of the European Union, are obliged to contribute to the Fund under the conditions of *Law no. 213/2015 on the Policyholders Guarantee Fund*.

5.9. Brokers on the insurance market

By the end of 2019, a number of 298 brokerage companies were registered in the records of the Financial Supervisory Authority, of which 287 were active companies.

The value of premiums intermediated by brokerage companies in 2019 stood at Lei 7.20 billion , increasing by 12.9% compared to 2018. The increase took place amid the background of appreciation of the volume of intermediated premiums both for non-life insurance (+ 13.35%), as well as for life insurance segment (+1,23%).

Table 35 Evolution of the brokerage level

Period	Intermediated premiums (lei)			Intermediation level (%)		
	Total of which:	**Non-life insurance**	**Life Insurance**	**Total**	**Non-life Insurance**	**Life Insurance**
31.12.2015	**5,217,310,211**	5,088,347,613	128,962,597	**61.13%**	73.14%	8.18%
31.12.2016	**6,200,117,078**	6,029,407,386	170,709,691	**66.09%**	78.19%	10.23%
31.12.2017	**6,166,053,903**	5,962,005,414	204,048,489	**63.56%**	77.54%	10.14%
31.12.2018	**6,380,788,060**	6,143,247,895	237,540,165	**62.90%**	76.39%	11.30%
31.12.2019	**7,203,671,303**	6,963,197,545	240,473,758	**65.60%**	79.81%	10.66%

Source: FSA

The high level of intermediation on the non-life insurances market is a feature of the local market that contrasts with the situation from most European countries, where the share of sales through insurance brokers is lower and the share of direct sales (through its own network of agents or online) is more significant.

As a result of the increase in the brokerage level and of the gross written premiums, the revenues from the brokerage activity earned by the insurance brokers in 2019 has registered a percentage increase of 15.19% compared to 2018.

Table 36 Revenues from the brokerage activity (lei)

2017	2018	2019
971,812,823	1,095,337,930	1,261,778,661

Source: FSA

The share of revenues from the brokerage activity in the volume of brokered premiums on the life insurance segment was 42.82% (average commission).

At the level of the brokerage market, the average commission calculated for 2019 was 17.52%.

5.10. Potential risks and vulnerabilities on the insurance market

The high level of concentration on the insurance market is a vulnerability, both in terms of exposure by insurance classes and in terms of significant market shares held by a relatively small number of insurance companies.

From the perspective of exposure by classes, the Romanian insurance market is characterized by a high level of concentration both for the non-life insurance segment (the dominance of motor insurances on the local market is observed) and in terms of life insurance activity.

The local market's dependence on motor insurances has led to losses for insurance companies over time. There is a record of combined ratio of over-unitary damage for classes A10 (MTPL and CMR) and A3 (CASCO) between 2018 - 2019, which indicates losses of companies for these categories of insurances. Also, the gross claims paid for these classes of insurances amount to Lei 4.91 billion in 2019, representing 85% of the total gross claims paid for general insurances, respectively 72% of the total volume of gross claims paid on the entire market. Gross claims paid for classes of motor insurances also has a high value as a share of the total gross written premiums for these insurances, namely they represent cumulatively about 78% of the gross written premiums for the two categories of insurances (classes A10 MTPL and A3 CASCO).

In this respect, in order to reduce the dependence of the insurance market on motor insurances, FSA has developed a series of financial education programs in order to diversify the interest of Romanian consumers for a wider variety of insurance products and services. Financial education programs have aimed to develop the level of financial inclusion, a better understanding by consumers of insurance products on the market, as well as to increase the consumer confidence.

In order to diversify the insurance market and to develop other insurance segments and to reduce the dependence of the motor insurance market, working groups have also been set up at the FSA level in order to develop the agricultural and health insurance markets.

A number of measures have been proposed for health insurances since 2016 (including technical clarifications on the implementation of tax deductibles for private health insurance policies). Thus, a more detailed analysis of the evolution of this market shows an increase in the volume of gross written premiums for health insurances from a share of 0.34% in 2009 to a share of 2.45% in 2019

for those related to health insurances in total gross written premiums for the entire non-life insurance activity, respectively from 0.56% in 2009 to 7% in 2019 for those related to life insurances of total gross written premiums at the level of the life insurance market.

From this perspective, there is a tendency to diversify the consumer interest in the health insurance products, which implicitly leads to the development of these insurance segments. For the long run, the development of the health insurance market can improve the profitability of insurance companies by reducing the dependence on insurances that brings higher losses, which leads to ensuring the financial stability of the entire insurance market from Romania.

The year 2020 began with the emergence of a new risk for the financial markets related to the rapid spread of COVID-19, with significant effects over the entire economic activity.

The long-term impact of COVID-19 on the insurance sector is uncertain, but we can expect a number of disruptions at European level, with potential consequences including on the domestic market.

The main risk areas identified were:

- the decrease in the value of the assets of insurance companies as a result of the abrupt fallof the stock exchanges;
- the increase in the value of the insurers' liabilities, arising as a result of the materialization of risks due to the spread of COVID-19, especially in case of health insurance products, death, temporary work inability, risk of non-payment of debts of the insured, attached insurance banking products, travel insurance.

For medium and long term, given the context of the current macroeconomic environment characterized by very low interest rates, it can have a negative impact over the solvency and profitability of insurance companies (especially for the life insurance segment), due to the risk of reinvestment in bonds with lower yields as bonds currently mature from the insurers' portfolios.

All these cumulative adverse developments indicate a double impact for insurers: both on the assets side and on the liabilities side, with potential negative consequences for the solvency and financial position of companies.

Given the context of the spread of COVID-19 and the lockdown measures imposed by states with an impact on the economic activity, these risks may be joined by the business risk generated by a potential decrease in the volume of gross written premiums and an increase in the redemptions of the policies in force.

In order to a ensure fair treatment and the protection of the rights of the customers of insurance products, FSA carries out activities of supervision and control of compliance with the rules of conduct.

Conduct Risks :

- Customers may suffer losses in the event of early termination or requesting payments in disadvantage conditions granted by the market;
- Although the customer service activity takes place online, the fact that certain departments are not connected to the customer service makes it difficult to communicate and the information requested is delayed;
- The possibility of suspending MTPL insurance contracts will increase the operational risk for companies;

- The interruption of payments to the insured as a result of the decrease of their incomes, which will lead to the impossibility of continuing the contractual relations and the termination of the insurance contracts;
- Slowing down the functional activities for solving the claims files for which the physical contact is necessary: medical examinations, expert reports, findings/reconstructions, etc .;
- Changing the conditions for the conduct of supervision and inspections, both internal and external, may affect the market stability if not done responsibly and in good faith.

The main aspects identified for the MTPL (*Compulsory Motor third party liability insurance*) product, the main product for which the most notifications and complains are registered at the level of insurers, but also of market supervisors:

- Late payment of compensations related to MTPL claims files;
- Exceeding the legal deadline for communicating the maximum amount of compensation;
- Exceeding the legal deadline for submitting the compensation offer;
- Exceeding the legal deadline for submitting the notification of rejection of payment of the claim file;
- Exceeding the legal deadline for making the finding/refinding.

FSA ensures the monitoring of the insurance market in order to identify innovative technological solutions, applied by insurance companies following the COVID-19 outbreak that shall observe the consumers rights. The website of the InsurTech HUB group has been constantly updated and a close connection has been maintained between the members of InsurTech HUB and FSA.

In view of the protection and management measures generated by COVID-19, which has forced companies to operate remotely, the cyber risks, in particular those related to the loss or unauthorized use of data, were constantly growing.

Following the analysis carried out, FSAsubmitted a warning on the cyber risk to all insurance companies, through which a series of recommendations were made in order to mitigate this risk, including the review/identification with the external IT auditor/provider of outsourced IT services for vulnerabilities and identification of ways to address operational risks in compliance with the requirements of Rule no. 4/2018, as well as the FSA notification regarding any cyber incident that occurred in the current activity of the insurance company.

FSA analyzes the insurance products of companies and brokers and several aspects that may harm the consumer have been identified, such as: incomplete information, vague identification of the target market, ambiguous definitions of deadlines, misleading consumers, non-coverage risks during the grace period, disagreement with the legislation of non-bank financial institutions, etc. These aspects are subject to continuous supervision and controls carried out by teams of specialists, but also to discussions with company representatives in order to remedy the deficiencies identified.

Given the significance of protecting customers of insurance products and ensuring the stability of the insurance market, FSA carries out the project *"Enhancing the supervision function of the Romanian insurance market in respect of market conduct",* funded by the European Commission, which requires technical assistance provided by EIOPA in the field of supervising the conduct of insurance distributors. The project aims at **developing risk based supervision tools on the conduct of distributors in relation to customers**, by implementing:

- the conceptual framework for identifying and monitoring the risks of conduct through the life cycle of insurance products;
- the reporting system sent regularly by the entities supervised by FSA;
- risk assessment tools to monitor the behavioral risks of insurance products at the market level, including the implementation of a system of market conduct indicators;
- risk assessment tools to monitor conduct risks at the level of each insurance company, including the implementation of a system of conduct indicators at company level;
- the process for approving the priorities for monitoring the conduct and the action plan;
- the process for approving the conduct supervision measures to be taken as a result of the supervision activities/actions.

Measures taken by FSA for assessing the impact of COVID-19

In accordance with the EIOPA recommendations published in March 2020, FSA issued **Rule no. 21/2020** on the extension of deadlines for reporting, publication of public information and transmission of other documents to the Financial Supervisory Authority in the insurance field, as a result of the COVID-19 outbreak and the establishment of the state of emergency in Romania.

The rule aims at extending the submission deadlines for both Solvency II-specific reporting and for national reporting, thus supporting the insurance companies to support their continued business in a context of high volatility and significant implications for business activities.

In March 2020, FSA also conducted a consultation on the impact of COVID-19 on the activity of insurance companies authorized and regulated by the Authority, addressing the following issues:

- an analysis of the impact that the pandemic could have on the activity and financial stability of companies in terms of solvency, liquidity, potential change in the risk profile;
- presentation of the types of insurance and the risks they cover, in the portfolio of companies at the end of 2019, which could be affected by the manifestation of this phenomenon and a quantitative analysis of the impact of exposure to these types of insurances;

Measures taken by the insurance companies under the COVID-19 context

A number of 26 insurance companies responded to the FSA initiative and provided relevant information on the impact of coronavirus over their business.

All insurance companies have submitted plans to continue the business or procedures and/or contingency measures , including in pandemic scenarios.

Most companies do not assess the impact of COVID-19 as a major one on their risk profile and financial position. Some of them performed additional stress tests and impact analysis, and the impact was marginal. Also, most are well capitalized, with liquidity and solvency indicators well above the minimum thresholds. From the perspective of insurance products, most companies either have exclusions for epidemics/ pandemics, or have a low exposure for this type of risk.

FSA continues to monitor the developments of the insurance market and the potential implications that the spread of COVID-19 may have, thus ensuring the main FSA goals related to ensuring the financial stability of the Romanian insurance market and consumer protection.

6. Interconnection of non-bank financial markets

As the coronavirus epidemic (COVID-19) spread from a regional crisis from Hubei, China to a global pandemic, international market shares fall and market volatility increased largely and rapidly.

In the United States, recent levels of volatility exceed those observed in October 1987 and December 2008. To date, there has been no other infectious disease that has had more than a marginal effect on the financial market volatility. From February 24, 2020, news of COVID-19 developments has dominated other international events and acted as a global risk factor for the international economy.

6.1. Interconnection triggered by the COVID-19 pandemic

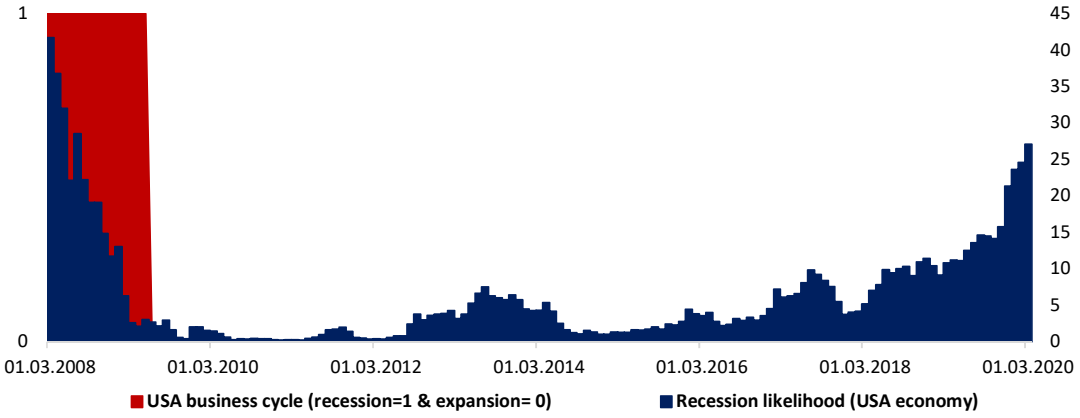
How can such a strong impact on the financial markets be explained? First, by the double impact that the pandemic has on the public health, amid the background of the ease with which COVID-19 spreads and the mortality rate among those who contract the virus.

