

REPORT ON THE NON - BANK FINANCIAL MARKETS STABILITY

1/2021

Note The analyses within the report are mainly based on the financial reports of the entities supervised by ASF until the reference date March 31, 2021, as well as on other data and information on financial markets (IMF-World Economic Outlook, EC, NCSP, INS, NBR) available until this date. 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. All rights reserved. Reproduction of information for educational and non-commercial purposes is permitted only with the indication of the source.

The report on financial stability was prepared within the General Directorate for Strategy and Financial Stability.

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FOREWORD

The year 2020 was marked by evolutions and unprecedented challenges in the recent history, as a result of the outbreak of the current health crisis. In a global environment characterized by a high degree of uncertainty, the ability to adapt to rapid structural changes has been a real challenge both from the perspective of companies and authorities involved in the regulation and supervision of financial markets.

In this context, the Financial Supervisory Authority has shown flexibility in the promoted policies and strategies and adaptability to the new socio-economic conditions, starting from the beginning of the crisis a series of internal analyses. Tax reductions, the extension of deadlines for submitting reports to the Authority, the submission of reports and correspondence only in electronic format were just some of the solutions that ASF implemented during 2020.

The non-bank financial markets supervised by the Authority, essential for the proper functioning of the Romanian financial system, offering alternative sources of financing, savings and protection against a wide variety of risks, have proven resilience to the shocks induced by the current health crisis, prudential requirements being still met at the aggregate level of the three supervised sectors.

The Romanian capital market registered, in general, a positive dynamic starting from the second part of 2020, after the episodes of high volatility in the first half of the year, a trend also manifested in the case of the capital markets in the region. Although the emergence of the vaccine, followed by the implementation of extensive vaccination campaigns have led to a reduction in tensions in non-bank financial markets, we still see the possibility of increased systemic risk, amid a decoupling between financial markets and the real economy.

Regarding the *insurance market in Romania*, the Financial Supervisory Authority has intensified its oversight and control activity, by virtue of the fundamental objectives of the Authority related to ensuring the financial stability of the supervised markets and consumer protection. The oversight and control processes led to the identification of some irregularities in the activity carried out within some insurance companies, ASF ordering, in this sense, measures to correct the deficiencies. Moreover, in the case of an insurer, serious deviations from the legal provisions have led to the establishment by the Authority of measures proportionate to the facts and

irregularities found, including by designating the Insured Guarantee Fund as temporary administrator, in order to replace the management of the company.

In the *Romanian private pension system*, risks remain low, due to the efficient functioning mechanisms and the legislative framework, which contribute to the reduction of solvency risks and market risks, including by setting investment limits on asset classes and issuers, thus determining the establishment of prudent and safe portfolios.

The year 2020 and the beginning of 2021 represented a period in which the consequences of the economic contagion phenomenon and the high degree of interconnection between the global financial markets were more acutely felt, which imposed the need to adapt quickly to the structural changes that occurred, representing at the same time an opportunity to redefine the way of managing economic activities.

In this context, the Financial Supervisory Authority has implemented a series of changes necessary for the healthy and sustainable development of markets, determined both by the exogenous risks of the non-bank financial system generated by the current health crisis and by the deficiencies identified during the supervision and control within ASF.

The measures established by the Financial Supervisory Authority both in the previous year and in the first half of 2021 came in support of ensuring the Authority's strategic objectives regarding the financial stability of supervised markets and the protection of consumers of non-bank financial services.

Furthermore, the main directions of action of the Authority are meant to support the sustainable development of the non-bank financial system, ensuring its proper functioning, in accordance with the best practices promoted by the national and European authorities.

PhD. Nicu MARCU

President

Financial Supervisory Authority

Introduction

integrated and sectoral context. It focuses on current market conditions, highlighting the main systemic elements that could pose a risk to financial stability and sustained market access by stakeholders. The report presents the ramifications of non-bank financial markets highlighted from several perspectives, including by analyzing the interconnection between them. Financial management policy and practices, transparent and competitive, are generally the tools for financial stability. Financial stability can be threatened by a negative economic evolution, but also by the situation of financial entities. However, different types of fraudulent financial activities have, from time to time, destabilized overall financial stability. The Authority must ensure that it is well equipped with all the necessary tools to combat such threats, to strengthen the financial market and to prevent financial fraud in a sustainable manner.

The financial stability report provides an

assessment of the non-bank financial system by

addressing supervised markets in both an

The Association of Certified Fraud Examiners defines fraud as an act or error committed by a person or entity that it knows may lead to some unfavorable benefits to individuals or entities. Fraud occurs when a distortion is made in a situation that is known to be a forgery and is committed with the intention of making an illegal gain. Fraudulent behavior in the presentation of financial statements and returns is an important concern, so that these actions must be detected and eliminated so that the financial statements can be trusted by stakeholders and the public.

Fraud can be of several types, such as: manipulation, forgery and modification of accounting through records or supporting documents underlying the preparation of financial statements, misrepresentation or deliberate omission of transactions and other important information.

Financial fraud investigation, risk detection and assessment are essential for financial institutions and regulated entities. This topic is constantly receiving significant attention from various stakeholders, including financial institutions and regulators, investors or researchers. The maximum level of decision and the removal of uncertainty in estimating the probability of fraud are essential to ensure financial stability, assess risk and minimize possible financial losses. Artificial intelligence techniques have proven to be effective solutions and deserve attention, especially if combined with the experience of the human factor.

Proactive fraud prevention through risk management policy, i.e. the act of discouraging fraud by eliminating causation and factors that allow fraud to be committed, is essential. Fraud prevention is achieved by improving organizational procedures and processes, and by developing effective risk management for all entities. Eliminating the factors that lead to fraud will increase investor confidence and help the sustainable development of non-bank financial markets.

Valentin IONESCU,

General Director of the Insurance and Reinsurance Sector

Synthesis

Tensions in the non-bank financial markets generated by the COVID-19 pandemic crisis eased in 2021, amid positive expectations about the success of global vaccination campaigns and favorable economic recovery prospects, supported by local and European public policies.

However, optimism about the economic recovery and its rapid incorporation into the prices of financial assets has led to the risk of a different evolution of financial markets from the economic fundamentals, which can generate speculative bubbles and lead to increased systemic risk.

The COVID-19 pandemic severely affected economies around the world, with International Monetary Fund (IMF) estimates from April 2021 indicating a decline in global gross domestic product (GDP) of -3.3%. The advanced economies were the most affected, registering a decrease of -4.7%, while the emerging and developing economies deteriorated by -2.2%. However, the global economy has weathered the shock better than originally anticipated. In the second half of 2020, most countries saw significant recoveries, ending 2020 with lower-than-expected GDP declines, mainly due to unprecedented fiscal and monetary stimulus measures. Against the background of optimistic developments, estimates of the decline in global GDP have improved, in parallel with a growing revision of forecasts for 2021.

Fiscal measures to support economies doubled by a decline in revenues following the GDP contraction have had a strong impact on fiscal deficits. Globally, the fiscal stimulus from the beginning of the pandemic to April 2021 totaled USD 16 trillion, representing 15.3% of global GDP. Of these, governments of advanced economies adopted most incentives (88%). At the beginning of the pandemic, most European countries were in a period of reducing government debt and deficits, so they had ample room for fiscal maneuver to support their economies. Significant incentives as a percentage of GDP were also provided by Italy (44%), Germany (39%), the United Kingdom (32%), France (23%) and Spain (22%). Emerging and developing countries have had the capacity to provide fiscal incentives in much lower shares of GDP, the vast majority of which are below 10%, in the context of lower administrative capacity. Romania has adopted fiscal incentives totaling USD 16 billion, representing 6.6% of GDP, amid a significantly lower level of indebtedness than in Europe, but whose accelerated dynamics could have created some financing problems. For the time being, however, Romania has had no difficulty in securing financing for deficits, with interest rates and the exchange rate remaining relatively stable.

According to IMF estimates, the global economy will grow by 6% in 2021 and 4.4% in 2022. It is estimated that there will be sharp differences between countries in the speed of the economy's return to pre-pandemic values, according to several factors, the most important of which are: the speed of vaccine penetration, the existence and effectiveness of economic support policies, as well as structural factors, specific to each country, such as tourism dependence.

At the local level, the COVID-19 crisis had a sudden and severe impact on GDP, but later recovered from the loss in a sustained manner. Thus, if during the crisis of 2008 the minimum was reached after 8 quarters, in the COVID-19 crisis the minimum was reached after only a quarter from the beginning, the economic recovery in the 3rd and 4th quarters of 2020 being significant. The labor market suffered a sudden shock because of the pandemic, but on a small scale, the number of unemployed in December 2020 being 296,000 people, 38,000 more than in December 2019. The government debt stock increased by 30% in 2020, well above the average of recent years (7-8%). Unlike in recent years, when the dynamics of government debt were influenced by domestic creditors, 60% of the increase recorded in 2020 is determined by external creditors, increasing Romania's vulnerability to foreign capital flows, which could be reversed under changes in interest rates on international markets or changes in the risk appetite of international investors. Government securities account for 86% of government debt. Of these, 13% were held by Pillar II and Pillar III pension funds.

International institutions and the National Commission for Strategy and Prognosis (NCSP) forecast a recovery of the Romanian economy in 2021 and 2022. IMF estimates the highest real GDP growth in 2021, of 6%, while the European Commission forecasts the lowest increase of 3.8%. NCSP estimates a GDP growth of 5% in 2021. Estimates for 2022 are between 4 and 4.8%. It is important to note that the forecasts are based on the hypothesis of a moderation of the COVID-19 pandemic due to the appearance of vaccines. These predictions may not come true if mutations not covered by current vaccines occur or in the event of a potential failure of the vaccination campaign.

Analyses by the European Systemic Risk Board (ESRB) on the impact of fiscal support measures on financial stability showed that in the first phase of the pandemic, a liquidity crisis was averted and the financial system continued to operate. The financial system has benefited from fiscal support programs as well as accommodative monetary policy. Up to a third of new bank loans to companies were based on fiscal measures related to the COVID-19 crisis, and prompt government action was particularly important to mitigate the impact of the crisis on businesses and households. Non-performing loans grew moderately and, in general, the contagion from the real economy to the financial system was kept under control. However, the longer the crisis lasts and the slower the economic recovery, the greater the risk that losses in the non-financial sector will spread to the financial sector.

Pandemic management efforts have triggered a series of recovery and support measures. In the European Union, the Recovery and Resilience Mechanism makes EUR 672.5 billion available to Member States in the form of loans and grants to support reforms and investments needed in the wake of the pandemic's negative effects, with the aim of making EU economies and companies more sustainable, resilient and better prepared for the challenges and opportunities of accelerated environmental and digital transitions. In the capital market, the "Capital Markets Recovery Package" has been prioritized to facilitate access to finance for EU firms, especially SMEs. The EU has also agreed to a new "EU recovery prospectus", which will be applied until December 31, 2022, to enable issuers to increase the additional equity needed to overcome the pandemic crisis. There have also been legislative changes to remove regulatory barriers to securitizing non-performing exposures by aligning non-performing exposures with international standards and ensuring their prudential soundness, allowing start-up banks to use risk-based modeling practices.

After tripling volatility in the first quarter of 2020, the level of systemic stress in the financial markets (measured by the CISS indicator) continued to drop, especially as a result of measures taken by the European Central Bank to stimulate liquidity, helping to ease investment climate. In the first quarter of 2021, the CISS indicator continued its downward trend. Optimism about the prospects for economic recovery has generated an exuberance on the financial markets, increasing the risk of non-correlation of market price levels with economic fundamentals and overvaluation. In this context, the emergence and spread of potential internal or external shocks can destabilize financial markets, with the possibility of severe corrections. The significant return of stock markets and the value of indices of credit financial instruments, which reached pre-crisis levels in all segments, contrast with the deteriorating economic fundamentals. Thus, the main risk for EU financial markets is that this decoupling will lead to a reversal of investor risk assessment and a sudden market correction. The investment fund industry at European level expanded in the second half of 2020, following the significant capital outflows induced by the initial shock of COVID-19, the bond funds registering the highest capital inflows and obtaining higher returns than equity funds. In the second half of 2020, activity in the primary markets improved, increasing the financing of non-financial companies.

The report on the financial stability of the EU insurance and pension markets, prepared by the European Insurance and Occupational Pensions Authority (EIOPA), shows that investments by European insurance companies have been negatively affected by the volatility of financial markets in the first half of 2020., while the extended period with extremely low returns intensifies the negative perspectives on the investment portfolio of the companies from the point of view of the reinvestment risk. In addition, the risk of deterioration in companies 'credit ratings affects the market value of insurance companies' corporate bonds, and deteriorating macroeconomic conditions could lower insurance demand, while increasing the risk of termination. However, the capital reserves of insurance companies were solid at the end of 2019 and proved robust at the time of the pandemic, deteriorating slightly in the first quarter of 2020, but resuming their upward trend in the second quarter of 2020, life insurance being the most affected. In the context of a potential waiver of support measures implemented by governments, a deterioration in insurers' balance sheets in 2021 is still possible, driven by further increases in liabilities, concomitantly with a further drop in the value of insurance companies' assets. Furthermore, it is important for insurance companies to act in order to maintain robust capital positions, while protecting policyholders and beneficiaries.

At national level, the macroeconomic risk remains relatively high. Although it is dropping, and indicators of economic activity and employment have improved, the macroeconomic framework remains fragile and depends on the success of local vaccination campaigns and a healthy recovery of economic sectors. At the same time, in the medium and long term, strategic objectives at European level aimed at the environmental sustainability of economies and at the acceleration of digitalization may have direct implications for certain sectors or industries for which the transition to a green economy may be more difficult to implement in a vulnerable context. Market risk also remains high, following the accelerated growth of the local financial market and the interconnections with foreign markets. Thus, the speed of transmitting potential shocks can be increased, with the possibility of abrupt corrections if factors appear that contradict the optimistic expectations regarding the economic recovery.