In addition, the estimated economic impact is intensified by the interconnection of the international economy. The pandemic has affected long-distance travels, cross-border transport, decreased the density of supply chains and thus the inventory stocks that are very vulnerable to supply disruptions.

The decrease in the external demand will have the effect of lowering the exports to Romania's main trading partners (Germany, Italy, France, Hungary, Great Britain, Bulgaria, Poland, Spain, Czech Republic, Turkey, the Netherlands), the result having a significant impact on the GDP.

At the same time, since the economy structure is service-oriented, involving direct interactions, any sudden change that requires social distancing leads to a rapid decline in demand for such services. Globally imposed social isolation and distancing policies have decreased the labor flow for companies, leading to a sudden and massive decrease in the production of goods and services.

Figure 64 Measures to assess the probability of entering a recession



Source: Atlanta Fed, Refinitiv, FSA calculations

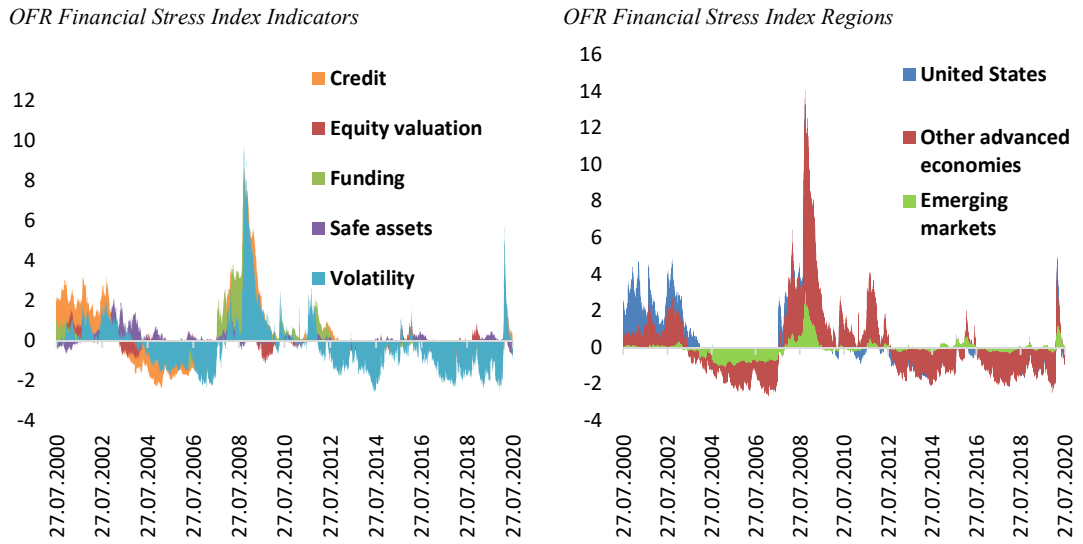
The interconnection of economies and financial markets has allowed an instant reaction and an uniform transmission of shocks to all economies.

When the indicator that measures the probability of entering a recession[27] exceeds 67%, it can be considered that the American economy is entering a recession. The indicator has increased rapidly in February and March and reached about 30% at the end of March.

6.2. Stress level in the financial system

Office for Financial Research – OFR[28] has developed a Financial Stress Indexin order to identify potential vulnerabilities of the financial system, the weaknesses of the system that can generate, amplify and transmit tensions in the US and/or on the international financial market. Financial stress can be captured by the way variables move together over time.

Figure 65 Financial stability indicator for the US economy (OFR FSI) [29,30]



Source: OFR, FSA calculations

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[27] Chauvet, M., & Hamilton, J. D. (2006). Dating business cycle turning points. *Contributions to Economic Analysis*, *276*, 1-54.

[28] https://www.financialresearch.gov/

[29] Categories of indicators - **Credit**: contains credit cost measures, which represents the difference in lending costs for companies with different solvency. During times of stress, credit differences can increase when the default risk increases or the functioning of the credit market is disrupted. Larger differences may indicate that investors are less willing to lend, increasing costs for lenders seeking financing. **Equity valuation**: includes valuations of shares from several stock indices, which reflect investor confidence and risk appetite. During times of stress, stock values may fall if investors become less willing to hold risky assets. **Financing**: includes measures related to how easily financial institutions can finance their activities. During times of stress, financing markets may freeze if participants perceive their counterparty's credit or liquidity risk as too high. Secure assets: includes valuation measures for assets that are considered to be value deposits or that have stable and predictable cash flows. During times of stress, higher valuations of safe assets may indicate that investors are migrating from risky or illiquid assets to safer ones. **Volatility**: includes measures of implicit and/or achieved volatility for the equity, credit, currency and commodity markets. In times of stress, increased uncertainty about asset values or investor behavior can lead to higher volatility.

[30] Variables are classified into regions according to the location of the markets where they are reflected. United States: US-centered variables. **Other advanced economies**: variables that measure the stress of advanced economies other than the United States, including mainly the euro area and Japan. **Emerging markets**: variables that measure the stress on the emerging markets.

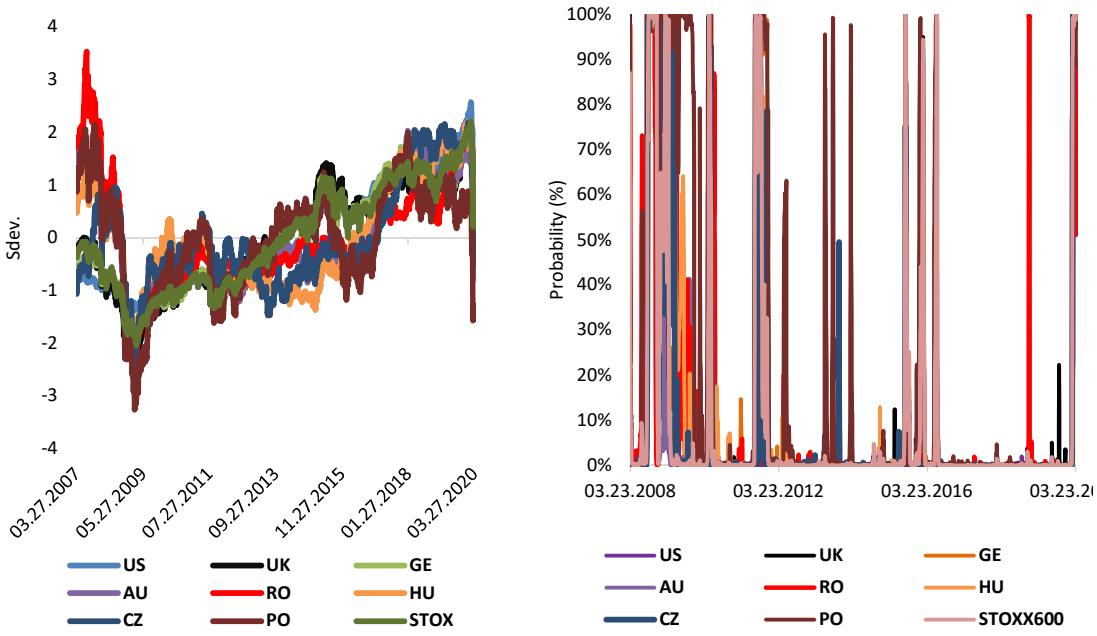
The Financial Stress Index (FSI OFR) provides an overview of the level of stress on the global financial markets. The index is built from the 33 financial market variables and is positive when stress levels are above average, respectively negative if there are no tensions on the financial market.

The value of OFR FSI on a given day is the weighted average level of each variable observed on the market on that day, related to its history. The index is zero when this average is zero, which suggests that the stress is at a normal level. The index is calculated after each US trading day.

Volatility, followed by credit, has increased mostly in February and March this year and will continue to remain high in the coming months. The FSI indicator indicates the USA as the region with the highest potential for economic instability among the three groups of economies.

Despite the heterogeneity between markets, the contagion has spread rapidly both to emerging markets and to other advanced economies, exceeding the speed with which capital markets have responded to financial market tensions over the past 10 years. Until March, the level recorded in 2020 did not exceed the one from 2008.

Figure 66 Extension of contagion: a) evolution of indices (standard deviation); b) high volatility regime (Markov-Switching model)



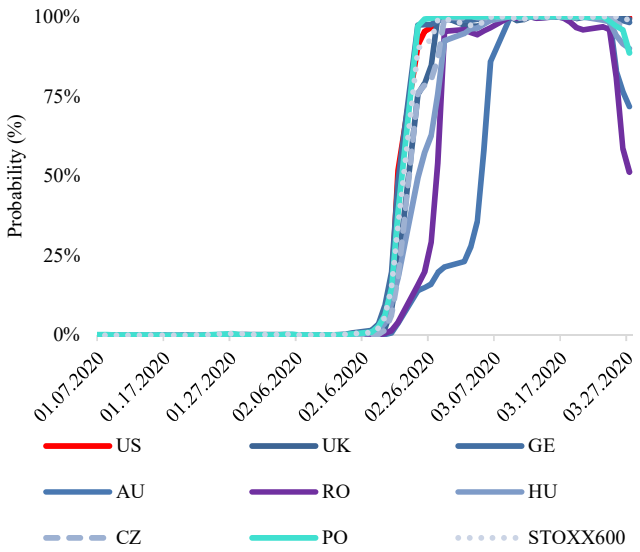
Source: Refinitiv, FSA calculations

The evolution of stock indices in the United States, Great Britain, Germany, Austria, Romania, Hungary, Czech Republic, Poland and Stoxx600 is normalized (zero average, standard deviation = 1) and shown in the graph on the left.

By using a Markov-Switching model, the volatility of stock indices was broken down into three volatility regimes: a low volatility regime, a medium regime and a high volatility regime.

The high volatility regime occurs with a low frequency and is present when volatility increases highly. The analysis of the high volatility regime allowed the analysis of the contagion extension between the stock indices.

Figure 67 Short-term evolution – contagion extension

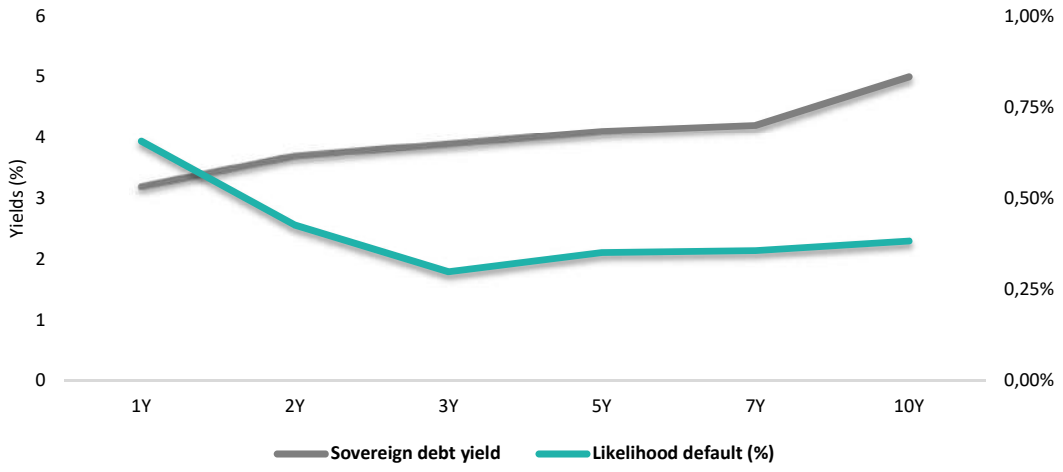


On February 21 (Friday) the US market entered the high volatility regime followed by Germany. On Monday, February 24, all stock markets (of the sample) except from Austria and Romania experienced very high volatilities. The Romanian market entered the high volatility regime on March 5, being the last market (of the sample) affected by volatility (low sensitivity to external events).

The markets remained in regime 3 for at least 1 month (on March 27 they were still all in high volatility regime).