Most public policies implemented by European states have helped to avoid a deep financial crisis and to maintain credit flows towards the economy. However, economic prospects and projections remain uncertain and sometimes contradictory, while latent vulnerabilities occur in several economic sectors and geographical areas. In the first quarter of 2021, there was an increase in financial markets over economic fundamentals, given that the decoupling of financial markets from economic fundamentals can generate speculative bubbles and lead to increased systemic risk. However, the level of stress in the financial system decreased and returned to the levels considered normal, according to the OFR FSI financial stress index. In addition, in the first quarter of 2021, as a result of an upward trend in stock market indices, capital markets entered a regime of low volatility.

The network of exposures of the entities from the non-bank financial markets shows that, in the case of all the three non-bank financial sectors supervised by the ASF, the main risk exposure is towards the Romanian state, through the sovereign bonds held in the portfolio. Thus, government securities are held in the investment portfolios of collective investment undertakings in a percentage of about 26%, in a percentage of 67% they are found in the investment structure of private pension funds, and insurance companies have invested 42% of their assets in government securities.

In the sovereign bond market, the **contagion** between government bond yields rose sharply and intensified in the first quarter of 2020, in February and March, surpassing in speed previous episodes of contagion spread between European economies. The contagion index for government securities increased simultaneously 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 securities, but also in the context of the measures taken by the European Central Bank for increasing market liquidity. From the point of view of the net contagion, respectively the difference between the contagion received and the contagion transmitted, the calculations showed that Romania receives on average 30% contagion from other European countries.

The **stability indicator for non-bank financial markets**, estimated at a monthly frequency, useful for studying the current evolution of non-bank financial intermediation by taking into account the dependence between the three sectors, shows that tensions in the insurance market, private pension funds market and capital continued for about a year since the beginning of the pandemic, the indicator returning to positive territory in April 2021.

The estimate of the **capital market balance level** (unobservable, latent variable) showed that both the STOXX600 index (proxy for the European capital market) and the Romanian capital market registered an increase above the balance level, given that the monetary policy rate is low and the implicit expectations for economic growth in long-term bonds are low. Capital market growth was significant in the first quarter and decoupled from economic fundamentals, as prices of traded financial instruments already had optimistic expectations about the prospects for macroeconomic recovery supported by broad public policies, as well as the success of pandemic vaccination campaigns. The estimates made until March 31, 2021 do not indicate that the capital market is in a speculative bubble, and the simulations made on the Romanian capital market show a reduction in the uncertainties generated by the shocks of economic uncertainty.

For the **local stock market**, in the medium and long term, the most important risk is that of stagnation at the current level of development (from the perspective of capitalization, liquidity, degree of diversification of issuers and instruments, etc.), which could have a negative impact on other components of the financial market (e.g.

insurers, pension funds, collective investment undertakings) and the economy as a whole (limited access to market financing as an alternative to bank financing). The high volatility triggered by the COVID-19 pandemic in 2020 began to decline significantly, returning to pre-crisis levels. After the Bucharest Stock Exchange obtained the status of secondary emerging market from FTSE Russell, the liquidity of the local capital market improved.

Investment risks, credit risk and liquidity risk remain relevant for the **collective investment undertakings market.** They are generally properly managed throughout the market, by diversifying and complying with the investment policies assumed in the prospectuses of the funds. The low complexity of the market means that, for the time being, these risks are not amplified by the use of financial leverage, complex financial instruments (e.g. derivatives, structured, bonds resulting from securitization, etc.) not having a significant share in total assets (3.75% of GDP at the end of 2020). The level of concentration of storage services remains high in 2020, for the same structural reasons as in the case of private pension funds.

The main risk identified by the Investor Compensation Fund (FCI) was that it did not have sufficient financial resources to compensate investors in the event of a new case of compensation. At the same time, the Fund must ensure a balance between its payment obligations (clearing capacity and current liabilities resulting from the operation of the Fund) and the ability of members to contribute to the Fund's resources, a new hypothetical clearing situation increasing the risk to ICF stability. The legal framework governing the work of the ICF is currently being revised to ensure, inter alia, a sustainable and at the same time equitable way of financing it in relation to its members.

The high degree of concentration remains a vulnerability for the Romanian insurance market, both in terms of exposure by insurance classes and in terms of significant market shares held by a small number of insurance companies. The highest values of underwriting remain recorded by car insurance, which represents approximately 71% of the non-life insurance market. A very high degree of concentration persists in the market of compulsory motor third party liability insurance (MTPL) and guarantee insurance. The first two insurers, namely the companies City Insurance and Euroins Romania, accumulated approximately 75% of the MTPL insurance portfolio in Romania in 2020. These two companies registered significant increases in market shares, and currently, the City Insurance company has the largest market share, respectively 24.9% in 2020, increasing by almost 143% compared to 2016. At the same time, the City Insurance Company held over 45% of the insurance market at the end of last year.

The conduct risk remained at a high level during 2020, amid the increase in the total number of petitions registered with the Financial Supervisory Authority compared to the previous year. Considering the latest evolutions and trends on the insurance market and the evolution of the main indicators of the companies City Insurance and Euroins Romania, the Financial Supervisory Authority intensified the supervision and control activity for the two companies, finding several types of deficiencies, for which they were sanctioned.

In the case of City Insurance, following the recent investigations, major deficiencies were identified in its activity, given that most of the cash of City Insurance were reported by the company as being registered in a bank account which ASF acknowledged that it did not exist and that the company City Insurance did not have contractual relations with the respective bank. Thus, the solvency and liquidity indicators of City Insurance have been severely distorted since 2017, but for the indicators for 2020, ASF has made adjustments to reflect the lack

of cash. The recalculation of these indicators resulted in **negative values of eligible own funds intended to cover capital requirements** both on December 31, 2020 and March 31, 2021, as well as a **need for liquid assets in the total amount of about RON 845 million** (on March 31, 2021) **to cover the gross reserve of approved damage** (short-term obligations of the company towards the insured). Considering the special gravity of those found, ASF applied several sanctions¹ to City Insurance, among which we mention: sanctioning the members of the management with fines in the amount of Lei 8 million and complementary withdrawal of the approvals granted by ASF, as well as the designation of the Guarantee Fund of the Insured as a temporary administrator of the insurer. In this context and considering the large market share held by the company City Insurance, there is an increase in **solvency and liquidity risks** on the Romanian insurance market.

In the context of the insurance market concentration rise, in the event of materialization of certain risks, ASF has identified a negative impact on industry, consumers, insurance supply and financial resources of the Insured Guarantee Fund.

For the **private pension system**, the risks regarding the stability and good functioning of the pension funds are kept at low levels, considering the mechanism of implementation and functioning of the Romanian private pension system of the type-defined contributions with absolute and relative guarantees, reducing solvency risk to a minimum. Through prudent investment strategies and portfolio diversification policies applied by fund managers, market risks are diminished. In addition, the legislative framework governing Pillar II and Pillar III provides for investment limits by asset and issuer classes, while also helping to reduce high risks and exposures. The structure of the private pension system in Romania provides several mechanisms for protecting the rights of participants, of which the most relevant are: separation of assets between administrators and funds, active involvement of depositaries in additional checks and validations, establishment of technical provisions by administrators, as well as reporting requirements and increased transparency. To these the Private Pension System Rights Guarantee Fund (FGDSSP) is added, with the fundamental purpose of guaranteeing the rights of participants and beneficiaries acquired within the private pension system, whose stability is maintained, the risks being low.

As it is still in an accumulation stage, a number of other risks relevant to the Romanian private pension system (e.g. the risk of a possible insufficient replacement rate of the income from the active period with that of the private pension or liquidity risk) are not applicable for the time being due to the still low share of participants close to retirement age.

The impact of the COVID-19 crisis on private pension funds was low in 2020, with managers coping well with the shock and continuing to deliver positive results for participants.

From the point of view of macroprudential oversight, the ASF has implemented European Systemic Risk Council Recommendation ESRB/2020/15 on the extension of dividend distribution restrictions to insurance and financial investment service companies, where such distributions would affect certain conservative capital thresholds.

¹ https://www.asfromania.ro/ro/a/2091/sanc%C8%9Biuni-%C8%99i-m%C4%83suri-aplicate-de-consiliul-autorit%C4%83%C8%9Bii-de-supraveghere-financiar%C4%83

Analysis of the local and international macroeconomic and financial context

The year 2020 was marked by the outbreak of the coronavirus pandemic and its global effects. The new coronavirus was initially detected in China in late 2019. It spread rapidly, but Chinese authorities imposed severe restrictions, managing to control the spread of the virus. China was severely affected economically in the first half of the year, but recovered quickly, ending 2020 on the rise.

The rest of the countries have been in shock since the first quarter, but in the second quarter there have been historic declines in GDP. In the second half of 2020, most countries saw significant recoveries, ending the year with lower-than-expected GDP drops, mainly due to unprecedented fiscal and monetary stimulus measures.

The advanced economies recorded the strongest declines, but it is estimated that the emerging ones will experience effects for a longer period. Thus, most advanced economies are expected to reach pre-pandemic levels in 2022, while most emerging economies in 2023.

Fiscal measures to support the economy, coupled with declining revenues as a result of GDP contraction, have had a strong impact on fiscal deficits. At the beginning of the pandemic, most European countries were in a period of reducing government debt and deficits, so they had ample room for fiscal maneuver to support their economies. Emerging countries had less room for maneuver, so they were able to take fewer measures to support their economies.

The labor market has been affected to a lesser extent than GDP. The shock was just as sudden, but the magnitude was much smaller than in the 2008 crisis. The labor market began to recover from the second half of 2020, amid the economic recovery.

Central banks have supported the economy through lending policies (interest rate cuts or asset purchases). For the time being, the central banks of the advanced economies intend to maintain the monetary easing policy, but some signals have begun to appear that could lead to an adjustment of the current policy, such as rising long-term interest rates in the US or rising inflation in the Euro area. Such an adjustment of the monetary policies of advanced economies could lead to capital withdrawals from emerging economies, which would pose particular problems for them in terms of financing fiscal and current account deficits. Romania is in such a situation, an increasing part of the budget deficit being financed from external sources. On the other hand, unlike other emerging countries, Romania is a member of the European Union, with the possibility of accessing European funds. The latter were an important source of financing the current account deficit in 2020.

According to IMF analysts, the global economy will grow by 6% in 2021 and 4.4% in 2022. However, it is estimated that there will be sharp differences between countries in the speed of the economy's return to pre-pandemic values. The key elements of return dynamics are:

- The penetration rate of vaccines and their efficiency in the face of new mutations in the virus;
- The ability of governments to support economies through fiscal policies;
- Structural factors, specific to each economy.

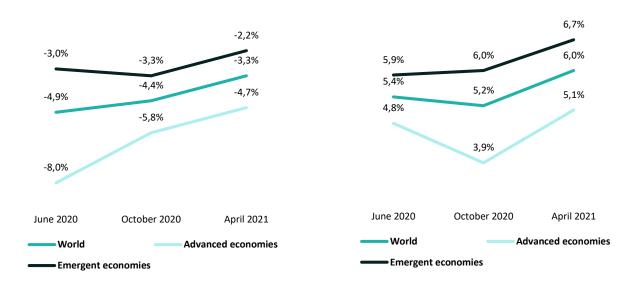
1.1. International macroeconomic and financial developments

Evolutions of economic growth

Economies around the world have been severely affected by the COVID-19 pandemic, with global GDP declining by -3.3%, according to IMF estimates from April 2021. The most affected were advanced economies, which fell by -4.7%, while emerging and developing economies fell by -2.2%.

However, the global economy coped better than originally expected: over the year, estimates of declining global GDP improved, in line with a growing revision of forecasts for 2021. These revisions came in the context of the relaxation of the restrictions imposed by governments due to the slowdown in the spread of the virus in the summer of 2020, the adaptation of the behavior of companies and consumers to the new realities, but also the fiscal and monetary relaxation policies. The recovery of economies has slowed in the last quarter, amid new waves of the pandemics, which have led to restrictions tightening.

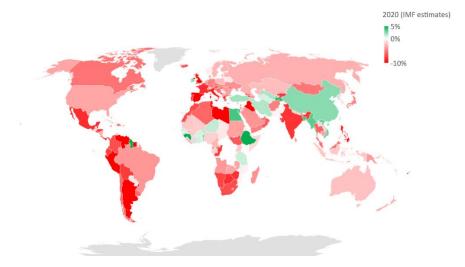
Figure 1 Growing revision of IMF estimates with regard to GDP variation for 2020 (left) and forecasts for 2021 (right)



Source: IMF, World Economic Outlook June 2020, October 2020, April 2021

In structure, economies were affected differently: Asian economies performed better, while European and Latin American states were most severely affected (Figure 2).

Figure 2 Evolution of real GDP, 2020 compared to 2019



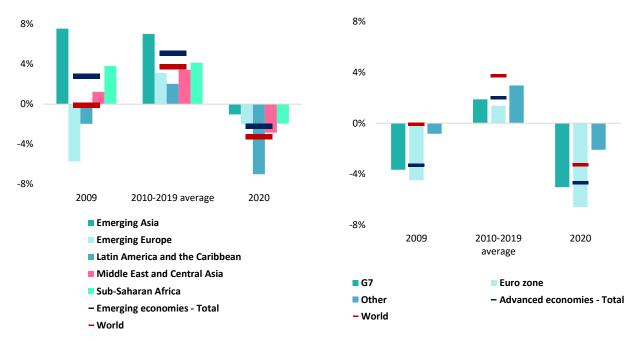
Source: IMF

The most affected were tourism-dependent countries, commodity exporters and countries whose governments did not have room for maneuver in terms of easing fiscal and monetary policies.

A special case is that of China, the country where the new coronavirus was first detected. China was initially severely affected, but has recovered economically, ending 2020 with an increase of 2.3%. Other economies that ended 2020 in increase were Ireland, Turkey, Vietnam, Iran and Egypt.

Figure 3 Evolution of GDP - emerging economies

Figure 4 Evolution of GDP - advanced economies



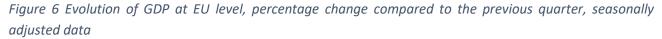
Source: IMF

At the level of the European Union, the largest drops were registered by Spain (-10.8%), Italy (-8.9%), Greece (-8.2%) and France (-8.1%). At the opposite pole was Ireland, the only EU country to end the year on the rise (3.4%), followed by Lithuania (-0.8%), Luxembourg (-2.3%), Denmark (-2.7%) and Poland (-2.7%).

2020 3.4% -10.8% -2.7% -5.0% -3.9%

Figure 5 Evolution of GDP in the European Union in 2020 compared to 2019

Source: Eurostat





During 2020, EU countries had a strong correlated evolution, registering moderate drops in the first quarter, followed by strong drops in the second quarter, only to subsequently register significant rises in the third quarter. During the last quarter of the year, the evolutions were mixed, with variations between -4.4% (Ireland) and 4.6% (Romania). In terms of structure, the largest drops in the second quarter were recorded by Spain (-17.8%), Croatia (-15.1%) and Hungary (-14.5%). At the opposite pole were Ireland (-1.8%), as well as a number of Scandinavian (Finland, Denmark) and Baltic countries (Estonia, Lithuania, Latvia).

In the first quarter of 2021, at the aggregate level, GDP had a constant evolution, both in the Euro area and in the EU27. About half of the EU countries registered slight or moderate drops compared to the previous quarter (seasonally adjusted data), the most severe corrections being reported by Portugal (-3.3%), Slovakia (-2%) and Germany (-1.8%). The highest increases were registered in Ireland (7.8%), Croatia (5.8%), Estonia (4.8%) and Greece (4.4%), followed by Romania, with 2.8%.

From the perspective of the return of GDP to pre-crisis values, most countries in the European Union register in the first quarter of 2021 values below those in the fourth quarter of 2019 (using seasonally adjusted data), which shows that those states have not yet recovered the losses caused by the current health crisis. Five countries registered positive values: Ireland (7.7%), Estonia (3.4%), Luxembourg (3.2%), Lithuania (0.8%) and Romania (0.8%). The largest drops were registered by Spain (-9.4%), Portugal (-9.2%), Austria (-6.9%) and Italy (-6.4%).

Table 1 Evolution of GDP at EU level, percentage change compared to the previous quarter, seasonally adjusted data

	2019			2020				2021	
	T1	T2	T3	T4	T1	T2	Т3	T4	T1
Euro area	0.4	0.2	0.2	0.1	-3.8	-11.5	12.6	-0.6	-0.3
UE27	0.5	0.3	0.3	0.1	-3.4	-11.1	11.7	-0.4	-0.1
Bulgaria	1.3	0.6	0.6	0.6	0.4	-10.1	4.3	2.2	2.5
Czech Republic	0.6	0.5	0.5	0.4	-3.1	-8.7	6.9	0.6	-0.3
Germany	0.6	-0.5	0.3	0	-2	-9.7	8.7	0.5	-1.8
Ireland	-1.3	5	-0.4	4.2	-4.5	-1.8	11.5	-4.4	7.8
Spain	0.5	0.4	0.4	0.4	-5.4	-17.8	17.1	0	-0.5
France	0.6	0.6	0.2	-0.3	-5.9	-13.2	18.5	-1.5	-0.1
Italy	0	0.2	0.1	-0.4	-5.7	-12.9	15.9	-1.8	0.1
Hungary	1.7	0.7	0.3	1.4	-0.4	-14.5	9.7	2.8	2
Poland	1.8	0.8	1.1	0.2	-0.2	-8.9	7.5	-0.5	1.1
Romania	1.7	0.7	0.4	0.9	0.7	-11.8	5.5	4.6	2.8

Source: Eurostat

Forecasts of economic growth

Economies have coped well with the shock of COVID-19, mainly due to fiscal and monetary policies adopted by governments. According to IMF estimates, the global economy will grow by 6% in 2021 and 4.4% in 2022. However, it is estimated that there will be sharp differences between countries in the speed of the economy's return to pre-pandemic values.

According to IMF analyses, the most important factors that will influence the recovery of savings are:

- Vaccine penetration rate countries have different access to vaccines, with developed economies having a major advantage in this regard. At the same time, the emergence of new strains of the virus that are not covered by current vaccines could invalidate current predictions.
- **Economic support policies** governments are expected to continue their economic support policies. However, some governments may run out of fiscal space, which could affect returns. At the same time, a tightening of monetary policy in advanced economies, followed by an increase in real interest rates, could lead to capital outflows from emerging economies, which could have serious financing difficulties.
- Structural factors, specific to each country, such as tourism dependence.

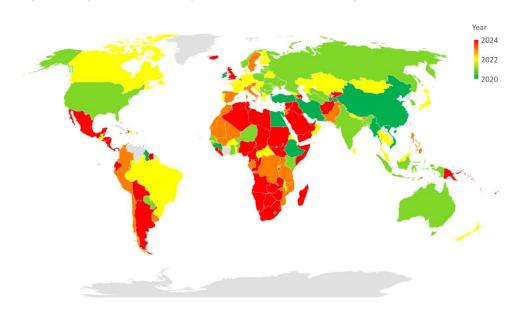


Figure 7 Year of return of the real GDP/capita indicator at the value of 2019

Source: IMF, ASF calculations

Most advanced economies are expected to reach pre-pandemic levels in 2022, with the exception of the US, which will reach this level in 2021. At the aggregate level, emerging and developing economies will recover in 2023, however, in terms of structure, there are pronounced differences between countries. Some economies, such as China, Turkey, Egypt and Ireland, have recorded rises since 2020.

At European level, it is estimated that most countries will reach a level of real GDP/capita before the pandemic in 2022. At EU level the exceptions are Spain and Italy, which will reach the respective level in 2023. At the same time, it is estimated that Great Britain will return to its pre-pandemic level in 2024.

Table 2 Economic growth forecasts

	Euro	European Commission			IMF		
	2020e	2021p	2022p	2020e	2021p	2022p	
EU	-6,3	3,7	3,9	-6,1	4,4	3,9	
Euro area	-6,8	3,8	3,8	-6,6	4,4	3,8	
Germany	-5,0	3,2	3,1	-4,9	3,6	3,4	
Spain	-11,0	5,6	5,3	-11,0	6,4	4,7	
France	-8,3	5,5	4,4	-8,2	5,8	4,2	
Italy	-8,8	3,4	3,5	-8,9	4,2	3,6	
Netherlands	-4,1	1,8	3,0	-3,8	3,5	3,0	
Bulgaria	-4,9	2,7	4,9	-3,8	4,4	4,4	
Hungary	-5,3	4,0	5,0	-5,0	4,3	5,9	
Poland	-2,8	3,1	5,1	-2,7	3,5	4,5	
Romania	-5,0	3,8	4,0	-3,9	6,0	4,8	

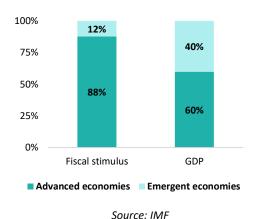
e = estimated
p = prognosis

Source: IMF, European Commission Winter Forecast

Fiscal measures adopted by governments

Globally, the fiscal stimulus from the beginning of the pandemic to April 2021 totaled USD 16 trillion, representing 15.3% of the global GDP.

Figure 8 Share of fiscal incentives



Although emerging and developing economies account for 40% of global GDP, most fiscal incentives (88%) have been adopted by governments of advanced economies. The ability of governments to continue to support economies through fiscal measures is considered essential by IMF analysts for further economic recovery in the near future. Countries whose governments have limited fiscal room for maneuver are expected to recover more heavily and suffer long-term effects.

Among the advanced countries, most fiscal incentives were adopted by the US, USD 5.838 billion, representing 28% of GDP, followed by Japan (USD 2.230 billion, 44% of GDP) and Germany (USD 1.476 billion, 39% of GDP). Significant

incentives as a percentage of GDP were also provided by Italy (44%), the United Kingdom (32%), France (23%) and Spain (22%).

Table 3 Fiscal incentives in G20 countries - advanced economies (left) and emerging economies (right)

	Billion USD	% of GDP
US	5.838	28%
Japan	2.230	44%
Germany	1.476	39%
EU *	1.361	11%
UK	878	32%
Italy	824	44%
France	604	23%
Canada	307	19%
Spain	281	22%
Australia	243	18%
South Korea	239	15%

	Billion USD	% of GDP
China	903	6%
India	228	8%
Brazil	215	15%
Russia	85	6%
Turkey	81	11%
Indonesia	57	5%
South Africa	30	10%
Argentine	23	6%
Saudi Arabia	21	3%
Mexico	20	2%

^{*} in addition to the governments of the member countries

Source: IMF

Among emerging countries, most fiscal incentives have been adopted by China (USD 903 billion, 6% of GDP), India (USD 228 billion, 8% of GDP) and Brazil (USD 215 billion, 15% of GDP). Emerging and developing countries stand out with much lower shares of fiscal incentives in GDP, the vast majority of which are below 10%. Romania has adopted fiscal incentives totaling USD 16 billion, representing 6.6% of GDP.

In addition to limited resources, emerging countries also face a problem with the efficiency of using fiscal measures to support their economies, as they have traditionally had a lower fiscal multiplier as a result of both lower administrative capacity and higher level of corruption.

Budget deficit and government debt at European level

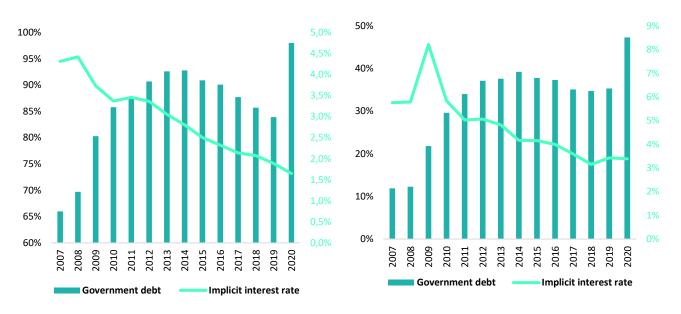
As a result of measures to support the economy, but also of declining revenues, the need for funding from European governments has increased sharply and significantly. Most European countries were in the process of reducing their government debt as a percentage of GDP, which gave them more room for maneuver. In contrast, Romania is already in a process of some fiscal easing, which could have raised some issues. For the time being, however, Romania has had no difficulty in securing deficit financing, with interest rates and exchange rates remaining stable.

In the case of Romania, the level of indebtedness is significantly lower than the European one, but the accelerated dynamics may pose some financing problems.

The default interest rate² in the Euro area has been on a downward trend in recent years, falling from 4.3% in 2007 to 1.6% in 2020. In Romania, the default interest rate has stabilized in the last three years around 3.4%, after falling from values above 5% before 2010.

² The default interest was calculated according to the IMF methodology by reporting the interest paid by the government during a year to the average stock of public debt (arithmetic mean of the values recorded at the end and beginning of the year, respectively)

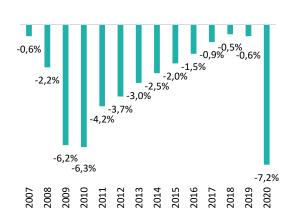
Figure 9 Government debt stock (% of GDP) and default interest rate in the Euro area (left) and in Romania (right)

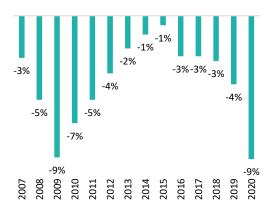


Source: Eurostat, ASF calculations

From the perspective of the need for funding, the COVID-19 pandemic was a shock. Most European countries were in the process of reducing the need for funding, but Romania was one of the exceptions.

Figure 10 Need for financing (% of GDP), Euro area (left) and Romania (right)





Source: Eurostat

Inflation at European level

Throughout 2020, inflation at European level had a downward trend amid declining international oil prices, but also high agricultural production, which influenced food products inflation.



Figure 11 Inflation rate (HICP) and its forecast for the Euro area

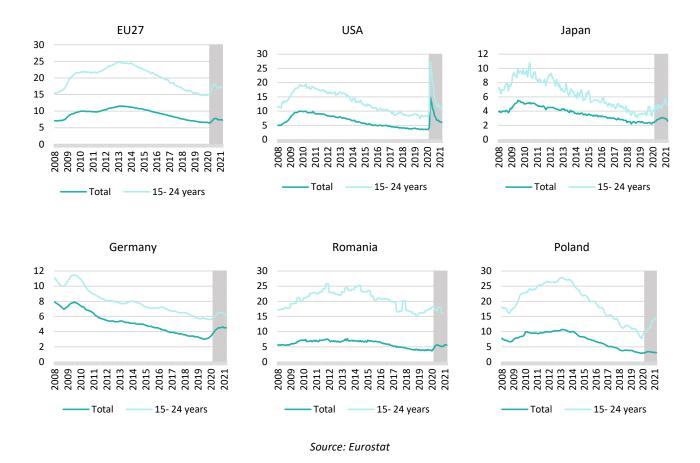
In the first five months of 2021, inflation at European level registered a slight increase, with more and more signals regarding the accumulation of inflationary pressures. These were also generated, in part, by fiscal and monetary measures to support savings. It remains to be seen whether these inflationary trends are transient, representing a temporary shock generated by rising demand due to the reopening of economies, or are structural, with a long-term impact. The European Central Bank estimates inflation to moderate in 2021 and 2022.