Source: Refinitiv, FSA calculations

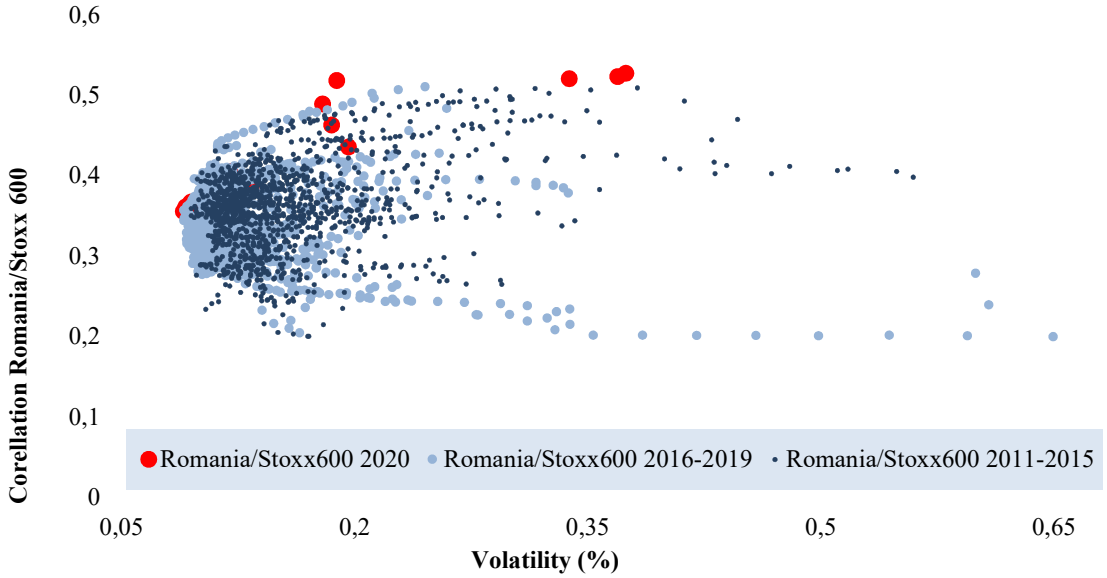
Figure 68 Probability of non-payment for the sovereign debt (Romania)



Source: Starmine, Refinitiv, FSA calculations

In March, the risk of non-payment for short-term sovereign debt has increased, not only for Romania, but also for other European economies due to the rapid deterioration of the economic climate and the forecasts of a reduced economic activity.

Figure 69 Increase in the correlation risk with foreign markets - the dependence between the Romania/Stoxx 600 correlation and the volatility of the Romanian capital market



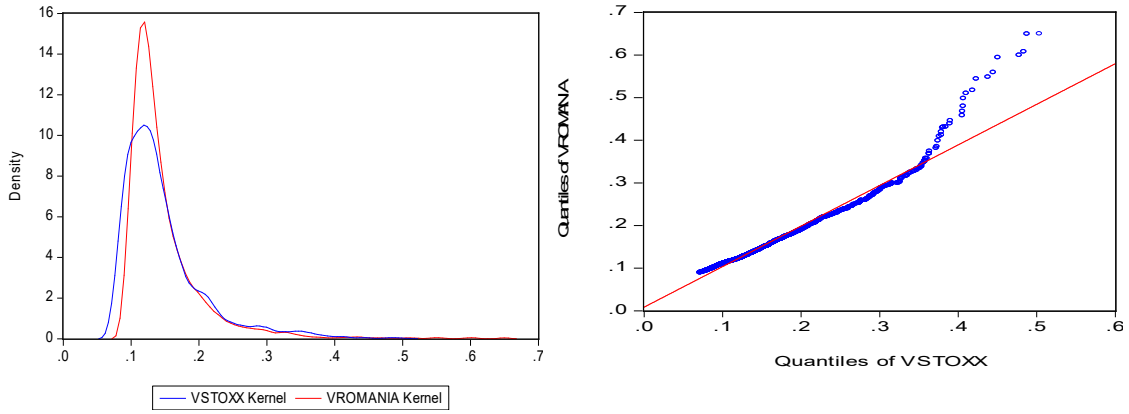
Source: Refinitiv, FSA calculations

The dependence between volatility and correlation is a property specific to financial markets defined and with the term of contagion.

The density for the periods 2011-2015 and 2016-2019 is concentrated in the medial left area, which indicates that on the normal market, the **volatility regime is expected to be up to 20%** with a significant correlation in the range of 0.3-0.4 .

In 2020 it is observed that the **dependence between volatility and correlation** has increased rapidly. At a volatility of over 50%, the correlation between markets increased over 0.5. A high level of correlation is normally expected only for markets with similar assets. In case of the markets analyzed, only the risk factors are similar.

Figure 70 Volatility density for Romania (VROMANIA) and Stoxx600 index (VSTOXX). Dependency between quartiles

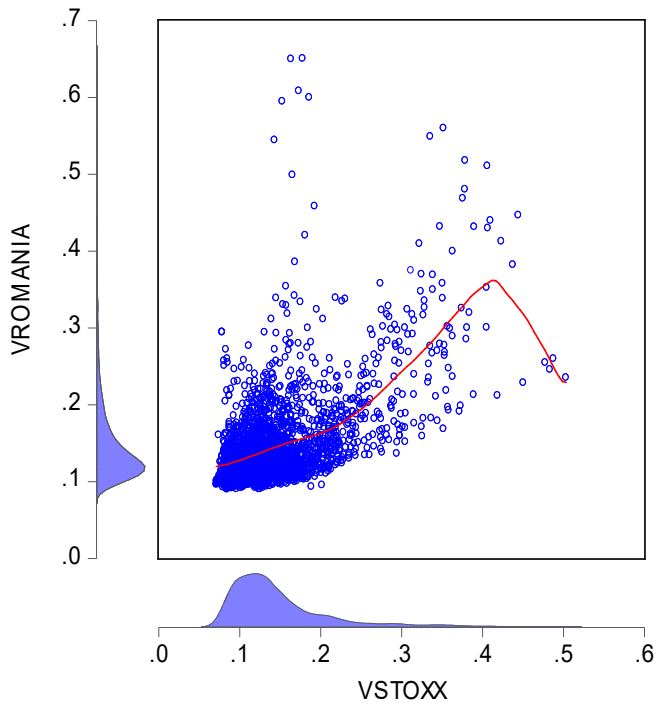


Source: Refinitiv, FSA calculations

The analysis of the Romanian capital market volatility and the Stoxx600 index show a higher volatility for the Romanian market specific for a frontier/emerging market (data from 2011-2020) with higher losses than the European market. The dependency between the volatility quantiles of the two stock indices shows that there is a linear relationship only for 40% of the data, while the nonlinear dependence exists for 60% and reflects the fact that for negative returns the transmission mechanism is more complicated.

The following graph shows 3 contagion scenarios.

Figure 71 The relationship between the volatility of the Stoxx600 index and the Romanian capital market: 3 contagion scenarios between the European market and the local capital market



The density of co-dependence between volatilities shows that volatility is usually 85% in the range [0 0.2).

Since the assets assessed on the two markets are heterogeneous, the financial shocks of the last 10 years have had 3 different developments: 1) low volatility on foreign markets with high volatility for the domestic market (blue arrow), **2) high volatility for both markets,** 3) high volatility for foreign markets, low volatility for the domestic market. **COVID-19 is found in scenario 2 indicated by the red arrow.**

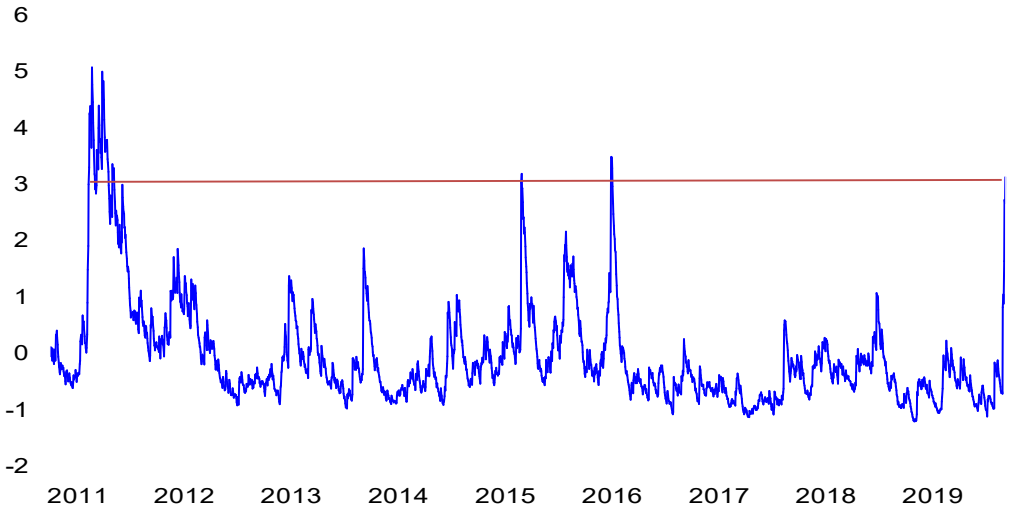
Source: Refinitiv, FSA calculations

The 3 volatility scenarios where the volatility exceeds the value of 20% are the expression of only 2% of the data. The results should be understood as a function of the external market volatility, as Stoxx600 volatility causes the Granger[31] local stock market and not the other way around.

Regarding the volatility evolution on the neighboring markets (Hungary and Poland), the principal component analysis (PCA) shows that they are co-dependent with volatility on the Romanian capital market in proportion of 74%. The following chart shows the evolution of the common factor for the volatility of the capital markets in Romania, Hungary, Poland and Stoxx600. Tension has increased in March to a level close to the events from 2011, 2015 and 2016.

[31]Granger causality (see https://www.statisticshowto.datasciencecentral.com/granger-causality/)

Figure 72 Common factor for the dynamics of capital market volatilities



Source: Refinitiv, FSA calculations

To the extent that **the stability of financial markets is doubly affected**, both in terms of GDP and in the transmission mechanism of financial markets, it is necessary to analyze how economic uncertainty affects the economic and financial markets.

The table below summarizes the correlation between economic uncertainty measures (3 indicators) and financial conditions (3 indicators) for the Romanian economy.

Economic uncertainty measures: economic policy uncertainty is an index of trust in the economy developed by DG ECFIN on the basis of a questionnaire. Macroeconomic uncertainty[32] represents the change in the European sentiment calculated for Romania, the volatility of the financial market is the volatility of the index calculated by Refinitiv for the Romanian capital market.

Financial conditions for Romania: financial market volatility, PER ratio (Price –to-Earnings Ratio), the loan difference for companies calculated as the difference between the yield of 1-year government bonds and the consumer loan yields for companies (1 year). Data for economic uncertainty measures and for financial conditions are given monthly for the period January 2010 - February 2020.

Table 37 Correlations between uncertainty and indicators for financial conditions

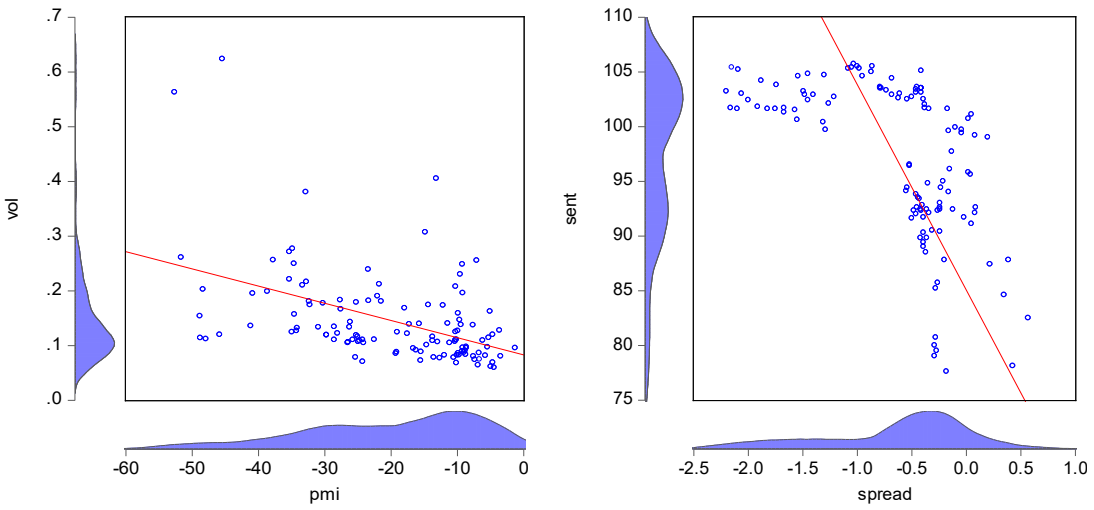
Correlation	PER indicator (Romania)	Volatility(Romania)	Spread (Romania)	PMI (Romania)	Sentiment index (Romania)
PER indicator (Romania)	1.000000				
Volatility (Romania)	-0.011218	1.000000			
Spread (Romania)	0.559384	0.224703	1.000000		
PMI (Romania)*	-0.276566	-0.462825	-0.499372	1.000000	
Sentiment index (Romania)	-0.284736	-0.491988	-0.586683	0.950104	1.000000

Source: DGECFIN, Refinitiv, FSA calculations, *PMI = the indicator of trust in economy was used as a proxy for PMI

[32] Haddow, A. Macroeconomic uncertainty: what is it, how can we measure it and why does it matter?