Labor market

The labor market experienced a sudden shock at the beginning of the COVID-19 pandemic, but its scale was limited. For comparison, in 2008 the shock was slower, but the magnitude was much higher. Most economies recovered in the second half of the year, following the initial shock in the second quarter of 2020.

Unemployment among young people remains higher than that recorded for the rest of the age groups. Although young people lost more jobs during the pandemic, unemployment rates for the two age groups show no pronounced divergences as a result of the base effect.

Figure 12 Unemployment rate 2008 - March 2021, seasonally adjusted data (gray: pandemic period)



Monetary policy

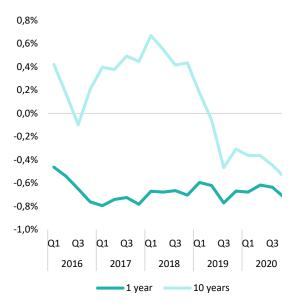
The US Federal Reserve (Fed) reacted quickly to the COVID-19 pandemic, lowering monetary policy interest rates from 1.45% to 0.05%. According to statements, the Fed intends to keep interest rates low to help the US economy. However, long-term interest rates have begun to rise, which could put pressure on monetary policy interest rates in the future as well.

The European Central Bank has maintained monetary policy rates at pre-pandemic levels. In addition, it has continued and expanded a number of asset purchase programs designed to inject liquidity into the market, thus stimulating lending. As a result, government bond yields have been in negative territory since before the pandemic began. However, in the first months of 2021, inflation in the Euro area rose slightly, which could put pressure on interest rates in the future.

Figure 13 US Treasury yield curve



Figure 14 Yields on Euro area government bonds



Source: Eurostat

Source: Federal Reserve

1.2. Local macroeconomic and financial developments

Economic growth

The COVID-19 crisis had a sudden and severe impact on Romania's GDP, but the local economy later sustainably recovered from the loss. Thus, if during the crisis of 2008 the minimum was reached after 8 quarters, in the COVID crisis the minimum was reached after only a quarter from the beginning, and the economic recovery in the third and fourth quarters of 2020 was significant and culminated in a return to pre-crisis level in the first quarter of 2021, after only three quarters of lower values.

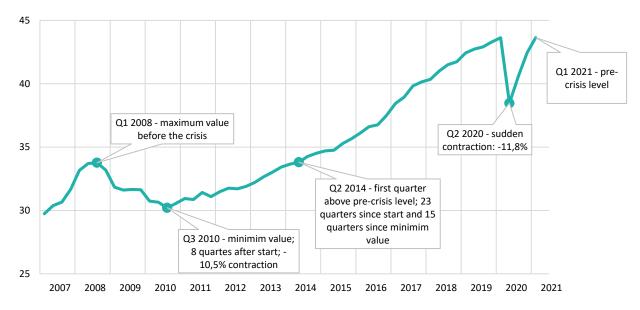


Figure 15 Quarterly GDP dynamics, seasonally adjusted series, billion lei, average prices of 2000

Source: INS, ASF calculations

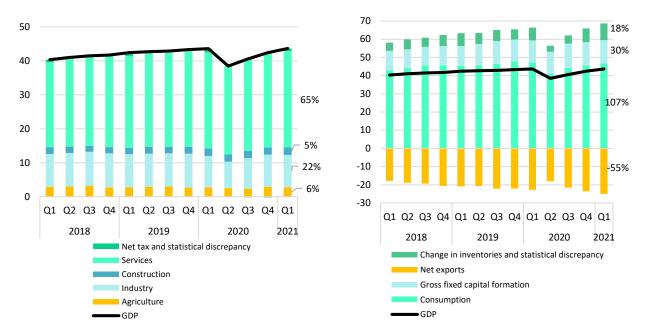
In terms of resources, the largest component of GDP is the services sector, with a share of 65% (Q1 2021). It registered a real annual decrease of -5.9% in Q2 2020, but returned to values close to those of 2019 in Q3 and Q4 2020, with real annual decreases of -2% and -0.4%, respectively. In the first quarter of 2021, the services sector exceeded the value of the corresponding quarter of 2020, registering an increase of 0.3%.

The construction sector was the only one to record increases during the COVID-19 pandemic. It represents 5% of GDP (Q1 2021) and recorded real annual increases of 8.4%, 10.4% and 8.3% respectively in the last three quarters of 2020. In Q1 2021, the construction sector had an approximate value equal to that of the first quarter of 2020, registering a slight drop of 0.1%.

Industry accounts for 22% of GDP (Q1 2021) and recorded the largest contraction in Q2 2020, the first quarter of the pandemic. The sector recorded significant returns in the last two quarters of 2020, but remained at significantly lower values than in the corresponding quarters of 2019 (with a drop of -7.2% in Q3 and -4.6% in Q4, respectively). However, the sector recovered in Q1 2021, up 2.6% from the pre-crisis period of 2020.

Agriculture represents 6% of GDP (Q1 2021). This sector recorded significant annual contractions in real terms in Q2 and Q3 2020 (-13.3% and -23.2%, respectively), but recorded an increase of 6.6% in Q4 2020 compared to Q4 2019. In 2021, in the first quarter, the sector grew by 1.5% compared to the corresponding quarter of 2020.

Figure 16 GDP dynamics by main components (resources - left, uses - right), seasonally adjusted series, billion lei, average prices of 2000



Source: INS, ASF calculations

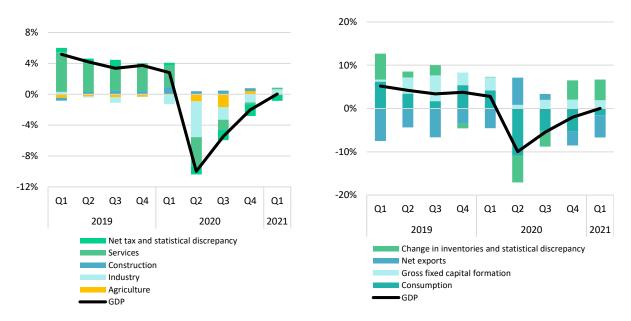
In terms of uses, final consumption contracted severely in real terms by -10.2% in Q2 2020 compared to Q2 2019. Final consumption remained significantly lower in the last two quarters of 2020 compared to the same period of the year 2019, registering decreases of -4.8% in Q3, respectively -4.7% in Q4, recovering to some extent in Q1 2021 (-1.4%). The evolution of final consumption strongly influences the dynamics of GDP, having a share of 107% in GDP (Q1 2021).

Net exports represent 55% of GDP (Q1 2021), registering pronounced drops in Q2 2020 (-12.9%), followed, however, by returns in the last two quarters (-2.6%, respectively + 6.5%). In Q1 2021, net exports registered a significant rise of 9.8% compared to the corresponding quarter of the previous year.

Gross fixed capital formation represents 30% of GDP (Q1 2021) and registered significant real increases in all four quarters of 2020 (11.9% in the first quarter, 3.5% in the second, 6.1% in Q3, respectively 7.8% in the last quarter), as well as in the first quarter of 2021 (7%).

In terms of contributions to real GDP variation, the most important were, on the resources side, the industrial sector, followed by the services sector. Although the share of industry in GDP is significantly lower than that of services, the sector's contribution to GDP dynamics was higher due to stronger contraction. On the uses side, the largest contributions were final consumption and inventory variation. Gross fixed capital formation made a positive contribution.

Figure 17 Contribution to the GDP variation of its main components (resources - left, uses - right), seasonally adjusted series, billion lei, average prices of 2000



Source: INS, ASF calculations

Forecasts for economic growth

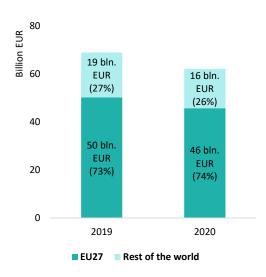
The IMF, the EC and the NCSP forecast a recovery of the Romanian economy in 2021 and 2022. The IMF estimates the largest increase in real GDP in 2021, of 6%, while the European Commission and the NCSP forecast similar values of 5.1%, respectively 5%. The three institutions have similar estimates for 2022, of 4.8 - 4.9%. It is important to note that the predictions of the three are based on the hypothesis of tempering the COVID-19 pandemic due to the appearance of vaccines. These predictions may not come true if mutations not covered by current vaccines occur or if the vaccination campaign fails.

		IMF		EC		NCSP	
	2020	2021	2022	2021	2022	2021	2022
Real GDP forecast	-3.9	6	4.8	5.1	4.9	5	4.8

Source: IMF - World Economic Outlook, EC - spring forecast 2021, NCSP - spring forecast 2021

Foreign trade

Figure 18 Evolution of exports by destination



Sursa: INS, calcule ASF

Romania's exports registered a contraction of -9.9% in 2020. The contraction of exports to the main partner, the European Union, was -8.9%.

The product groups that contributed the most to the decrease in the volume of exports were "Machinery, appliances and electrical equipment; sound and video recording or reproducing apparatus "(decrease of -7.4%, contribution of -2.2%)," Means and materials of transport" (decrease of -7.7%, contribution of -1.4%), "Base metals and articles thereof" (decrease of -11.3%, contribution of -1%) and "Textiles and textile articles" (decrease of -17.7%, contribution of -1%).

By country of destination, the largest decreases were for exports to the United Kingdom (-20%), USA (-18%), Italy (-14%), Spain (-13%) and France (-12%).

Table 4 Evolution of Romania's exports by destination

	2019 (billion EUR)	2020 (billion EUR)	Share (2020)	Cumulated share (2020)	Drop in 2020
Total	69.0	62.2			-9.9%
Germany	15.5	14.1	23%	23%	-8.7%
Italy	7.8	6.7	11%	33%	-14.1%
France	4.8	4.2	7%	40%	-12.3%
Hungary	3.3	3.1	5%	45%	-6.8%
Poland	2.4	2.3	4%	49%	-4.7%
Bulgaria	2.4	2.3	4%	53%	-6.7%
Netherlands	2.1	2.2	4%	56%	4.2%
Turkey	2.2	2.1	3%	59%	-6.0%
UK	2.6	2.1	3%	63%	-19.6%
Czech Republic	2.2	1.9	3%	66%	-11.2%
Spain	2.1	1.8	3%	69%	-12.6%
Austria	1.5	1.5	2%	71%	-2.9%
Slovakia	1.5	1.3	2%	73%	-8.2%
Belgium	1.2	1.2	2%	75%	-0.8%
US	1.3	1.1	2%	77%	-17.9%
Republic of Moldova	1.2	1.0	2%	79%	-16.4%
China	0.8	0.8	1%	80%	9.4%
The Russian Federation	1.0	0.8	1%	81%	-19.4%
Serbia	0.9	0.7	1%	83%	-19.5%

Source: INS, ASF calculations

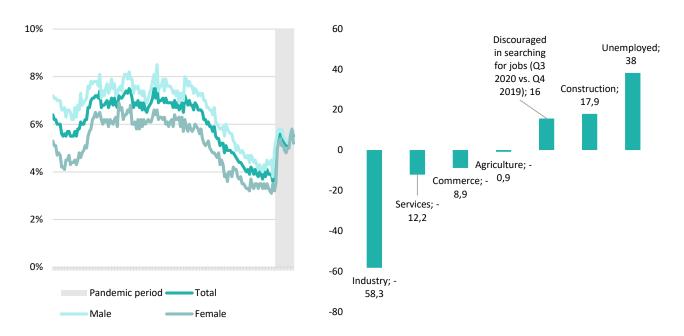
In 2020, imports also contracted, but less than exports (EUR 5.7 billion, representing 6.6%). Thus, the trade deficit deteriorated slightly, from EUR 17.3 billion to EUR 18.4 billion. By product groups, the most affected were "Mineral products", with a drop of -2.5 billion EUR, representing 34.4% of the value for 2019 and contributing with -2.8% to the decrease of -6, 6% of imports.

Labor market

The labor market has suffered a sudden shock as a result of the coronavirus pandemic, but its magnitude has been limited, at least by comparison with historical unemployment rates. Thus, in December 2020 there were 296,000 unemployed, 38,000 more than in December 2019. At the same time, during 2020, the number of people discouraged from finding a job increased by 45%, from 34,000 to 50,000 people.

Figure 19 Unemployment rate, seasonally adjusted Figure 20 Variation data Figure 20 Variation 2020 vs. Q4 2019 (tl

Figure 20 Variation in the number of employees, Q4 2020 vs. Q4 2019 (thousand people)



Source: INS, BNR, ASF calculations

From the point of view of the workforce, the most affected sector was that of industry, with a drop of -4.3%, especially the component of the manufacturing industry (-4.6%). In structure, the most affected manufacturing industry was textiles, clothing and leather, where the number of employees dropped by -14%, from 178 thousand to 154 thousand. The second most affected manufacturing industry was the automotive industry, with a decrease in the workforce of -5.4%, from 178 thousand to 169 thousand employees.

The construction sector registered the largest rise in the number of employees, 17.9 thousand, representing 4.5% of the 258 thousand employees at the end of 2019.

Within the services sector, the largest drops were registered in HoReCa and transport (-14.5 thousand, respectively -7.4 thousand employees), while the largest rises were registered in health and social welfare (13.6 thousand) and in information and communication technology (6.6 thousand employees).

NCSP forecasts a slight decrease in unemployment in 2021, to the value of 4.8%, followed by a return in 2022 to the pre-pandemic value (4%). The European Commission, in the spring forecast, estimates higher values, of 5.2% in 2021 and 4.8% in 2022.

Inflation

In Romania, inflation (measured by the CPI - consumer price index) decreased during 2020, from 3.6% in January to 2.06% in December. This was followed by a significant increase of almost 1% in the first quarter of 2021, to 3.05%.