The correlations between uncertainty and indicators for financial conditions is negative and shows that the economic uncertainty has a direct impact on the stability of the Romanian financial market.

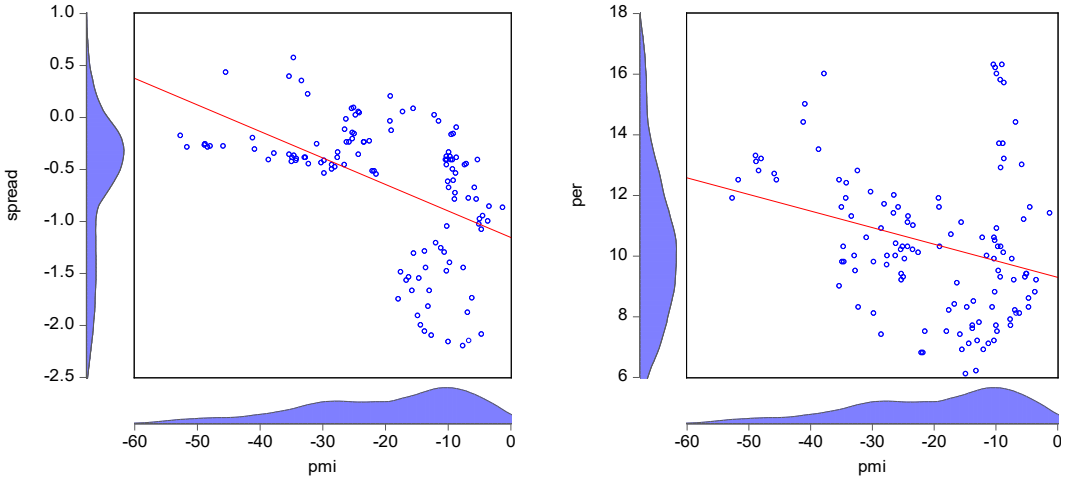
Figure 73 Relationship between PMI and volatility (left) - Relationship between spread and sentiment indicator (right)



Source: Refinitiv, FSA calculations

The correlation between PER and spread is positive because both tend to decrease at the same time, the capital market volatility has a positive correlation with the cost of credit, while PMI and the sentiment index are positively correlated, as they are two close measures for economic uncertainty.

Figure 74 Relationship between PMI and spread (left) - Relationship between PMI and PER (right))



Source: Refinitiv, FSA calculations

Capital market volatility and the PER ratio (Price-to-Earning Ratio) are inversely correlated, as uncertainty in the capital market increases and the PER ratio decreases.

The natural connections between the different segments of the financial sector, as well as the connections between them and the local economy or the external economic and financial environment, have become stronger and more complex during recent decades, once with globalization and technological development accelerating.

Beyond the benefits, the increasing interconnection favors the transmission of risks through contagion from one component of the financial sector and the economy to another, which is one of the significant vulnerabilities highlighted by the global financial crisis.

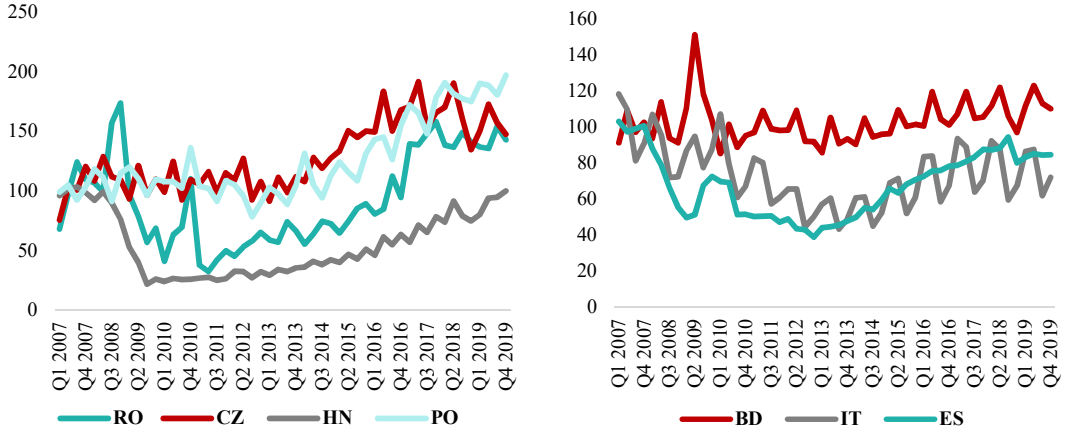
The COVID-19 pandemic showed how strong the contagion risk is, as well as the effects for both the bank and non-bank markets.

Although the local financial market does not have the same level of sophistication as the markets developed, **the level of interconnection is high**, which makes it necessary to constantly monitor all the possible risk transmission channels between sectors.

All three sectors of the FSA activity are approximately equally likely to receive shocks from outside, which could have significant consequences for their size, operation and performance.

The slowdown in the global and European economy will also have a strong impact on the insurance sector, as trends in all European economies are declining in the number of new car registrations.

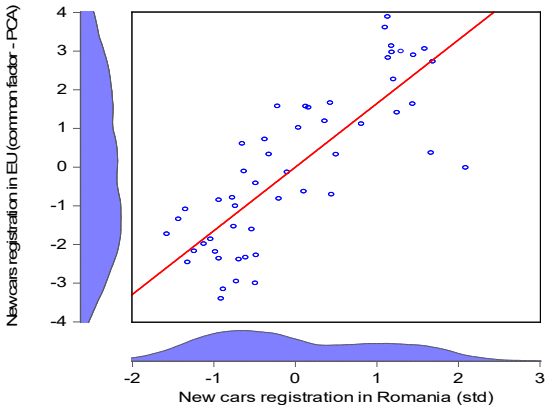
Figure 75 New car registrations (2007 = 100; seasonal data) Romania (RO), Czech Republic (CZ), Hungary (HN), Poland (PO); Germany (BD), Italy (IT), Spain (ES)



Source: Refinitiv, FSA calculations

The economies of Romania, the Czech Republic, Hungary and Poland will be more severely affected by the economic contraction, especially insurance companies that relied on similar incomes but had poor economic conditions.

Figure 76 Elasticity of car registrations in Romania



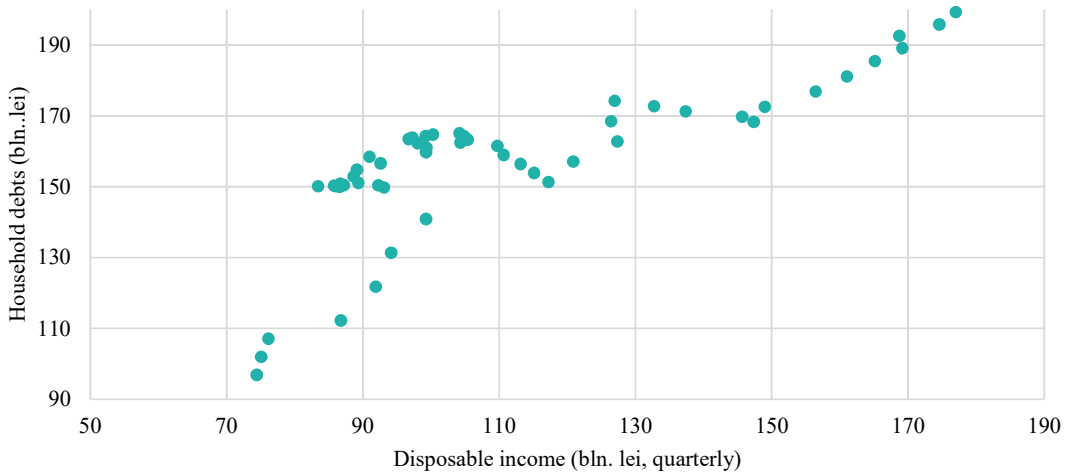
Source: Refinitiv, FSA calculations

The graph above shows the elasticity of new car registrations in Romania compared to the European car market. Elasticity indicates a direct relationship, which leads to the idea that the Romanian market will be strongly affected by the change in the European business cycle.

The common factor for the European market is the first major component extracted from a monthly data set[33] between 2010-2020 for the European economy. This explains about 60% of the variation in data.

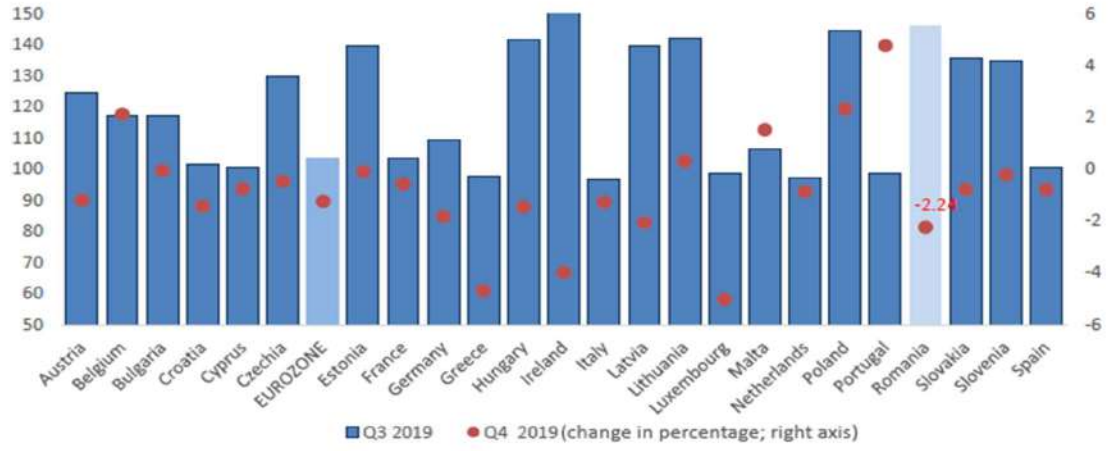
Another vulnerability to the financial stability that will affect the insurance sector is the increase in the household debt.

Figure 77 Income available (households) compared to debts (households) – Q12007:Q12020



Source: Refinitiv, FSA calculations

Figure 78 Index of industrial production



Source: Refinitiv, FSA calculations

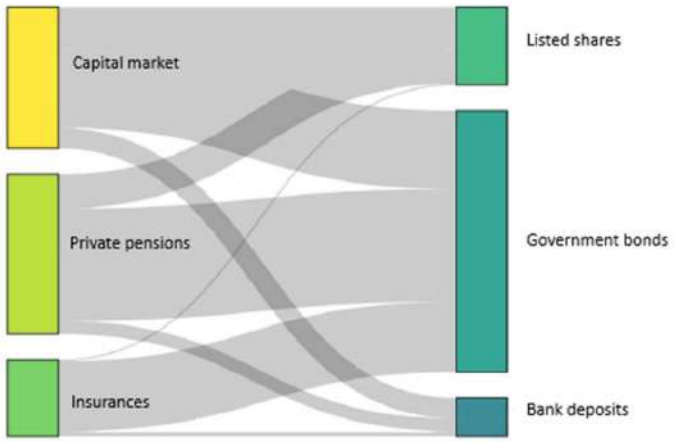
[33] New car registrations, monthly and seasonal data for all European Union countries between 2010-2020. Source: Refinitiv

The trend for the industrial production index recorded in the fourth quarter of 2019 compared to the previous quarter was decreasing, and the current monthly data indicate an acceleration of the downward trend in the first quarter of 2020.

6.3. Network of balance sheet inter-sectoral exposures

One of the already traditional methods used to monitor the level of interconnection between markets is represented by the analysis of balance sheet exposures between sectors or between individual entities. Particularly, for entities operating on non-bank financial markets, mostly institutional investors, exposure to several main assests classes and the markets on which they are traded is relevant.

Figure 79 Network of exposures of non-bank financial markets by type of assets



Source: FAS, FAS calculations

Collective investment undertakings in transferable securities (capital market) have a share of 26% invested in listed shares, private pensions (PII) - 20%, while the insurance sector has invested very little in the capital market.

The specifics of the activity of insurers, investment and pension funds, make the financial assets held to play an extremely significant role for their ability to meet their obligations towards policyholders/investors/participants. At the same time, a shock felt by one of the issuers of such instruments or by one of the markets on which they are traded, with a significant share in the aggregate assets at the level of one of the non-bank financial sectors supervised by FSA, could have an implicit effect over the performance or stability of that sector.

The network of exposures presented above shows that, in case of all the three non-bank financial sectors supervised by FSA, **the main exposure to risk is towards the Romanian state, through the sovereign bonds held in the portfolio.**

In comparison, the level of interconnection with the stock markets has a medium to low magnitude, while the interconnection with the banking system (viewed exclusively from the perspective of balance sheet assets) is very low.

6.4. Contagion index for the sovereign bonds

The contagion index for government bonds[34] assesses the extent to which shocks on domestic markets affect other countries, but also the evolution of the intensity of contagion phenomena in comparison with the previous values of the index (Diebold, 2009).

The calculation of the index is based on a VAR (2)[35] model for a mobile sample of 150 weekly yields of bonds denominated in euro (lei for Romania: 10 years maturity), starting from 2007, in order to capture the index evolution related to the value recorded during the sovereign debt crisis of 2011. Bonds issued by Germany are used as a **reference value** for calculating the bond spread.

Initially, the highest values of the contagion index were reached during the sovereign debt crisis (2011) and in March 2012 (second Greece *bailout*). The worsening of market conditions, which has increased as a result of the uncertainties generated by Grexit and later by Brexit (2018), resulted into an increase in contagion on the sovereign credit markets.

On the sovereign bond market, the contagion between government bond yields has increased sharply and has intensified during the first quarter of 2020, in February and March, surpassing in speed the previous episodes of the contagion spread between European economies. **The contagion index for the government bonds** has increased at the same time with **the contagion index for the capital market**, as a result of the risk aversion of investors who left the stock markets and bought government bonds, but also against the background of the measures taken by the European Central Bank to increase the market liquidity.

Figure 80 Contagion index for government bonds (10 years)

Source: Datastream, FSA calculations

Factors influencing the price of sovereign bonds are **global risk aversion**, **contagion and country-specific risk**. The increase from February and March was predominantly influenced by the global risk aversion.

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[34] Claeys, P., & Vašíček, B. (2014). Measuring bilateral spillover and testing contagion on sovereign bond markets in Europe. *Journal of Bank & Finance*, *46*, 151-165.

[35] Self-regressive vector

Net contagion is the difference between received contagion and transmitted contagion and is an indicator of their relative significance to the sovereign bond market.

The table below shows that Bulgaria, Romania and Hungary receive net contagion, while Spain, Italy, Belgium, France and Ireland transmit net contagion.

Italy is the country that transmits the highest contagion because it is the third largest economy in the world by size of the bond market.

The contagion indicates the sensitivity to changes in the returns of the other indices studied and thus shows the level of long-term integration, but also the short-term sensitivity to the movements of other capital markets.

Table 38 Contagion received and transmitted in government bond yields (10 years)

	RO	IT	SP	AU	FR	NL	PT	IR	FN	BE	BL	HN	CZ	PO	Received cont.	Net cont.
RO	61.3	4	2	0.6	1.1	0.9	1.1	2	3.8	1.2	2.2	8.2	5.4	6.5	39	15.1
IT	1.1	29.3	16.2	4.4	8.4	4.6	6.2	6.3	2.6	9.3	2	2.5	3.2	3.9	71	**-31.2**
SP	0.9	17.9	26.2	6.3	9.6	4.6	7.7	6.8	1.5	7.8	1.6	2.6	3.3	3.1	74	**-11.9**
AU	1.1	8.3	6.6	26.3	14.3	8.5	3	3.3	4.2	13.9	1.3	3.3	3.6	2.3	74	1.6
FR	0.6	10.6	8.2	12.2	26.9	9.2	3.5	3.7	5.1	12.7	1	1.9	2.4	2.2	73	**-15.9**
NL	1.6	6	5.7	9.8	10.6	39.9	1.7	3.9	6.6	8.5	0.8	1.2	2.2	1.6	60	4.1
PT	0.3	9.3	9.5	5.1	6.1	2.3	40.4	11.5	1	8.6	1.3	1.1	1.5	2.1	60	8.8
IR	0.8	8.7	7.7	3.1	5.1	3	16	42.9	1.1	5.2	0.7	1.3	1.9	2.5	57	1.7
FN	2.2	4.3	3	6.8	8.2	9	0.8	1.8	47.6	9.3	0.1	2.8	2.6	1.4	52	11.8
BE	0.6	10.9	9.4	12.1	14.6	7.9	3.1	4.2	5.3	24.9	0.9	2.4	2.1	1.5	75	**-14.5**
BL	4.6	4.2	2.2	2.2	2.1	1.8	2.3	2.4	0.2	2.3	63	2.1	4.6	5.9	37	17.3
HN	3.9	6.2	5.8	3.8	3.2	1.5	2.4	3.2	3.7	5.1	1.5	36.3	7.4	15.9	64	13.2
CZ	3.2	5.8	4.9	4.4	3.6	1.4	0.7	2.7	3.1	3.2	3	7	45.8	11.3	54	3.6
PO	3	6	4.7	1.6	2	1.2	2.7	3.5	2	2.4	3.3	14.4	10.2	43	57	-3.2
Transmitted contagion	23.9	102.2	85.9	72.4	88.9	55.9	51.2	55.3	40.2	89.5	19.7	50.8	50.4	60.2		

Source: Datastream, FSA calculations

6.5. Composite index of dynamics of non-bank financial markets

The operating mechanisms of the entities authorized on the local non-bank financial market and the component of institutional investors that characterizes them, together with the existence of mutual exposures between the three sectors, facilitated by financial instruments, determine the existence of common risk factors that influence their dynamics.

Although a possible financial shock may affect all three sectors at the same time, its impact can be measured with different frequency and depending on a certain gap. For example, some of the supervisory data for capital markets and pension funds are available daily, weekly or monthly, usually with a minimum gap of one period, and for the insurance sector data are generally available only quarterly, with a two-month gap (similar to GDP). For the research approach, but also for supervision,

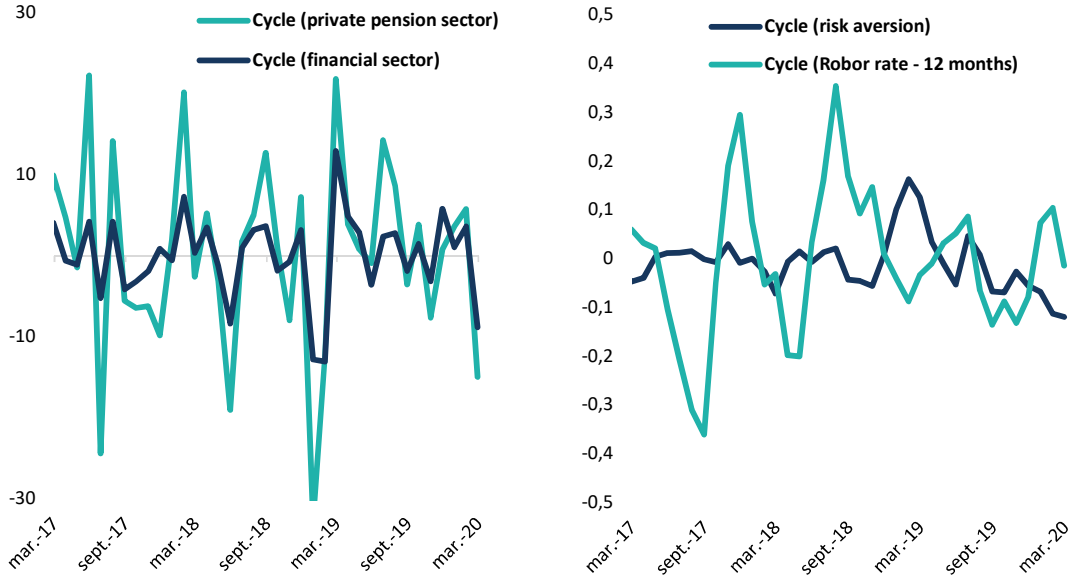
the answer to the following question is interesting: in the scenario where an unexpected financial event leads to a rapid decline on the financial markets or a change in macroeconomic expectations or in short/medium term macroeconomic forecasts, then what is the impact on non-bank financial intermediation? We intend to quantify the impact on non-bank financial intermediation by using a macro-financial indicator with mixed frequency.

A mixed frequency indicator[36] is designed as to integrate and extract information from the time series available at different periods: daily, monthly, quarterly, etc., and to provide a clear trend signal for heterogeneous data whose trend is unclear. The indicator must be sensitive enough in order to detect the impact of a sector's vulnerability on non-bank intermediation as a whole.

Shocks on financial markets as well as the events that can lead to rapid changes in the macroeconomic environment can significantly influence the financial intermediation both through contagion, as well as through increasing stress on the portfolio of institutional investors. Any institution has or should have an indicator or set of indicators for monitoring the risk factors. Short-term fluctuation of a certain risk (eg. exchange risk) may be available at a daily frequency and this information may be included in the mixed frequency indicator. Therefore, by including the exchange rate volatility, the indicator is designed to react and to be more sensitive to daily events.

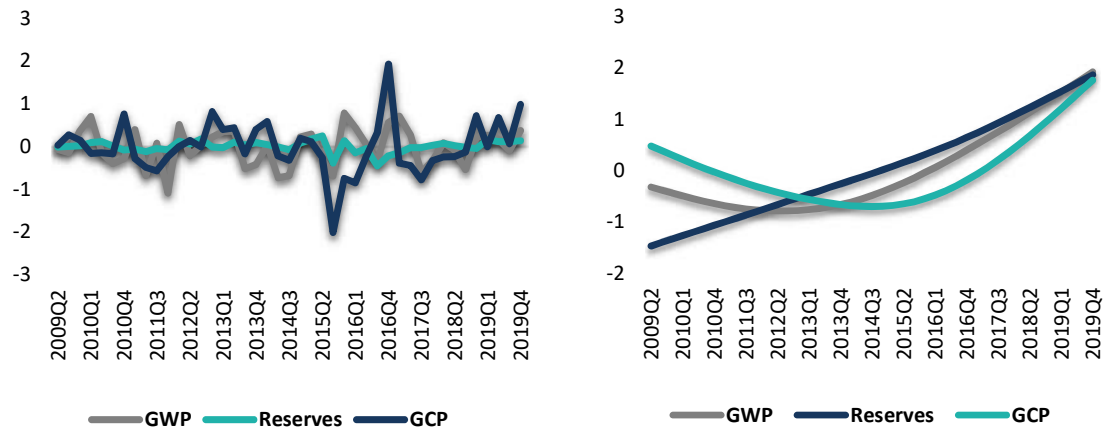
On the other hand, if the indicator is designed to monitor the financial stability of non-bank financial intermediation, we will also need less frequent data, such as quarterly macroeconomic data containing information on the economy structure as a whole. Since the purpose of the indicator is to provide an overview of the financial stability, the indicator cannot be too sensitive, as our goal is to build a financial stability indicator that provides an early warning signal.

Figure 81 Deviations from trend of sectoral indicators



[36] To design a mixed frequency indicator we followed the methodology proposed by Brave and Butters (2019), which is an extension of the dynamic factorial model that incorporates the accumulator proposed by Mariano and Murasawa (2003). The post-production phase of the indicator, which accounts for the serial correlation, the calibration of the indicator, the calculation of the forecast error is not presented.

Figure 82 Deviations from trend of the indicators in the insurance sector (left), trend (right)



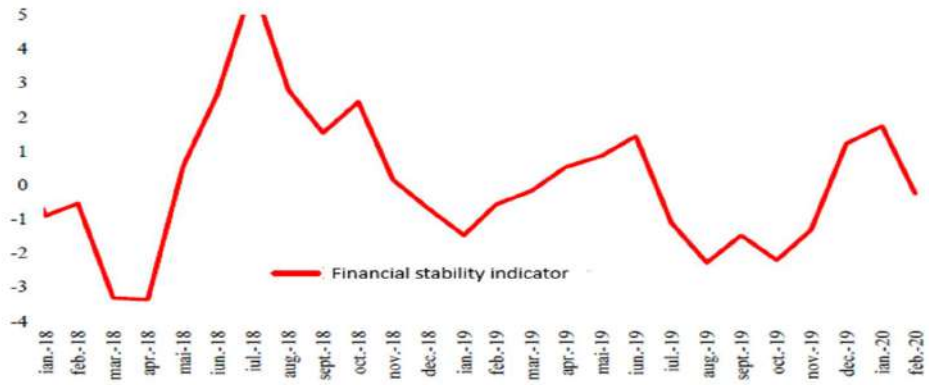
Source:Refinitiv, FSA, FSA calculations

The analysis indicates different mechanisms for receiving and transmitting shocks between the three sectors. The mixed indicator proposed is built from the following time series:

- data on the monthly profitability of the financial price index provided by Thomson Reuters were used for the capital market. We chose an index for the financial sector of the Romanian capital market in order to have a clearer signal of the dynamics of the development on the Romanian financial market.
- for the private pensions sector we calculated the average monthly yield (annualized) for the private pension administrators of the second pillar. Data are available on the website of the Financial Supervisory Authority from Romania.
- for data on the insurance sector, we selected the damage indicator which represents the ratio between the total losses (paid and reserved) in receivables plus the adjustment expenses divided by the total premiums collected. Insurance data is quarterly and should inform whether there is a widespread loss of insurance companies.
- The spread between AAA and BAAA rated corporate bonds is the indicator for risk aversion.