In structure, the dynamics of the CPI in 2020 was influenced by the evolution of the "energy" component, which varied strongly over the analyzed period, in line with the international oil price. In the first months of 2021, the "energy" component determined a CPI increase, both due to the return of oil prices and due to the liberalization of the electricity market on January 1.

Food inflation declined sharply in the second half of 2020, a trend that continued in the first months of 2021, from over 5% in the first half to 1.59% in March 2021. This development is mainly due to a favorable production of vegetables and fruits at European level.

According to the "Inflation Report" published in May 2021, the National Bank of Romania anticipates 4% inflation in the second half of the year, followed by a return to the target range ($2.5\% \pm 1$ pp) in 2023.

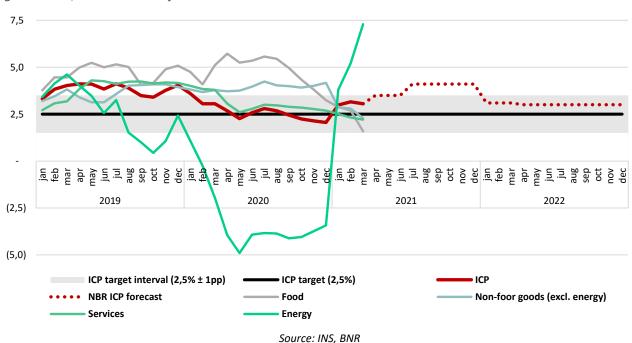


Figure 21 CPI, evolutions and forecast

Current account deficit and its financing

Figure 22 Current account evolution, EUR billion



Source: BNR

Romania has a growing current account deficit in recent years, reaching -11.4 billion EUR. From a financing perspective, the most important sources in recent years have been the capital account (in particular, capital transfers consisting mainly of European funds) and through the net flow of portfolio investments. The latter had significant values in 2020, including during the COVID-19 pandemic, totaling EUR 4.3 billion in the first quarter, EUR 2.73 billion in the second quarter, EUR 3 billion in the third and EUR 3.6 billion in the last quarter.

The significant share of portfolio investment flows in financing the current account deficit results in a potential vulnerability of the external balance in the face of interest

rate increases in advanced economies or in the face of a decrease in investors' risk appetite, which could lead to an outflow of this type of capital. In fact, in the first quarter of 2021, portfolio investments recorded net outflows of EUR 1.3 billion, offset by a decrease in reserve assets of EUR 2.2 billion.

Figure 23 Balance of payments

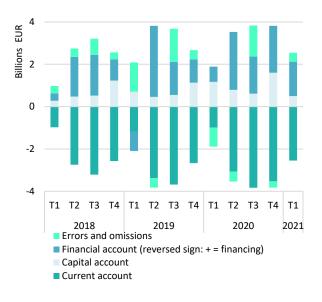
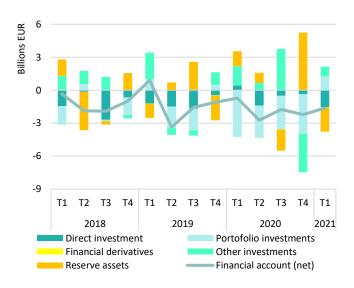


Figure 24 Structure of net flows of the financial account



Source: BNR, ASF calculations

At the same time, the importance of European funds in financing the current account deficit (flows accounted for in the capital account) emphasizes the need to continue or even accelerate the attraction of these funds by Romania.

The IMF, EC and NCSP forecast a slight reduction in the current account deficit in 2021 and 2022.

		IMF		EC		NCSP	
	2020	2021	2022	2021	2022	2021	2022
Current account deficit (% of GDP)	-5.2	-5	-4.7	-4.9	-4.6	-4.8	-4.5

Source: IMF - World Economic Outlook, EC - spring forecast 2021, NCSP - spring forecast 2021

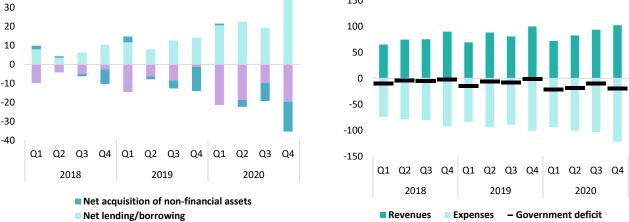
Budget deficit and its financing

The need for government funding increased in 2020, both in the context of the budget deficit and the acquisition of non-financial assets, both dynamics being strongly influenced by the COVID-19 pandemic.

Net debt increased in the second quarter of 2020 by 183%, in the third by 53%, and in the last quarter by 151% compared to the corresponding quarters of 2019.

Figure 25 Situation of government operations, billion Figure 26 Structure of the budget RON

40
30
150
20



Source: INS, ASF calculations

With the exception of the second quarter, quarterly government revenues increased in 2020 compared to the corresponding periods of 2019. Government expenditures grew at a faster pace, leading to an increase in the budget deficit.

From the onset of the pandemic to the present date (March 2020 - April 2021), the government has adopted a number of measures to support the economy:

additional health expenditures: 1% of GDP;

■ Government deficit

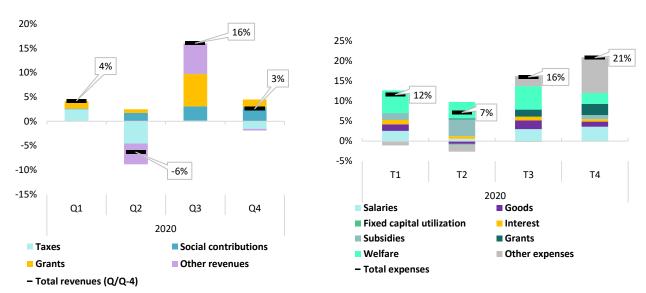
- additional expenditures in areas other than health: 1.2% of GDP;
- deferrals regarding the payment of taxes and duties: 0.2% of GDP;
- loans to companies in the economy (especially for the purchase of health products and in the air transport industry): 0.2% of GDP;
- government guarantees: 4.2% of GDP.

In the second quarter of 2020, government revenues fell by 6.3%. The largest drops were registered in the chapters "taxes" and "other revenues", which contributed by -4.6% and -4.3%, respectively, to the decrease of revenues. Contributions to social security budgets increased, with a positive contribution of 1.7% to revenue dynamics.

On the expenditure side, the most important increases were recorded in the chapters "personnel expenses", "social assistance expenses" and "other expenses". In the second quarter of 2020, subsidies increased by 4 billion lei compared to the second quarter of 2019, representing a contribution of 4.2% to the total dynamics of expenditures.

Figure 26 Revenue dynamics (t/t-4), percentages

Figure 27 Expenditure dynamics (t/t-4), percentages



Source: INS, ASF calculations

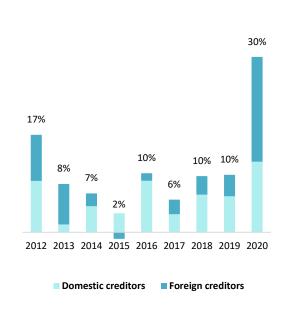
In 2020 there was a significant increase in the government debt stock (+ 30%), well above the average of recent years (around 7-8%). Most of this increase is related to external creditors (about 60%), a situation also different from that of recent years, when the dynamics of total government debt was much more influenced by the dynamics of debt to domestic creditors.

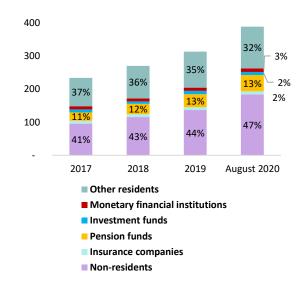
Under these conditions, as in the case of the current account deficit, there is a vulnerability of Romania to foreign capital flows, which could be reversed in the face of changes in interest rates on international markets or changes in international investors' risk appetite.

Government securities account for 86% of government debt. At the end of August 2020, 47% were owned by non-residents, 13% by pension funds (Pillar II and Pillar II) and 2% by companies in the insurance sector, respectively by investment funds. The remaining 35% was held by other residents, including monetary institutions.

Figure 28 Annual dynamics of the government debt stock

Figure 29 Structure of government securities holdings (billion lei)





Source: Ministry of Finance, ASF calculations

Source: Ministry of Finance, NBR, ASF, ASF calculations

Particularities of the COVID-19 crisis compared to the global financial crisis of 2008

The two crises differ fundamentally in terms of causes:

- the crisis of 2008 was endogenous to the financial system, being generated by non-performing loans and their securitization;
- the COVID-19 crisis is exogenous to the financial system.

Another difference was the strength of the financial system at the beginning of the crisis: at the beginning of 2020, the financial system was robust, being able to cope with shocks, while in 2008 the financial system was fragile, with internal problems. In addition, the new regulations following the 2008 crisis have further strengthened the financial system to deal with unexpected shocks.

These two differences influenced both the reaction of the authorities and the future evolution. One of the factors that amplified the crisis of 2008 was the reaction of the authorities, who initially did not intervene. This reaction is natural because the intervention tools are different in the case of a potentially systemic crisis than in the case of a smaller shock. Thus, in the event of a limited shock, the authorities must allow market forces to act and allow the bankruptcy of institutions that have not had proper risk management. On the other

hand, in the event of a crisis with systemic potential, the authorities must intervene to support and prevent the bankruptcy of vulnerable institutions. Thus, in 2008, the authorities were reluctant to intervene from the beginning. This uncertainty did not exist in 2020, where the source and extent of the shock left no room for doubt as to the need for action to support the financial system and the real economy.

Thus, the reaction of the authorities was prompt and unprecedented in magnitude.

As a result, although the decline in GDP was as pronounced as in the whole crisis of 2008 (many economies shrinking by 10% compared to previous highs), the period of decline was much shorter, with most economies recovering substantially after only a quarter. At the same time, the labor market was much less affected than in 2008, with unemployment rates remaining, in many cases, close to the lows of the last decade.

	The financial crisis of 2008	The COVID-19 crisis
The source of the shock	Endogenous financial system	Exogenous to the financial system
Financial system	Fragile	Robust; regulations strengthened as a result of the 2008 crisis
Total tax incentives in most countries	1-2-3% of GDP	5-40% of GDP
GDP - Minimum reached after	1-2 years	1-2 months (estimated)
GDP - Return to pre-crisis levels	3-5 years	1-2 years (estimated)
Capital market - minimum reached after	1-1.5 years	1-2 months (estimated)

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

Relaunching the European Union's economy

The recovery and resilience mechanism³ will provide Member States with EUR672.5 billion in loans and grants to support the reforms and investments needed for the EU's economic recovery following the negative effects of the COVID-19 pandemic. The aim of the Mechanism is to make EU economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of environmental and digital transitions.

The Recovery and Resilience Mechanism entered into force on February 19, 2021. At this time, Member States are in the process of preparing National Recovery and Resilience Plans which contain a coherent package of reforms and public investment projects. To benefit from the Mechanism's financial resources, these reforms and investments must be implemented by 2026. National recovery and resilience plans must address the challenges identified in the European Semester, in particular country-specific recommendations, and address the transition to green and digital economies. Each plan is expected to contribute to the four dimensions set out in the 2021 Annual Sustainable Growth Strategy, namely: environmental sustainability, productivity, equity and macroeconomic stability.

The recovery and resilience mechanism is an opportunity to accelerate the economic recovery in the EU and strengthen the commitment to the transition to a green and digital economy. Thus, each plan will include investments of at least 37% of spending on climate reforms and investments of at least 20% of spending on the digital transition.

However, until the start of effective funding of Member States under the National Recovery and Resilience Plans, given the persistence of the pandemic and the emergence of new strains in conjunction with vaccination campaigns, it is advisable for government policies to focus on the following priorities⁴:

- Continued health spending to suppress the COVID-19 pandemic. The economic benefits of the costs of
 distributing and administering vaccines will outweigh any other costs in the absence of action in this regard.
 Cooperation on global production and distribution is essential, and governments must not restrict the
 international dissemination of vaccines.
- Adaptation and calibration of fiscal support according to the stage of the pandemic. Until the end of the COVID-19 pandemic, fiscal policy must continue to support the affected business environment and households. Given the fact that in some states, the fiscal space is limited, it must be analyzed in terms of debt sustainability.
- Maintaining accommodative monetary policies. Given that, the inflation rate is low and expectations in this regard are well anchored in many states, monetary policy may remain accommodative.

³ https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_ro

⁴ The picture of the global economic outlook, IMF, April 2021

Adequacy of macro-prudential policies to limit risks to financial stability. An extended period of
accommodative monetary policy is likely to add to financial vulnerabilities, given investor orientation
towards returns and deteriorating lending standards. Policy makers need to tighten selected monetary policy
instruments to address vulnerabilities, while avoiding a tightening of financial conditions.

Financial sector measures to support the EU's economic recovery

In December 2020, the EU Council approved changes to EU capital market rules to support the economic recovery from the COVID-19 pandemic crisis. Negotiations on the "Capital Market Recovery Package" have been a top priority, so that immediate support for economic recovery can be provided by facilitating access to finance for EU companies, in particular SMEs. Legislative changes include amendments to the Financial Instruments Markets Directive (MiFID II), to the Prospectus Regulation and to the EU Securities Framework.

As part of the changes to MiFID II, the EU agreed to simplify information requirements in a targeted way, for example for information on costs and expenses. In addition, a specific derogation was agreed to allow banks and investment firms to group research and execution costs related to research on small and mid-cap issuers. This will increase research on these issuers, thus improving their access to finance in the capital markets.

The position limit regime for commodity derivatives will also be adapted to help European firms respond to market volatility and to support the emergence and growth of euro commodity derivatives markets. The changes do not affect agricultural products, especially products used for human consumption.

EU has also agreed to set up a new "EU recovery prospectus" to facilitate the issuance of capital by companies. The EU recovery prospectus will be available for capital increases of up to 150% of the remaining capital in a period of 12 months. This will avoid very dilutive emissions, while ensuring the possibility of using the new prospectus as a basis for a significant recapitalization of companies. The new regime will apply until 31 December 2022 to allow issuers to increase their equity necessary to overcome the crisis caused by the COVID-19 pandemic. EU has also adjusted the minimum information requirements to be included in the recovery prospectus to provide investors with adequate information.

To facilitate securitization, the existing EU framework for simple, transparent and standardized securitizations (STS) will be extended to include synthetic securitizations. The agreed changes will contribute to the release of bank capital for new loans and will allow a wider range of investors to finance the economic recovery following the crisis caused by the COVID-19 pandemic.

The new rules also remove regulatory barriers to securitizing non-performing exposures. This is done by largely aligning the rules on non-performing exposures with international standards and by ensuring their prudential soundness, while allowing start-ups to use risk-based modeling practices. This will help banks better manage their balance sheets when faced with the economic consequences of the COVID-19 pandemic, ensure their medium-term lending capacity and share risks more broadly with the non-bank financial sector.

Proposal of the European Securities and Markets Authority (ESMA) to amend the EU Regulation on monetary funds

Given that a number of EU monetary funds have faced significant liquidity problems during the acute stress period of March 2020, with large redemptions from investors, on the liabilities side, and a deterioration in liquidity, on the assets side, ESMA has launched a public consultation on potential regulatory framework reforms for monetary funds.

Proposed amendments can be divided into: (a) proposals on investors and funds (related to redemptions, restrictions on holding assets, increasing liquidity reserves, etc.) and (b) proposals aimed at improving the resilience of monetary funds, but are "external" "(related to sponsor support, improving the liquidity of the basic instruments in which the funds invest, etc.).

Analysis of the European Systemic Risk Board (ESRB) on the impact of fiscal support measures on financial stability

The European Systemic Risk Board (ESRB) examined the extent to which government fiscal support measures, implemented to protect the real economy from the effects of coronavirus, have had an impact on financial stability in the EU. In essence, the fiscal response, aimed at supporting the real economy, stabilized lending and thus the financial system continued to function.

In the first phase of the pandemic, a liquidity crisis was averted and the financial system continued to operate. Up to a third of new bank loans to companies were based on fiscal measures related to the COVID-19 crisis, and prompt government action has been vital in mitigating the impact of the crisis on businesses and households. The financial system has benefited from fiscal support programs as well as accommodative monetary policy. In addition, a flexible approach to current legislation has supported these measures by temporarily easing constraints on some banks' balance sheets. Non-performing loans have not increased so much, and in general, the contagion from the real economy to the financial system has been kept under control.

The longer the crisis lasts and the slower the economic recovery, the greater the risk that losses in the non-financial sector will spread to the financial sector. In the ESRB's view, at this stage of the pandemic, authorities need to focus on: (i) targeting fiscal measures at the most affected sectors; (ii) monitoring the sustainability of private debt, given that certain measures have increased the indebtedness of debtors; (iii) preparing for an acute stress scenario in the corporate sector by managing potential administrative constraints related to non-performing loans and insolvency proceedings, (iv) improving the transparency of financial institutions' balance sheets and updating reporting; and (v) policy coordination between countries.

The authorities must manage the compromise on the duration of the measures. The magnitude of potential future solvency issues depends on the evolution of the pandemic, the performance of different sectors and the adequacy of policy responses. Withdrawing fiscal measures too quickly could exacerbate the effects of the financial crisis and jeopardize financial stability. Maintaining too much fiscal support would increase budgetary pressure and delay structural changes in the economy. In order to achieve a fair compromise, the authorities must have timely access to reliable information on the state of the economy and the effects of policy measures.

Measures proposed by the Financial Stability Board (FSB) for the non-bank financial sector following the shock caused by the COVID-19 pandemic

The financial market turmoil of March 2020 highlighted the need to strengthen the resilience of non-bank financial intermediation, with the Financial Stability Board (FSB) suggesting three lines of action: (i) examining and addressing specific risks and markets that contributed to the magnification of shocks; (ii) improving the understanding of systemic risks to the non-bank financial sector and the financial system as a whole, including interactions between banks and other financial institutions; and (iii) evaluating policies to manage systemic risks to the non-bank financial sector.

First, the review of specific risk factors involves examining the following elements:

- Liquidity risks, main functions and aspects regarding the structure or regulation of monetary funds, which experienced capital outflows and contributed to the accumulation of short-term stress;
- Whether and how other types of open-end investment funds that have invested in illiquid assets could amplify liquidity stress;
- Whether market participants have been prepared for the margin calls they have experienced;
- The role of heavily indebted investors in sovereign bond markets;
- The structure of financing markets for both governments and corporations.

Second, improving the understanding of the resilience properties of the system as a whole involves analyzing:

- Interconnections between banks and the non-bank financial sector;
- The concept and the desired level of system resilience;
- The role of public policies in ensuring the resilience of the system and the provision of financial services to the real economy.

Third, the role of policies in addressing the systemic risks of the non-bank financial sector needs to be assessed. There are a range of policy instruments or they are already implemented in the non-bank financial sector.

While some adjustments to some of these instruments may be considered to support the resilience of the non-bank financial sector, the question arises as to whether and how these instruments should be incorporated into a framework that takes into account their impact on the system as a whole. It is necessary to clarify the role of ex-ante resilience strengthening mechanisms in order to minimize the need for exceptional ex-post interventions. This will also help address concerns about the risk of any unintended consequences, including the risk of moral hazard, due to expectations of central bank interventions.

1.4. The situation of financial markets at international level

The composite indicator for systemic risks, CISS, is calculated by the European Central Bank and takes into account different sectors of the financial system: stock and bond markets, foreign exchange, money markets, etc. The CISS indicator is built to show the extent to which systemic financial stress contributes to the financial instability of European markets. The value of the indicator is constrained to be in the range (0, 1), so that higher values indicate periods of financial stress for European markets.

The CISS systemic risk indicator tripled in volatility in the first quarter of 2020, amid a sharp appreciation of composite sub-indicators. The European Central Bank has taken a number of measures to increase liquidity, helping to ease the investment climate in the next two quarters. In the first quarter of 2021, the CISS indicator continued its downward trend.

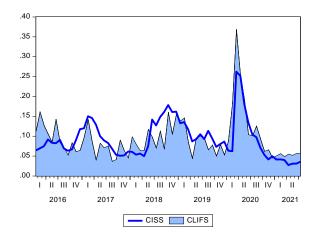


Figure 30 CISS indicator for systemic risk

Source: European Central Bank, ASF

CISS sub-indicators that measure stock market volatility, bonds and foreign exchange had a slight downward trend in the first quarter of 2021.





Source: European Central Bank

According to the CLIFS⁵ indicator, an index calculated by the European Central Bank to measure financial stress at country level, Romania was characterized by the highest increase in financial tension among European Union countries relative to early 2020 and at the same time by the highest value of the indicator. It has followed international trends and has been declining since April. The trend continued in the first quarter of 2021 and indicates an improvement in the macroeconomic climate in Romania.

MSCI WORLD U\$ - TOT RETURN IND

IBOXX EURO CORPORATES - Tot. Rtn ldx Today

MSCI ACWI COMMOD PRODUCERS - TOT RETURN IND

150

140

120

110

90

80

70

60

9/1/2020

12/1/2020

3/1/2021

6/1/2021

9/1/2021

Figure 32 Evolution of volatility on stock, bond and commodity markets (2018 = 100)

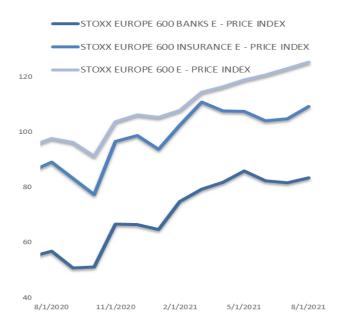
Source: Refinitiv, ASF calculations

In the first two quarters of 2020, there was a rapid increase in volatility in international financial markets (MSCI WORLD index) amid the pandemic generated by COVID-19. The international growth trend in the fourth quarter, which continued in the first quarter of 2021, indicates an exuberance of capital markets that is not explained by fundamental economic factors. Decoupling capital markets from economic fundamentals increases the risk of a severe correction.

The level of risks associated with corporate sector financing (IBOXX index) remained constant in the first quarter of 2021, as the indicator is dependent on the decline forecasts for global GDP, due to the contraction of manufacturing (MSCI COMMODITIES PRODUCERS index).

⁵ CLIFS - Country-Level Index of Financial Stress

Figure 33 Evolution of the indices of the banking sector and the insurance sector at European level (2018 = 100)



Source: Bloomberg, ASF calculations

At European level, the indices related to the banking sector, capital market and insurance registered a growth trend both in the fourth quarter and in the first quarter of 2021, which shows an improvement of the economic indicators specific to the three sectors.

Figure 34 Evolution of yields on 10-year sovereign bonds



Sursa: Refinitiv, calcule ASF

In the fixed income instrument markets and in particular in the sovereign bond market, the downward trend in yields was observed due to fears of a possible long-term recession and a reduction in monetary policy rates.

Internationally, in March 2021 compared to December 2020, the most significant increase was registered by the FTSE MIB index (IT: 10.87%), while the largest decrease was registered by the SSEA index (SHG: -0.90%). At the local level, stock index returns performed positively. The increases registered (3 months) were between 12.86% (BET-FI index) and 15.92% (BET-NG index).

Table 5 Stock market returns as of March 31, 2021

International indices	3 months	6 months	12 months
EA (EUROSTOXX)	8.69%	22.14%	42.52%
FR (CAC 40)	9.29%	26.31%	38.01%
DE (DAX)	9.40%	17.61%	51.05%
IT (FTSE MIB)	10.87%	29.63%	44.56%
GR (ASE)	6.93%	38.46%	54.94%
IE (ISEQ)	9.59%	26.69%	56.86%
ES (IBEX)	6.27%	27.74%	26.45%
UK (FTSE 100)	3.92%	14.45%	18.37%
US (DJIA)	7.76%	18.72%	50.48%
IN (NIFTY 50)	5.07%	30.61%	70.87%
SHG (SSEA)	-0.90%	6.97%	25.17%
JPN (N225)	6.32%	25.85%	54.25%

BSE indices	3 months	6 months	12 months		
BET	14.11%	24.23%	46.74%		
BET-BK	14.75%	25.88%	47.68%		
BET-FI	12.86%	15.61%	23.27%		
BET-NG	15.92%	22.11%	38.46%		
BET-TR	14.16%	25.60%	54.41%		
BET-XT	13.67%	22.27%	41.08%		
BET-XT-TR	13.72%	23.56%	48.16%		
BETPlus	14.15%	23.99%	46.49%		
ROTX	14.15%	29.54%	47.44%		

Source: Thomson Reuters Datastream, ASF calculations

3M = March 31, 2021/December 31, 2020; 6M = March 31, 2021/September 30, 2020; 12M = March 31, 2021/March 31, 2020Note: Max. (green) and min. (red) are set at $\pm 4\%$ (3 months), $\pm 8\%$ (6 months) and $\pm 15\%$ (12 months)

1.5. The size of the non-bank financial markets in Romania

The assets of the non-bank financial sector have evolved upwards, but timidly in recent years. Although the first quarter of 2020 was severely affected by the outbreak of the COVID-19 pandemic, non-bank financial sector assets relative to GDP reached a level of about 13.6%. The efficient management of this crisis has determined the recovery of losses and even exceeding the level recorded in 2019, by the end of 2020.

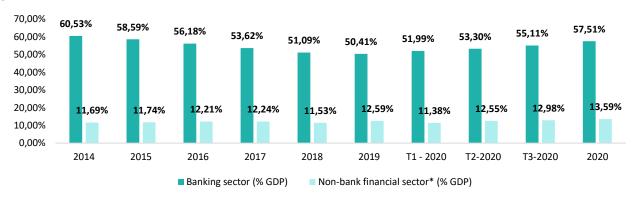


Figure 35 Financial sector assets relative to GDP

Source: INS, BNR, ASF calculations, * IFNs are not included, provisional data

The evolution of the total assets of the private pension funds was determined both by the flow of contributions received monthly and by the positive results obtained by the administrators as a result of the investment policies, their value relative to GDP being of 7.40% at the end of 2020. The second place from the perspective of the value of assets related to GDP, is the sector of financial instruments and investments, where the generalized drop of the capital market caused by the pandemic determined a ratio of 3.92% between assets and GDP. The assets of the insurance-reinsurance sector represented at the end of 2020 a percentage of 2.27% of GDP, slightly higher than the previous year (2.10%).

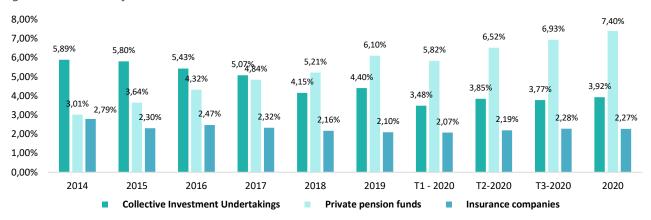
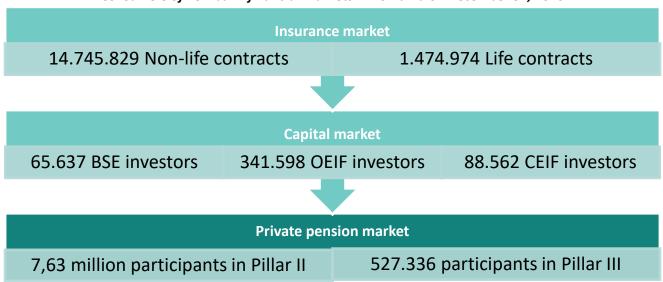


Figure 36 Non-bank financial sector assets relative to GDP

Source: INS, BNR, ASF calculations, * IFNs are not included, provisional data

Consumers of non-bank financial markets in Romania on December 31, 2020



At the end of the first quarter of 2021, the market capitalization (main segment, shares only) reached a level of 179.49 billion RON. In March 2020, the most significant decrease was registered, amid investor fears related to the COVID-19 pandemic. The lowest level of stock market capitalization, 113.85 billion RON, was registered on March 18, 2020.