Monthly data (pensions, capital market and interest rate) are expressed as deviations from the trend (Hodrick-Preston).

Figure 83 Mixed indicator of financial stability (Jan.2008-Feb.2020)



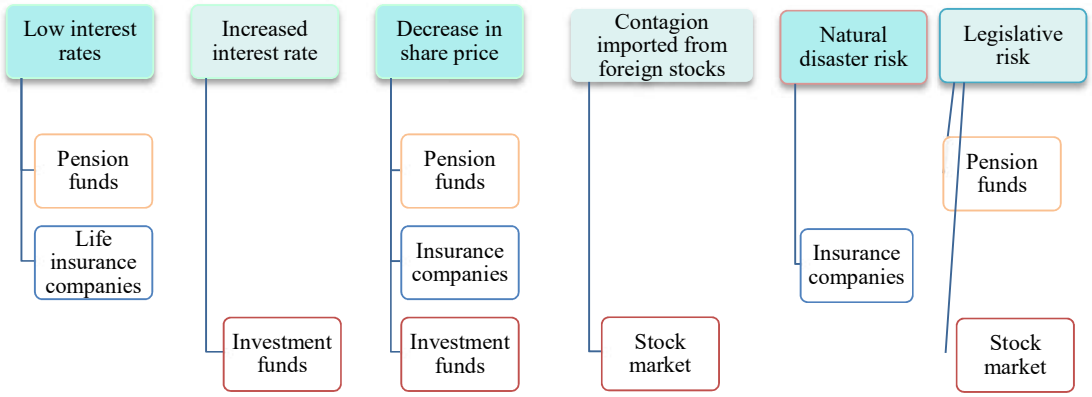
Source: Refinitiv, FSA, FSA calculations

The financial stability indicator has been estimated at a monthly frequency and is useful for studying the current evolution of non-bank financial brokerage by taking into account the dependency between the three sectors. Based on the current data, there is a steady deterioration in financial stability, but without reaching a critical level.

6.6. Triggers outside non-bank entities supervised by the FSA

Due to the specific structure and operating mechanisms of non-bank financial institutions, some sectors are more likely to amplify and pass on shocks from outside them to parts of the financial system (eg. stock exchanges, sovereign bond markets, stock markets). derivative financial instruments, mutual funds, etc.), while others (when they operate properly and are not affected by vulnerabilities) act most often as a stabilizer that cushions or even absorbs the shocks received, thus protecting the rest of the financial system (eg. especially life insurance companies, but also non-life insurance companies, pension funds, etc.)

Entities	Size	Interconnection	Substitutability	Complexity	Leverage
Pension Funds	**X** *(total assets)*				
Insurance companies	**X** *(written premiums)*	**X**	**X**		
Investment funds	**X** *(total assets)*	**X**			
Regulated markets, trading systems, clearing, settlement		**X**	**X**		
Brokers on the capital market		**X**			



Source: FSA

Insurance companies perform significant economic functions and are big players on the financial markets. They allow the business entities to diversify their non-systemic risk, thus providing the necessary premises for the development of the entrepreneurial activity. At the same time, insurance companies are a major source of **long-term venture capital** for the real economy because they are among the largest institutional investors. The ability of insurers to fulfill their function of absorbing

risks (their effects) depends very much on the lack of internal vulnerabilities, the level of capitalization, the level of adequacy of reserves, the level of liquidity, the level of their profitability, etc.

Similar to life insurers, **pension funds are long-term institutional investors**, which puts them in a position of volatility buffer and provider of systemic liquidity. This situation is also found in case of pension funds in Romania, which are still in the stage of accumulation and increase, especially due to the "defined contributions" mechanism, according to which they operate.

On the other hand, the still underdeveloped stock market from Romania may be a potential factor in amplifying the shocks received by contagion from foreign exchanges. The same situation can be seen in case of collective investment undertakings (mutual funds), which are particularly likely to be a transmission channel and a driver for a potential liquidity crisis.

Entities with defined liabilities (solvency risk) are more likely to generate and transmit systemic risks. In this category, in Romania are found predominantly the insurance companies.

In case of pension funds, this risk is highly lowered as a result of the "defined contribution" mechanism. Similarly, in case of stock markets and mutual funds, since there are no defined obligations, the risks that can be generated do not come from the perspective of solvency but of liquidity.

Table 39 Triggers for insurance companies

<table>
<tr><th>Triggering event</th><th>Company risk profile</th><th colspan="2">Potential systemic risks</th><th>Main transmission channels</th></tr>
<tr><td rowspan="4">• Macroeconomic factors
- Unemployment
- Inflation
- Speculative bubbles (eg. real estates)
- Others

• Financial factors
- Yields movements
- Market prices (shares, fixed income instruments, etc.)
- Bank system status
- Financial innovation
- Others

• Non-financial factors
- Demographic changes (mortality/longevity)
- Legislative changes
- Political changes
- Technological changes
- Behavior of the policy consumer/holder (mass withdrawals, etc.)
- Cyber attacks</td><td rowspan="4">• Market risk
- Interest rate
- Shares
- Properties
- Etc.

• Health risks
- Mortality
- Longevity
- Prior withdrawal of the policy
- Etc.

• Banktruptcy risks
• Life risks
- Technical provisions
- Mortality
- Longevity
- Early withdrawal of the policy
- Calamities
- Etc.

• General risks</td><td colspan="2">Entity based sources –Direct sources
➢ Deterioration of the solvency position leading to:
a) Bankruptcy of global systemically important insurers (G-SII) and domestic systemically important insurers (D-SII)
b) Collective bankruptcies of non-systemic important institutions as a result of exposure to common shocks</td><td></td></tr>
<tr><td>- Size
- Global activities
- Counterparty exposure
- Macroeconomic exposure
- Substitutability</td><td>- Exposure channels
- Lack of offer for certain products
- Expectations and information assimetry
- Assets liquidation</td></tr>
<tr><td colspan="2">Activities based sources – Indirect sources(i)
➢ Involvement in certain activities or products with a higher potential for systemic risk
➢ Potential dangerous interconnections</td><td></td></tr>
<tr><td>- Transactions with derivatives (non-hedging)
- Financial warranties</td><td>- Exposure channel
- Assets liquidation channel</td></tr>
</table>

- Others	-Premium provisions - Early withdrawal of the policy - Calamities • **Operational risk** (including fraud) • **Model risk**	(including monolines) - Assets loan (eg. securities lending) and management activities - Direct loan - Products with early withdrawal presenting maturity transformations - Guaranteed products - Variable annuities	- Channels with activities similar to banks (maturity transformation and leverage effect)
		Behavior based sources –Indirect sources (ii) ➢ Collective behavior of insurance companies that may exacerbate the market price movements (eg. its nature or chaotic behavior) ➢ Excessive risk undertaken by insurance companies ➢ Excessive concentrations	
		- Concentration in certain classes of assets and common exposures on assets side - Excessive undertaking of risks - Searching for yields too high to enter the banktruptcy/moral hazard issues - High competition that can lead to insufficient technical provisions or premiums	- Exposure channel -Assets liquidation channel.

Source: Systemic risk and macroprudential policy în insurance (EIOPA, 2017)

Additionnally to the capital requirements requested by Solvency II, the European regulator (EIOPA) conducts stress tests in order to calculate the financial stability of insurance companies in the event of severe, but plausible shocks.

Events such as the COVID-19 pandemic reiterate the usefulness of macro prudential instruments such as stress tests in maintaining the financial stability and preparing the financial institutions for extreme scenarios.

Systemic risk

Systemic risk is often analyzed from two perspectives: as an effect on the economy (most often measured as a GDP effect) and as an effect of financial intermediation. Financial stability is broadly

defined as the ability of the financial system to allocate resources efficiently, to assess and manage risk factors, and to absorb shocks. The effects of COVID-19 can be quantified in both directions: both on GDP and on financial intermediation. According to the analysis carried out by international forums with a role in the analysis and monitoring of systemic risks[37], a series of criteria for the identification and classification of systemic risks were identified:

Criteria for classifying the systemic risk according to the type of risk causing difficulties to the financial system

- Insolvency risk
- Liquidity risk
- assets and liabilities mismatch risk
- Risk of accumulation/concentration
- Contagion risk
- The risk of correlation with the activity of other market participants

The risk of accumulation/concentration occurs when an external shock has a negative impact on several financial institutions and as a consequence they can no longer provide some financial services/products.

Contagion risk

The contagion risk manifests itself as a domino effect, caused by a financial institution and its **dependencies/interconnection** with other financial institutions. Failure to meet the financial obligations creates difficulties for counterparties. Contagion can occur directly or indirectly (reputation effect). The analysis of the contagion risk must also take into account the contagion speed. If the contagion spreads slowly, then regulators have time to limit the damage. Market, credit or liquidity risk does not create systemic risk insofar as it affects only a few financial institutions.

The size of a financial institution does not create a systemic risk and does not weaken the stability of the financial system if the institution is diversified (Adrian and Brunnermeier, 2011; Kessler, 2013).

The contagion risk arises as a result of the connection between a financial institution/business line and the financial system and refers to the extent to which the services/products provided are affected by the business environment and each other. Different methods for its estimation have been proposed in the literature.

The contagion risk for the insurance activity is given by:

- interconnection with other financial institutions
- reinsurance activities
- investments
- recourse (MTPL)
- credit guarantee insurance.

[37] Financial Stability Board, European Systemic Risk Board, Basel Committee on Bank Supervision, International Association of Insurance Supervisors, International Monetary Fund

Insurance companies have direct exposures to other insurers, banks and other financial institutions, through debt holdings, equity and other financial instruments. These exposures can cause direct contagion and lead to the spread of systemic risks.

Interconnection with other financial institutions

Table 40 Assessment of systemic risks of the insurance activity according to the interconnection with the financial market

	Contribution to the systemic risk	Empirical results
Underwriting activity (traditional insurance activity)	Very low	The dependence between the life, non-life and the banking sector is low. The relationship between reinsurance companies and insurers is hierarchical (Zufferey, 2000; IAIS 2011; Kessler, 2013). The difficulties encountered in the insurance sector do not affect the economy (Cummins and Weiss, 2013). The bankruptcy of insurance companies does not increase the market risk (Park and Xie, 2011)
Funding activity (traditional insurance activity)	Very low	Damages prohibit the quick sale of assets in the event of bankruptcy (Kessler 2013) High shares holding in case of non-life insurance companies; life insurance companies are more vulnerable to stock market shocks due to leverage (Chen at al, 2013b) The financial crises have not disrupted the insurance/reinsurance activity for both life and non-life insurances (Berry-Stolzle et al.,2012) Prolonged liquidity loss during a financial crisis can have an impact or create vulnerabilities for insurance companies (Baranoff, 2012)

Insurance companies are also connected to the financial system due to their position on the market of derivatives, because life insurance companies use interest rate swaps to manage their long-term mismatches between assets and liabilities. The sale of CDS contracts - *credit default swaps* (complex non-traditional activity) increases the interconnection with the financial system (see the case of AIG), a situation that is not specific to the insurance system from Romania.

Interconnection: macroeconomic factors and the risk of interconnection for insurance companies

The deterioration of the **macroeconomic environment** creates the conditions for increasing the risk of interconnection between the capital market and insurance companies. An environment characterized by low inflation and potential economic growth generates losses for life insurers, pension funds, the banking sector and the capital market.

Insurance companies, especially those operating in the field of life insurances, and pension funds include in their investment portfolio mainly government securities and corporate bonds, instruments that are sensitive to changes in interest rates**.**

This shows the connection between non-bank financial markets, monetary policy and the capital market. The value of insurers' assets and liabilities varies according **to interest rate fluctuations**.

Life insurers and pension funds are generally long-term investors in the economy. As a result, this type of investor holds long-term bonds, which may face a lower market price (decrease in assets) if interest rates increase. With regard to liabilities, **an increase in the interest rate** may lead to a

decrease in technical provisions as liabilities to insured persons decrease, while the number of policies redeemed may increase. On the other hand, lower interest rates and a low for long environment can erode the profitability of insurance companies and pension funds, especially those with long-term investments.

Moreover, insurers may be vulnerable to a **sudden re-evaluation of risk premiums** and to multiplying the credit spreads. If the rise in yields is primarily driven by increasing risk interest rates, losses on assets are most likely offset by lower liabilities, depending on maturity mismatches, types of contracts guaranteed and coverage of individual risks. In the event of a negative *duration gap* between assets and liabilities, this would improve the company's financial position.

However, if the increase in yields is primarily due to **widen credit spreads**, insurers and pension funds would suffer immediate losses in fixed income investment portfolios, which can only be partially offset by a lower value of liabilities. Therefore, losses on assets cannot be fully offset by lower liabilities in this case, leading to a deterioration to the short-term financial situation.

Thus, if there are mismatches between the **maturity of assets and insurance liabilities**, then the insurance company will be vulnerable to changing interest rates, usually insurers who underwrite life insurances having long-term obligations towards policyholders, but failing to find investments in assets with equally long maturities.

Acatrinei[38] (2017) analyzes the transmission of macroeconomic shocks to insurers 'portfolios in Europe and points out that an increase in macroeconomic risks in Europe can lead to a common shock to insurance companies, as insurance companies' portfolios are mainly made up of bonds. Macroeconomic shocks have a different impact on bonds depending on their maturity. Life insurance companies are more affected by low interest rates because the duration of long-term liabilities increases more than that of short-term assets.

The business model of the insurance industry is based on risk mutualization by aggregating idiosyncratic risks that are not correlated. To the extent that the size of a financial institution is not the result of a specific risk concentration, the size does not lead to an increase in the potential for systemic risk (IAIS, 2011 and 2012a).

Interconnection: insurance companies – insurance companies

Alves et al[39] (2015) have analyzed the 29 largest European insurance groups and their financial counterparts and focused on the **direct connections between insurers and banks from EU**. The insurers included in this analysis represent Eur 5 trillions in assets, more than 60% of the total EU insurance market. Specifically, each insurance group submitted top ten exposures (by the end of 2013) to banks (debt, equity and deposits), insurers (debt and equity) and financial brokers (derivatives, repos and guarantee lending positions). Sectoral data show that **at least 20% of insurance companies' assets are represented by investments in banks**. As a result, insurers are a significant funding source for the banks. The analysis took into account the first ten exposures of the 29 insurers for each instrument. They represent about 10% of total assets, which indicates a low level

[38] EIOPA, Financial stability report, December 2017 https://eiopa.europa.eu/Publications/Reports/Financial_Stability_Report_December2017_7%20Macroeconomic%20fundame ntals%20and%20latent%20factor%20of%20the%20EU%20yield%20curve.pdf

[39] Alves, Ivan, et al. Network analysis of the EU insurance sector. No. 07. European Systemic Risk Board, 2015

of concentration. More than half of the reported exposures result from investments in bonds issued by banks. **The network of insurance groups, banks and other financial institutions has an overall low interconnectivity**, for example, compared to interactions between the largest banks only from the EU. The network density is relatively low and shows that **credit/financing events do not spread easily through direct contagion**. Unfavorable events in the network lead to only limited direct contagion effects.

Insurers' solvency positions are large enough and their exposure is low enough in order to avoid direct contagion caused by the bankruptcy of one of their counterparts, which could eventually lead to their own bankruptcy. This also applies to simultaneous adverse events at the top ten of their banking partners, except for two insurance groups.

Heam[40] (2014) has used a set of bilateral exposures between 21 French financial institutions, and compared several strategies for measuring interconnection from different points of view: substitutability, integration, core-periphery distance, systemic significance and systemic fragility.

Insurance companies are **less interconnected with other insurance companies** than is usually the case with banks. However, insurance companies can be connected directly to banks through financial conglomerates - it is a direct financial, reputational and operational link.

EIOPA has published a set of recommendations[41] on the consolidation, cooperation and exchange of information of the authorities supervising insurance companies with other relevant authorities, such as the European Central Bank (ECB)/Single Supervisory Mechanism (SSM) or other national authorities, on the results of stress tests of insurers affected that are part of a financial conglomerate. Intra-group exposures between insurers and banks can create vulnerabilities for the financial stability if there is a high concentration of assets within the same group. Moreover, both insurers and banks invest in equity, both as strategic holdings and as actual investments.

Interconnection: ceding to reinsurance

The activity of ceding to reinsurance contributes to the systemic risk and increases the vulnerability of an insurer if the counterparty incurs losses (as an effect of the materialization of credit risk related to the reinsurer). In addition, since reinsurers also cede reinsurance policies, a rollback spiral can be generated. If the reinsurance system is robust, then the rollback spiral will not occur, especially if the risks are shared by the reinsurers.

From the perspective of **investments held by insurance companies** (predominantly fixed income instruments, in particular government securities and corporate bonds), an interconnection is created with the banking system and the markets where those assets are traded. The interconnection between insurers and banks could intensify the contagion within the financial system through exposures to the same types of risk. For example, **a sudden revaluation of risk** premiums can directly and indirectly affect insurers through exposure to the banking sector. Another channel of risk

[40] EIOPA, Financial stability report, December 2014 https://eiopa.europa.eu/Publications/Reports/How%20to%20Measure%20Interconnectedness_Dec_2104.pdf

[41] EIOPA's Insurance Stress Test 2018 Recommendations, https://eiopa.europa.eu/Publications/Surveys/EIOPA-BoS-19-144_%202018StressTestRecommendations.pdf

transmission could be through different types of bank instruments grouped together and credited by institutional investors, such as insurers and pension funds.

The analysis of the size and structure of the assets can highlight the systemic relevance of the company from the perspective of interconnection with the financial markets or with the banking system.

At the same time, **guarantee insurances and credit insurances** increase the insurers' vulnerability to macroeconomic risk and to credit risk.

A significant indicator for measuring insurers' interest rate risk is **the duration gap**, which is the difference between the sensitivity of the interest rate between assets and liabilities. The larger the gap (negative), the higher the risks when interest rates fall, because the value of liabilities (debts) increases more strongly than the value of assets, because liabilities have a longer duration, so they are more sensitive to changes in the rate interest. Because the value of liabilities increases and they will have to pay more than they get from investments, lowering the interest rate is not good for life insurers[42].

Interconnection: cross-border risks

Cross-border exposures could help to diversify risks, but also to increase interconnection and possible risk transfers between insurance companies. Insurance companies authorized in one country of the European Economic Area (EEA) may carry out insurance activities in another EEA country ("host country") through Freedom of Establishment (FoE) or through Freedom of Services (FoS). FoE requires the establishment of a branch, while FoS can be done without a physical presence in the host country. In case of branches, capital and liquidity could be moved without significant constraints towards the case of subsidiaries. The level of cross-border business varies significantly between EEA countries, while the volume of cross-border business and the interconnection between countries depends not only on the line of business but also on the regional specifics. The cross-border activity of insurers also varies according to the lines of business.

[42]https://www.bundesbank.de/Redaktion/EN/Downloads/Publications/Discussion_Paper_1/2017/2017_05_15_dkp_10.pdf?__blob=publicationFile

7. Financial stability and macroprudential policies

7.1. Measures on the non-bank financial sector given the context of accession to euro area

The year 2019 meant the implementation of several measures regarding the development of non-bank financial markets from the perspective of the medium-term strategic goal of accession to euro area, which results into the gradual increase of the level of convergence.

Improving the operationm of the Bucharest Stock Exchange (BVB) and its transition from border market to emerging market.

FSA continued the measures to achieve the status of emerging market and to stimulate the increase in the capital market liquidity. In this regard, steps have been taken in order to strengthen the dialogue and the collaboration with the entities that form the market infrastructure, as well as with other state institutions in order to support the initiation of new IPOs on BVB. Efforts have also been supported to improve regulation and to provide fiscal facilities in order to attract and retain institutional investors.

This desideratum, for the Romanian capital market to acquire the status of emerging market, has been materialized through the **announcement of FTSE Russell about its intention to recognize the inclusion of the Bucharest Stock Exchange into the category of emerging markets in September 2019. Thus, the Romanian capital market will be assigned (from September 2020) percentage allocations of geographical indices calculated by FTSE Russel, ranging between 0.008% and 0.085% of the total structure of these benchmarks in the financial field.**

Reauthorization of Central Depositary SA

The alignment of the Central Depository with the provisions of *Regulation (EU) 909/2014* on improving the settlement of securities in the EU and on the central depository of securities was completed during December 2019, through the reauthorization by the FSA of the Central Depository as Central Depository of financial instruments (eng. Central Securities Depository - CSD) based on EMIR, simultaneously with the approval of the Code of Central Depository SA and its Organization and Functioning Regulation. The new Code of the Central Depository has been revised in order to align with the terminology of *Law no. 126/2018 on markets of financial instruments* and on the organizational requirements set out in the CSDR and *Regulation (EU) 2017/392*. This process also involved collaboration by direct correspondence with the relevant authorities, respectively with the European Central Bank (ECB) and the National Bank of Romania (for the settlement system in euro, respectively in lei). The re-authorization process also involved a review of the rules and procedures of conduct, which led to changes in reporting requirements.

Regarding the observance by the Central Depository of the capital requirements provided by art. 47 para. (1) of *Regulation (EU) 909/2014*, one analyzed the reports and statistical data received concerning the scope of economic activities, determining the capital requirements for a period of 3 years.

The analysis revealed that the Central Depository always had double own funds compared to the necessary capital requested. According to the information provided by the ESMA website, the **Central Depository has been entered in the Central Depository Register (CSDR) of the Member States.**

Implementation of the primary legislative framework on alternative investment funds

By the end of 2019, itwas passed *Law no. 243/2019 on the regulation of alternative investment funds and for amending and completing some normative acts.*

The law aims to regulate alternative investment funds (AIF) in terms of organization, operation, and transparency obligations related to these types of entities (which are classified into contractual AIF and investment company AIF) and is part of the strategy of the Financial Supervisory Authority to revise the legal framework incidental to the operation of collective investment undertakings other than collective investment undertakings in securities. Also, the law completes the legal framework incidental to the managers of alternative investment funds (AFIA) represented by *Law no. 74/2015 regarding the managers of alternative investment funds* and the FSA *Regulation no. 10/2015 on the management of alternative investment funds*.

The need to draft this law was substantiated by the need to diversify the categories of AIF-type collective investment undertakings that meet the investors'requirements. The diversification of AIF-type collective investment undertakings allows the Romanian investors to diversify their investments and to increase their volume, the draft law also establishing the basis for an alternative source of financing investments in small and medium enterprises carrying out production, trade or services activities in various economic sectors from Romania.

Approval of the legislative framework regarding mutual insurance companies (*Law no. 71/2019 on mutual insurance companies and for amending and completing some normative acts*)

Law no. 237/2015, as amended, transposes *Directive 2009/138/EC* of the European Parliament and of the Council from 25 November 2009 on access to business and insurance and reinsurance business (Solvency II), as amended and completed, Directive that provides, in points A.22 and B.22 of Annex III, that the general insurance undertakings and the life insurance undertakings from Romania have the legal status of joint stock companies or mutual undertakings.

The legal framework existing in Romania prior to *Law no. 71/2019* did not regulate the manner of establishment and operation of mutual undertakings, to them being applicable some provisions of the Civil Code, Book I, Title IV, regarding the legal person. Therefore, these types of entities did not exist in Romania.

The purpose of *Law no. 71/2019* was to create the legal framework necessary for the establishment, organization and regulation of specific aspects of operation of mutual insurance companies in Romania, following the good practices existing in Europe.

The introduction of the occupational pension scheme through the implementation of the Directive IORP II

A decade after its establishment, the private pension scheme proves the soundness and security of a mature market, characterized by a consistent value of assets and a critical mass of participants, which ensures its stability and sustainability on long term. In 2019, FSA supported the introduction

of the occupational pension system, collaborating with the legislative initiator. The process was completed at the beginning of 2020, once with passing by the Parliament of *Law no. 1/2020 on occupational pensions*, which transposes the provisions of *EU Directive 2341/2016 on the activities and supervision of institutions for the provision of occupational pensions* - IORP II - into the Romanian legislation and which has as social goal the provision of an additional pension component, financed mainly by employers and, in subsidiary, by employees.

In order to allow a prudent diversification and to ensure an optimal return given a moderate risk, new asset classes were introduced in 2019, such as traded securities, issued by investment funds or companies carrying out real estate development activities (3 %), as well as private equity investments (10%) or investments in project companies.

The settlement of the issues related to inactive accounts on the Romanian capital market

One of the main goals of FSA, which is being implemented, is to improve the registration activity of Central Depositary SA, by solving the issues related to inactive holdings highlighted in Section 1 of the Central Depositary, belonging to the persons who acquired shares following the Mass Privatization Program (PPM). In this regard, the FSA benefits from technical support provided by the European Bank for Reconstruction and Development (EBRD) in order to solve the issues related to inactive holdings from Section I of the Central Depository, the project being fully funded by the European Commission through the Program of Structural Reform Support (SRSS). The expected duration of the project is 21 months.