Figure 37 Indicators regarding the financial instruments and investments sector

Stock market	: – March 31, 2021	Investment fund market – December 31, 2020				
The total value traded on the Bucharest Stock Exchange (BSE) on March 31, 2021	4.98 billion RON	Total assets of undertakings for collective investment in transferable securities (UCITS)				
The predominant class of financial instruments	Shares: 54%	18 Investment Management Companies (IMCs) 82 Open-End Investment Funds (OEIF) 26 Closed-End Investment Funds (CEIF) 5 Financial Investment Companies (FICs) Fondul Proprietatea 4 Depositaries				
Market capitalization on March 31, 2021	179.49 billion RON	47% investments in FDI 4% investments in FII 25% investments in FP 24% investments in SIF				

The degree of insurance penetration in GDP, being an indicator calculated as the ratio between the value of gross written premiums (GWP) by authorized and supervised entities locally and by branches and gross domestic product, registered a value of 1.15% in 2020, slightly higher than in 2019 (1.10%).

The insurance density, calculated as the ratio between the value of gross written premiums (GWP) on the Romanian territory (including GWP of branches based on the right of establishment, FOE) and its number of inhabitants, registered in 2020 a value of RON 630 /inhabitant, increasing by about 5% compared to the previous year.

Figure 38 Indicators regarding the insurance-reinsurance sector as at December 31, 2020

5 companies had activity of non-life insurance (NLI), 7 had activity of life insurance (LI) and 6 had composite activity

The private pension system as a whole registered positive results in 2020. The net assets related to Pillars II and III reached lei 83.29 billion at the end of March 2021. The rates of return obtained by the private pension funds were positive, so that no private pension fund recorded a rate of return below the minimum rate for its risk category.

Figure 39 Indicators regarding the private pension system sector as at March 31, 2021

Private pension system							
10 administrators							
17 private pension funds							
4 depositories							
6 auditors							
8,212,918 participants							
83,290,571,645 lei net assets							

The picture of risks on non-bank financial markets

2.1. Main vulnerabilities and risks of the European non-bank financial sectors identified by the supervisory authorities

The 2021 risk assessment of ESAs⁶ (ESMA, EIOPA and EBA) shows that the COVID-19 pandemic continues to affect the short-term recovery prospects and induces a number of vulnerabilities for financial markets. Macroeconomic conditions improved in the second half of 2020, supported by fiscal and monetary policy measures, but the intensification of the COVID-19 pandemic since the last quarter of 2020 has increased economic uncertainty. However, macroeconomic instability is not reflected in the valuation of assets and market volatility that have reached pre-crisis levels, highlighting the continuing risk of decoupling financial markets from economic fundamentals. In this context, ESAs recommend that competent national authorities, financial institutions and market participants take the following actions: (1) prepare for a deterioration in asset quality: banks need to adjust provisioning models to adequately manage the impact of the economic shock of the pandemic and ensure timely recognition of appropriate levels of provisions; (2) continue to apply additional measures to accommodate the environment characterized by low interest rates and related risks: although low interest rates are important to support economic activity, they negatively affect banks' revenues and remain the main risk for insurance companies and pension funds. It is important for insurance companies that the legal provisions reflect the sharp decline in interest rates in recent years and the existence of negative interest rates; (3) ensure robust lending practices and adequate risk assessment: banks must continue to conduct risk assessments to ensure that loans remain viable; (4) to continue conservative policies regarding the distribution of dividends and share repurchase programs; and (5) investment funds should further improve their ability to cope with a potential increase in fund unit redemptions and asset revaluation shocks.

Securities market

According to the Report on Trends, Risks and Vulnerabilities of EU Securities Markets⁷, prepared by ESMA, EU financial markets have recovered from the market stress induced by the COVID-19 pandemic in the second half of 2020, in terms of support interventions of public authorities, announcements of the availability of short-term vaccines and the reduction of uncertainties related to Brexit. However, the risks in the securities markets are still high. The significant return of stock markets and the value of indices of credit financial instruments, which reached pre-crisis levels in all segments, contrast with the deteriorating economic fundamentals. The main risk for EU financial markets is that this decoupling will lead to a reversal of investor risk assessment and a sudden market correction. Unregulated crypto asset prices, at very high levels, involve significant risks for investors. Credit risk is likely to increase further as corporate and government debt expands. The materialization of these risks depends on three main factors: the economic impact of the pandemic, market expectations regarding monetary and fiscal measures and the occurrence of additional external events in a fragile global environment.

⁶ ESA Risk Assessment Report, March 2021

⁷ ESMA Trends, Risks and Vulnerabilities Report, no. 1/2021

During the second half of 2020, equity and fixed income markets continued to recover from market corrections in the first quarter of 2020. EU equity markets grew by 10% in the second half of 2020, remaining slightly below pre-COVID-19 levels, with significant divergences between Member States and sectors. Fixed income financial instruments markets continued to grow across all sectors, especially in the third quarter of 2020. Riskier segments, such as high-yield corporate bonds and emerging market debt, have values above COVID-19 pre-crisis levels, reflecting investors' orientation towards high returns. The EU Securities Market Risk Chart⁸, recently published by ESMA, shows that financial markets continued their upward trend in the first quarter of 2021, with episodes of volatility following news of COVID-19 and the contagion of Gamestop market movements in the US.

With regard to market infrastructure, disruptions in trading venues in the EU raise concerns about over-reliance on post-trading services in third countries. The launch of several new entities in the EU from British groups in the fourth quarter of 2020 and the planning of major mergers are changing the landscape of trading venues after Brexit. The initial margins of the EU and UK CCPs declined slightly during the second half of 2020, following the sharp rise in March and April in the context of the COVID-19 turmoil. Settlement incapacities have gradually diminished since the peak of March, although they have remained above pre-crisis levels for equities. The number of credit rating downgrades continued its downward trend post-April, but issuers and structured finance products exposed to companies continued to be more affected by downgrade actions. Reform of benchmark financial indices is still ongoing, with large exposures to old benchmark financial indices in the financial instruments markets and the potential impact of credit rating downgrades on fixed income financial instrument indices.

The investment fund industry recovered in the second half of 2020, following significant capital outflows induced by the initial shock of COVID-19, with bond funds recording the largest capital inflows, reflecting higher returns than equity funds. The size and composition of monetary funds remained stable, while liquidity reserves were capped at high levels above legal requirements. The market for alternative investment funds remained stable in the third quarter of 2020, while hedge funds reduced their leverage through derivative financial instruments, but increased their indebtedness through loans. At the same time, there have been concerns about the valuation of assets in the portfolio, especially for real estate funds, while the availability of liquidity management tools (Liquidity Management Tools) varies between types of funds and jurisdictions.

Following market tensions over the first wave of the COVID-19 pandemic, investor sentiment has improved despite continuing uncertainties, and the performance of retail investor instruments, such as investment funds, has improved. The analysis of the behavior of retail investors during the market turmoil regarding the COVID-19 pandemic showed that new retail investors entered the stock markets during this period. The extent to which the growth of equity transactions is positive or negative in terms of investor protection depends on the situation of individual investors and whether the investment is determined by long-term investments or speculative reasons. The US Gamestop episode prompted ESMA to issue a Statement drawing investors' attention to the risks associated with social media-based investment decisions.

⁸ Securities Market Risk Chart, ESMA, no. 1, 2021

In the second half of 2020, primary markets recovered, improving the share of capital markets that financed non-financial corporations. The primary stock markets showed signs of differentiation between existing and new companies. Issues in the fixed income financial instruments markets remained high, but slowed after reaching record highs in the second quarter of 2020, with the quality of the issue deteriorating towards bonds with BBB-credit ratings. The access of SMEs (small and medium-sized enterprises) to the capital markets continues to be limited. However, the trading of SME shares improved in the second half of the year, especially in the growth markets of SMEs.

The EU sustainable debt market continued to expand at a brisk pace in the second half of 2020 (+ 32% compared to the first half of 2020, 508 billion euros), closely linked to the robust supply in the corporate sector and to the massive funding needs of the public sector to support the EU's economic recovery. The performance of the ESG (Environmental, Social and Governance) stock indices was mixed. This reflects the negative (positive) impact of COVID-19 vaccination announcements on sectors that performed well (poorly) during the crisis, such as health (transport) and have a higher (lower) share in ESG portfolios.

The wider impact of COVID-19 continues to attract digitalization, with positive results for consumers and businesses, but at the same time challenges and risks, especially related to cyber security. In the crypto space, the price of Bitcoin has reached new highs, fueled by strong investor demand and the expectation that crypto assets will gain general acceptance. Subsequently, it underwent severe corrections, amid increased volatility. Developments in "stable currencies" are still being monitored, while sentiment towards digital currencies is positive. At the same time, negotiations have begun on the European Commission's legislative proposal on cryptocurrencies.

Table 6 Trends and risks identified by ESMA

Main risks Risk segments			Risk categories			Sources of risk	
Nisk segments	Level	Perspective	Nisk categories	Level	Perspective	Sources of risk	Perspective
In general, the ESMA mission		→	Liquidity		>	Macroeconomic environment	→
Securities markets		\rightarrow	Market		\rightarrow	Interest rate	→
Infrastructures and services		→	Contagion		7	EU sovereign and corporate debt markets	7
Asset management		→	Credit		7	Infrastructure disruptions	→
Investors		7	Operational		→	Political and event risks	→

Source: Risk table, no. 1, 2021

Insurance and occupational pension market

The report on the financial stability of the insurance and pension markets in the EU⁹, prepared by EIOPA, shows that the volatility of financial markets has negatively affected the investments of insurance companies in the first half of 2020. In the long run, the extended period with extremely low returns intensifies the negative outlook on the profitability of the investment portfolio of insurance companies, due to the risk of reinvestment. In addition, the risk of deterioration in companies' credit ratings affects the market value of insurance companies' corporate bonds. Deteriorated macroeconomic conditions could create the risk of lower insurance demand and increase the risk of termination (lapses risk). However, the capital reserves of insurance companies were solid at the end of 2019 (median SCR rate: 213%) and proved robust at the time of the pandemic, deteriorating slightly in the first quarter of 2020 (203%), but resuming its upward trend in the second quarter of 2020 (210%). It is thus noted that life insurance was the most affected.

It will take some time for tensions over demand (declining insurance company underwriting and declining overall profitability) to run in parallel with the deterioration of the macroeconomic environment, where reductions in economic activity and disposable income will become tangible. However, in the future, news of vaccine developments and the potential reduction of geopolitical tensions mitigate risks and improve forecasts that 2021 will be a year in which economies will begin to recover.

European insurance companies have managed to withstand the difficult situation because, in particular, the Solvency II regime has helped them to better align risk capital, build resilience and improve their risk management practices. Although the risks to the growth outlook remain high, they appear to have become less pronounced and there are signs that the short-term impact on the financial position of insurers could be captured within Solvency II confidence levels.

However, uncertainty remains high and it is important for insurance companies to act in order to maintain robust capital positions while protecting policyholders and beneficiaries. EIOPA recommends that insurance companies act prudently in the management of their capital. Any distribution of dividends, share repurchases or variable remuneration must not exceed prudential thresholds, and companies must ensure that the reduction in the quantity or quality of own funds remains within the appropriate limits of current levels of risk. National supervisors should ensure that the assessment of insurance companies' overall solvency needs is prospective, taking into account the current level of uncertainty about the depth, magnitude and duration of COVID-19's impact on financial markets and the impact of this uncertainty on their business and solvency, liquidity and financial position models.

The prolonged environment of low yields remains a fundamental concern for both the insurance and pension sectors, but other risks have arisen due to the pandemic. The ongoing economic downturn is affecting the profitability of the corporate sector, resulting in declining credit ratings and rising unemployment. In addition, as a result of companies working from home, prices in commercial real estate are expected to fall.

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⁹ Financial Stability Report, December 2020

Moreover, the deterioration of the business cycle will be reflected primarily in the increase in non-performing bank loans, which could further affect insurers and pension funds due to their high interconnection with the banking sector. As a consequence of this crisis, public debt levels are rising significantly.

It is noteworthy that the volatility of financial markets has decreased as a result of the activation of the ECB's Public Sector Asset Acquisition (PSPP) program, which has made a positive contribution to reducing risks for insurers and pension funds. The increase in reinsurance prices, coupled with the potential reduction in reinsurance coverage, could lead to a widening of the protection gap.

Despite this turmoil, EIOPA will continue to focus on long-term goals, such as sustainable financing and digitalization. EIOPA's objective is to ensure that insurance companies and pension funds will not only be able to manage and mitigate climate and cyber risks, but also reflect the preferences of policyholders and members of investment pension funds. Fulfilling this goal will create pressures on the profitability of business models, which will increase the risks of capital weakness.

In addition, in order to realize the full potential of the Internal Market and create a Capital Markets Union, EIOPA will address the issue of fragmentation, especially in the area of long-term retirement savings. With the issuance of measures to implement the Pan-European Personal Pension Product (PEPP) Regulation, EIOPA has achieved its goal of conceiving PEPP as a simple, transparent and cost-effective retirement savings option for European citizens and providing an effective tool to reduce the gap between the degree of saving for pensions. PEPP is a unique opportunity to enable consumers to participate in sustainable investment and in the Capital Markets Union.

According to the update of the EU Insurance Market Risk Chart, insurance companies' exposures to macro risk remain high, while other risk categories remain medium. European supervisors expect an increase in credit risks in the next 12 months, reflecting concerns about corporate indebtedness.