Support for establishing a central national counterparty (CCP)

FSA supported the establishment of a central counterparty in Romania, which was achieved by mobilizing the market operator, but also of other entities concerned, at the level of FSA, constituting a working group responsible for the implementation of a plan to establish the CCP, monitoring the project to set up and authorize this entity according to EMIRa.

Participation to the project on "European Single Electronic Format - ESEF" - Implementation of the Commission Delegated *Regulation (EU) 2018/815* completing *Directive 2004/109/EC* as regards the regulatory technical standards on the specification of a single electronic reporting format

The European Commission has launched a project to promote cross-border investments and to provide the investors easy access to regulated information, by creating a system that provides a single view of the regulated information currently stored in the Officially Appointed Mechanisms (OAM). In view of the Capital Market Union framework and the legal obligations of *Directive 2004/109/EC*, the European Commission (EC) has developed the European Pilot Project for European Financial Transparency Gateway (EFTG). The purpose of the Pilot Project consists in the development of a blockchain platform infrastructure that allows to citizens and investors an increased access to the regulated information provided by the Officially Appointed Mechanisms (OAM). The EFTG pilot project also aims to provide the ability to search for regulated information, such as those from the annual financial reports, in order to contribute to a largerintegration of capital markets.

Consolidation of the FSA risk based-supervision of entities active on the capital market through implementing the supervision framework developed with the support of the World Bank

In order to meet the goals of ensuring the integrity and stability of non-bank financial markets and investor protection, FSA has undergone, since November 2016, a technical support project with the World Bank (EC-funded), which aimed to strengthen the supervisory and inspection function on the capital market.

This project aimed at rethinking the on-site and off-site supervision process, from prudential and rules of conduct perspectives, as well as optimizing the allocation of supervision resources, in relation to the risk-based hierarchies. Concentration and allocation of supervisory resources on those areas, entities (financial investment services companies, investment management companies, alternative investment fund managers) or financial products/investments that pose increased risks to the market stability and functioning, requires a gradual development, risk-based supervision techniques, procedures and practices and familiarizing the market with such approaches.

In this project, World Bank experts proposed a risk calculation methodology and a handbook that contributes to the consistent implementation of supervisory procedures for investment firms and investment management companies. The World Bank's recommendation was to technically implement the flow of information collection and data processing in order to achieve risk scores for each entity supervised.

In 2019, FSA efforts started the gradual implementation of the risk-based supervision methodology both at organizational level (establishing final formats and testing reporting models, internal procedures, market dialogue) and from an IT perspective (automation of reporting and flow of risk assessment, according to the methodology developed by FSA).

Consolidation of the FSA risk based supervision of entities from the insurance market through implementing the supervision framework developed with the support of the European Authority for Insurances and Occupational pensions

Within an European-funded project, the FSA received advice from EIOPA to strengthen its insurance supervision function, which aimed to develop a Handbook that also includes good practicesfor companies on the adequacy of technical provisions. The project took place between October 2017 and November 2018 in order to ensure the most effective tools for supervising the insurance market, in order to detect the major risks to which insurance companies are exposed and to ensure financial stability, both from micro and macro prudential perspective. Following the completion of the EIOPA Surveillance Handbook (April 2019), FSA started, from May 2019, creating the appropriate procedural framework/governance mechanism for the supervisory review process (SRP) of insurance companies.

Improvement of the current framework for the protection of consumers of non-bank financial services

In 2019, FSA approved the Consumer Protection Policy, through which it is envisaged to create an integrated organizational framework, necessary for the development of FSA programs in the field of consumer protection and financial education, through preventive monitoring and warning of possible violations of consumer rights and interests and through reactive actions to manage and settle complaints.

Also, in 2019, FSA approved the initiation of the project improving the supervision function of the Romanian insurance market in terms of market conduct, funded by the European Commission

through the Structural Reform Support Program (SRSP), a project that requires technical support granted by EIOPA in the field of supervising the conduct of insurance distributors, given the significance for the protection of consumers of insurance products and the stability of the insurance market. The project aims to develop supervisory tools based on risk assessment on the conduct of distributors in relation to customers, by implementing several tools.

7.2. Macroprudential instruments implemented by FSA

In 2019, the National Committee for Macroprudential Oversight did not issue any new recommendations to FSA. The Financial Supervisory Authority remained responsible for complying with the CNSM Recommendation no. R/4/2018, with permanent term, regarding the implementation of macroprudential instruments for fulfilling the intermediate goals included in the General Framework on the strategy of macroprudential policy of the National Committee for Macroprudential Oversight.

FSA conducts periodic analysis on the risks and vulnerabilities identified on the three supervised non-bank financial markets, as well as the opportunity to implement existing macro-prudential instruments. To date, the following macroprudential measures have been implemented:

- At the level of financial investment services companies (SSIF): the capital conservation buffer (implemented in 4 equal annual installments of 0.625% of the total value of risk-weighted exposures, between January 1, 2016 - January 1, 2019):
  - From January 1, 2016 - 0.625%
  - From January 1, 2017 - 1.25%
  - From January 1, 2018 - 1.875%
  - From January 1, 2019 - 2.5%
- With regard to the countercyclical capital buffer and the systemic risk capital buffer , to date there are no conditions requiring a level higher than 0% for this shock absorber in case of financial investment services companies (SSIF).
- In case of insurance companies, FSA maintained the previously implemented macroprudential elements:
  - insurance companies' liquidity index: monitoring and analysis at least quarterly the liquidity ratio of insurance companies;
  - recovery plan: In 2019, FSA received a single revised recovery plan from an insurance company;
  - Policyholders Guarantee Fund.
- In case of the private pensions market, FSA maintained in 2019 the macroprudential instrument regarding the restrictions on significant exposures regulated by *Law 411/2004 on privately managed pension funds*, *Law 204/2006 on voluntary pensions*, *Rule 11/2011 on investment and valuation assets of private pension funds*;
- In case of private pension fund managers, in order to avoid concentration on a small number of issuers, the limitation on exposure to an issuer to 5% of net assets has been maintained, and the exposure to a group of issuers and their affiliates cannot exceed 10% of the assets of the private

pension fund;

- All entities supervised by the FSA apply IT system security requirements. These were implemented by *Rule 4/2018 on the management of operational risks generated by information systems used by entities, authorized/approved/registered, regulated and/or supervised by the Financial Supervisory Authority*, according to which supervised non-bank financial entities submit to FSA annual self-assessments of IT risks as well as IT audit reports (which frequency differs depending on the risk class in which each entity is classified).

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AIF	=	Alternative Investments Funds
AIFA	=	Alternative Investment Fund Manager
APAPR	=	Association for Privately Administered Pensions from Romania
ARIS	=	Absolute Return Innovative Strategies
ATS	=	Alternative Trading System
ATS	=	Amount of Transactions Settled
BET	=	Bucharest Exchange Trading
BRD-GSG	=	BRD-Groupe Société Générale
BVB	=	Bucharest Stock Exchange
CASCO	=	Casualty and Collision
CCP	=	Central Counterparty
CCRT	=	Catastrophic Containment and Relief Trust
CD	=	Central Depositary
CDS	=	Credit default swap
CIF	=	Cost, Insurance and Freight
CEIF	=	Closed End Investment Funds
CIP	=	Consumer price index
CIS		Collective Investment Schemes
CISS	=	Composite indicator of systemic stress
CLIFS	=	Country level index of financial stress
CMR		Convention on the Contract for the International Carriage of Goods by Road
CR	=	Concentration rate
DGECFIN	=	The Directorate-General for Economic and Financial Affairs
D-SII	=	Domestic sistemically important insurers
EBRD	=	European Bank for Reconstruction and Development
EC	=	European Commission
ECB	=	European Central Bank
EEA	=	European Economic Area
EFAMA	=	European Fund and Asset Management Association
EFTG	=	European pilot project for European financial transparency
EIOPA	=	European Insurance and Occupational Pensions Authority
EMIR	=	European Market Infrastructure Regulation
ESA	=	European Financial Supervision System
ESG	=	Environment, Sustainability and Governance
ESMA	=	European Securities and Markets Authority
ETF	=	Exchange traded funds
EU	=	European Union
FIC	=	Financial Investments Company
FISC	=	Financial Investments Services Company
FOB	=	Free on Board
FoE	=	Freedom of Establishment
FoS	=	Freedom of Services
FP	=	Fondul Proprietatea

FSA	=	Financial Supervisory Authority
FSO	=	Financial Studies Office
FTSE Russell	=	Financial Times Stock Exchange Russell
G20		Group of Tweenty
GDP	=	Gross Domestic Product
GEO	=	Government Emergency Ordinance
GCP	=	Gross claims paid
GMS	=	General Meeting of Shareholders
G-SII	=	Global systemical important insurers
GWP		Gross Written Premiums
HHI	=	Herfindahl-Hirschman Index
HICP	=	Harmonized index of consumer price
ICF	=	Investor Compensation Fund
IMC	=	Investment Management Company
IMF	=	International Monetary Fund
IORP II		Directive (EU) 2016/2341 of the European Parliament and of the Council on the activities and supervision of institutions for the provision of occupational pensions
IT	=	Information technology
LI	=	Life Insurances
LTRO	=	Long-term refinancing operations
LTRO-III	=	Long-term targeted refinancing operations
MBS	=	Mortgage-backed securities
MCR	=	Minimum Capital Requirements
MFP	=	Ministry of Public Finances
MiFID II	=	Financial Instruments Markets Directive
MMFs	=	Monetary market funds
MPP	=	Mass Privatization Program
MTS	=	Multilateral Trading System
MTPL		Motor Third Party Liabilities
NBR	=	National Bank of Romania
NCMO	=	National Committee for Macroprudential Oversight
NSC	=	National Securities Commission
NCSP	=	National Commission for Strategy and Prognosis
NFI	=	Non-bank financial institution
NIS	=	National Institute of Statistics
OAM	=	Official appointed mechanisms
OECD	=	Organization for European Cooperation and Development
OFR-FSI	=	Financial stress indicator
OEIF	=	Open End Investment Funds
OPCVM/UCITS	=	Undertakings for Collective Investment in Transferable Securities
OPEC	=	Organization of Petroleum Export Countries
OPF	=	Optional Pension Fund
ORSA	=	Own Risk and Solvency Assessment
PAPF	=	Privately Administered Pensions Fund
PEPP	=	Pandemic Emergency Purchase Programme
PER	=	Price Earning Ratio

PMI	=	Purchasing Managers' Index
QLTRO-III	=	Quarterly long-term refinancing operations
RCB	=	Romanian Commercial Bank
RCD	=	Register of Central Depositaries
SCR	=	Solvency Capital Requirements
SERF	=	Single Electronic Reporting Format
SME	=	Small and Medium Enterprise
SRP	=	Supervisory Review Process
SRSP	=	Structural Reforms Suport Programs
SRSS	=	Structural Reforms Suport Programs
SSM	=	Single Supervision System
SURE	=	Support to mitigate Unemployment Risks in an Emergency
TAS	=	Transactions amount post-settlement
UCITS		Undertakings for Collective Investment in Transferable Securities
UGP	=	Underwriten gross premiums
UK	=	United Kingdom
US FED		United States Federal Reserve
US	=	United States of America
WTI	=	West Texas intermediate
ZEW	=	Zentrum für Europäische Wirtschaftsforschung (Center for European Economic Research)

Classes of insurances

Non-life insurances

A1 - accidents

A2 - sickness

A3 -land vehicles, excluding rolling stock

A4 – railway rolling stock

A5 - aircraft

A6 - sea, lake and river and canal vessels

A7 - goods in transit

A8 - fire and natural forcess (for other goods than those insurable from classes A3-A7)

A9 - hail, frost and other risks than those specified in class A8 (for other goods than those insurable from classes A3 to A7)

A10 - motor third party liability, for the use of land motor vehicles, including carrier's liability

A11 - liability for the use of aircraft, including carrier's liability

A12 - liability for the use of sea, lake and canal vessels, including carrier's liability

A13 - general liability, excluding the one mentioned in classes A10-A12 A14 - credit

A15 - suretyship

A16 - financial losses

A17 - legal expenses

A18 - assistance for people in difficulty during travel or absence from home or habitual residence

Life insurances

C1 - life insurance, annuities and additional life insurance

C2 - marriage and birth assurance

C3 - life insurance and annuities related to investment funds

C4 – permanent health insurance

C5 -tontines

C6 – capital redemption operations based on actuarial calculations

C7 - management of group pension funds

C8 - operations related to the duration of human life, according to the social insurance legislation