Macro risks remain high, amid growing GDP and inflation. Long-term foreign exchange yields increased in the first quarter of 2021;

- Credit risks are medium. CDS spreads fluctuate around the same levels as in previous assessments.
 Household debt/income rates raise concerns about the creditworthiness of mortgages and loans on the
 assets of insurance companies. The share of assets below the investment level increased slightly in the last
 quarter;
- Market risks remained medium, with an upward trend. Bond volatility increased, while the stock market remained stable. Concerns remain about investment in commercial real estate, given the lower prices in the last quarter of 2020;
- Profitability and solvency risks are constant at the medium level. Solvency positions for life insurance have improved, while those for non-life insurance have deteriorated slightly. There has been an improvement in asset yields and asset surpluses over debt, while remaining lower than pre-COVID levels;
- Insurance risks remain medium, despite the deterioration of certain indicators. Annual premiums for nonlife insurance continued to fall, while the disaster damage rate rose significantly. On the other hand, the annual premiums for life insurance reported a slight recovery, after the deterioration observed in previous quarters;

Market perceptions remained medium, recording an upward trend.

Table 7 EIOPA Risk Chart, April 2021

	Risks	Level	Trend (last 3 months)	Perspectives (next 12 months)
1.	Macroeconomic risks	High	7	→
2.	Credit risks	Medium	→	7
3.	Market risks	Medium	71	→
4.	Liquidity and financing risks	Medium	→	→
5.	Profitability and solvency	Medium	→	→
6.	Interconnections and imbalances	Medium	→	→
7.	Insurance risks (underwriting)	Medium	→	→
8.	Market perceptions	Medium	7	→

Source: Risk Chart, EIOPA, April 2021

2.2. Main risks and vulnerabilities at national level

The **macroeconomic risk** remains high, with declining prospects amid large-scale international and local vaccination campaigns and increased confidence in removing restrictions and resuming economic activities that have suffered in the context of measures and policies implemented for limiting the pandemic and stopping its effects on global health. Although favorable results have begun to emerge and growth expectations have been adjusted to reflect optimism, uncertainties about global developments persist and shocks to certain economic sectors by suspending their activity may have medium- and long-term chain effects. The economic recovery may remain fragile in the absence of adequate supportive public policies. In addition, strategic objectives at European level aimed at the sustainability of economies in terms of the environment and the acceleration of digitalization may have direct implications for certain sectors or industries for which the transition to a green economy may be more difficult to implement in a vulnerable context.

The market risk remains high, following the accelerated growth registered on the financial markets and implicitly of a possible distortion between the market price and the economic fundamentals of the assets. In the context of the interconnections between the financial markets, the speed of transmission of potential internal or external shocks can be increased, with the possibility of abrupt corrections if factors appear that contradict the optimistic expectations regarding the economic recovery. **Credit risk and liquidity risk** were assessed as having a medium to high level, being closely correlated with the macroeconomic outlook and the evolution of uncertainty.

Also, in the short and medium term, the **profitability risk** continues to be at a high level with a decreasing trend, in the context of a possible deterioration of the results obtained by companies as a result of the decrease in business volume amid restrictions and changes of the distribution chains in certain sectors.

For the **market of collective investment undertakings**, the most relevant are investment risks, credit risk and liquidity risk. Furthermore, they are generally managed adequately throughout the market, by diversifying and complying with the investment policies assumed in the prospectuses of the funds. The low complexity of the market means that, for the time being, these risks are not amplified by the use of financial leverage, complex financial instruments (e.g. derivatives, structured, bonds resulting from securitization, etc.) not having a significant share in total assets (3.75% of GDP at the end of 2020). The high level of concentration of storage services remains high in 2020, for the same structural reasons as in the case of pension funds.

In the **local stock market**, the high volatility triggered by the COVID-19 pandemic began to decrease significantly, returning to the level before the pandemic. Currently, the volatility of the Bucharest Stock Exchange indices remains low, and the regime remains medium to low for the time being. The COVID-19 pandemic had a direct and strong impact on the local stock market, due to the fear of investors. From the perspective of the local stock market, on the whole, the most important risk is that of remaining at a low level of development (from the perspective of capitalization, liquidity, degree of diversification of issuers and instruments, etc.), which would have a negative impact on other components of the financial market (e.g. insurers, pension funds, collective investment undertakings) and the economy as a whole (limited access to market financing as an alternative to bank financing).

The main risk identified by the Investor Compensation Fund (ICF) is that it does not have sufficient financial resources to compensate investors in the event of a new case of compensation. The primary and secondary legislation governing the ICF's business is under review to ensure, inter alia, better governance of the entity and a sustainable and at the same time fair way of financing for its members.

On the **Romanian insurance market**, the high degree of concentration continues to represent a vulnerability both in terms of exposure by insurance classes and in terms of significant market shares held by a small number of insurance companies. The highest values of underwriting remain recorded by car insurance, which represents approximately 71% of the non-life insurance market. A very high degree of concentration persists in the market of compulsory motor third party liability insurance (MTPL) and guarantee insurance. The first 2 insurers, namely City Insurance and Euroins Romania accounted for approximately 75% of Romania's MTPL insurance portfolio in 2020. These two companies recorded significant increases in market share, and currently, City Insurance is the most important player on the non-life insurance market in Romania, with a market share of 24.9%, increasing by almost 143% compared to 2016. Also, City Insurance owned over 45% of the insurance market at the end of last year.

The solvency and liquidity risk increased on the Romanian insurance market, amid the adjustments made by ASF regarding the indicators related to City Insurance SA, the leader of the Romanian insurance market, given that ASF acknowledged that most of the cash of the company City Insurance SA were reported by the company in a bank account that did not exist, to a bank company with which the insurer did not have contractual relations. Thus, the solvency and liquidity indicators of City Insurance SA have been severely distorted since 2017, but for the indicators for 2020, ASF has made adjustments to reflect the lack of cash, resulting in negative equity of eligible funds to cover the requirements of capital both on December 31, 2020 and on March 31, 2021 for the company City Insurance SA, as well as a need for liquid assets in the total amount of about 845 million lei (as of

March 31, 2021) to cover the approved gross claim provision (short-term obligations of the company towards policyholders).

In the context of maintaining this structural vulnerability at the market level, the risk of conduct remained high during 2020, amid the significant increase in the total number of petitions registered with the Financial Supervisory Authority compared to the previous year. Considering the latest evolutions and trends on the insurance market and the evolution of the main indicators of the companies City Insurance and Euroins Romania, the Financial Supervisory Authority intensified the supervision and control activity at the 2 companies, finding several types of deficiencies, for which they were sanctioned.

From the perspective of the Insured Guarantee Fund, the increase of the non-life insurance market concentration and the identification of major deficiencies in the company with the largest market share represent an additional risk on the fund's financial resources, in the hypothetical situation of materializing identified risks.

For the private pension system, the risks regarding the stability and good functioning of the pension funds are kept at low levels, considering the mechanism of implementation and functioning of the Romanian private pension system of defined contributions with absolute and relative guarantees, reducing solvency risk to a minimum. Systemic market risks are specific to the general investment climate, locally and internationally, outside the sphere of influence of fund managers. Through prudent investment strategies and portfolio diversification policies applied by fund managers, individual risks are diminished. In addition, the legislative framework governing Pillar II and Pillar III provides for investment limits by asset and issuer classes, also helping to reduce risks and large exposures. The structure of the private pension system in Romania provides several mechanisms to protect the rights of participants, of which the most relevant are: segregation of assets between administrators and funds, additional checks and validations by depositaries, technical provisions established by administrators, reporting requirements and increased transparency, to which the Private Pension System Rights Guarantee Fund (FGDSPP) is added. This construction of the market together with the stage of its evolution which is still in a period of accumulation determines the maintenance of a low risk on the stability of FGDSPP.

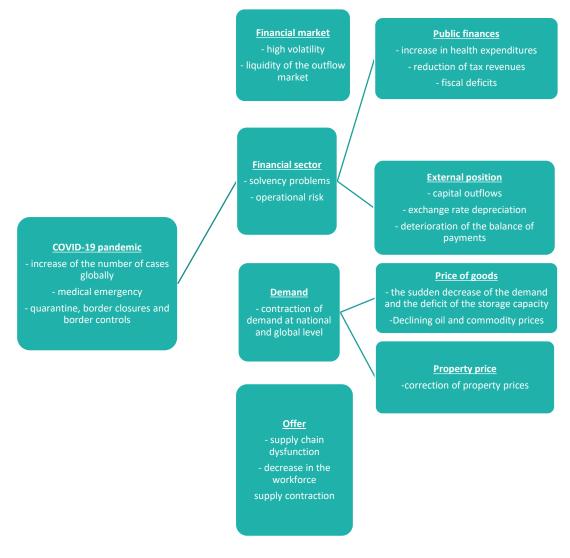
As it is still in an accumulation stage, a number of other risks relevant to the Romanian private pension system (e.g. the risk of a possible insufficient replacement rate of income from the active period with that of the private pension or liquidity risk) are not applicable for the time being due to the still low share of participants close to retirement age.

The crisis generated by the COVID-19 pandemic had a short-term impact in 2020 on Pillar II and Pillar III pension funds, characterized by an episode of high volatility, with administrators overcoming the shock well and continuing to record positive results for participants.

Interconnection of non-bank financial markets

The public policies decided by the states, presented in the first chapter, have contributed to avoiding a deep financial crisis and maintaining credit flows to the economy, economic prospects and projections remain uncertain and sometimes contradictory, while latent vulnerabilities occur in several economic sectors and geographical areas. In the first quarter of 2021, there is an increase in financial markets above the economic fundamentals.

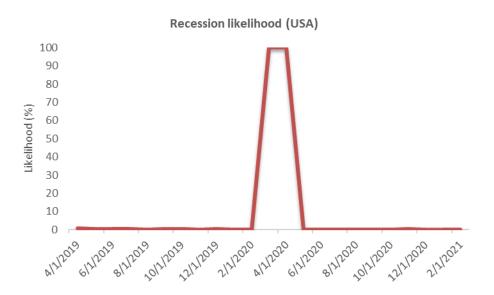
The infographic shows schematically the spread of macro-financial tensions generated by COVID-19.



Source: IMF

Decoupling financial markets from economic fundamentals can generate speculative bubbles and lead to increased systemic risk.

Figure 40 Assessment of the probability of entering a recession



Source: NBER (National Bureau of Economic Research), Refinitiv

Although there is no direct causal link between the US recession and major economies, the US recession influences the economic dynamics of major economies.

The probability of entering a recession is an indicator of early warning¹⁰ for entering a recession, calculated for the US economy. When the indicator that measures the probability of entering a recession¹¹ exceeds 50%, it can be considered that the American economy is entering a recession. The indicator rose rapidly in February and March and indicates that the US economy has entered a recession in the first quarter of the year.

According to the NBER¹² methodology, the US economy entered a recession in February and emerged from the recession in the second quarter.

¹⁰ http://econbrowser.com/recession-index

¹¹ Chauvet, M., & Hamilton, J. D. (2006). Dating business cycle turning points. Contributions to Economic Analysis, 276, 1-54.

¹² https://www.nber.org/news/business-cycle-dating-committee-announcement-june-8-2020. "A recession is a significant decline in economic activity spread across the economy, normally visible in production, employment, and other indicators. A recession begins when the economy reaches a peak of economic activity and ends when the economy reaches its trough. Between trough and peak, the economy is in an expansion.... The committee recognizes that the pandemic and the public health response have resulted in a downturn with different characteristics and dynamics than prior recessions. Nonetheless, it concluded that the unprecedented magnitude of the decline in employment and production, and its broad reach across the entire economy, warrants the designation of this episode as a recession, even if it turns out to be briefer than earlier contractions."

3.1. The level of stress in the financial system

The Office of Financial Studies¹³ (OFR) has developed a financial system stress index to identify potential vulnerabilities in the financial system, system weaknesses that can generate, amplify and transmit tensions in the US and/or international financial market. Financial stress can be captured by the way variables move together over time.

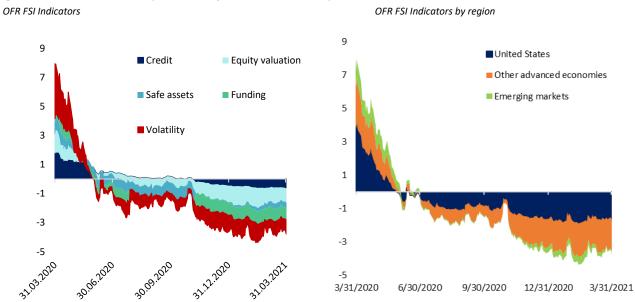


Figure 41 Financial Stability Indicator for the US Economy (OFR FSI)

Source: OFR, ASF calculations

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

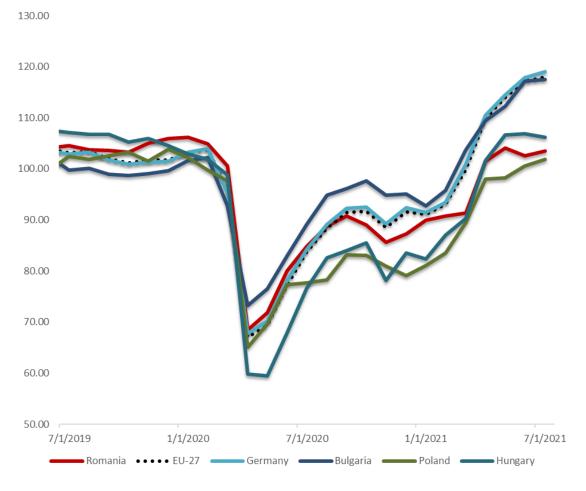
The value of OFR FSI on a given day is the weighted average level of each variable observed on the market on that day, in relation to its history. The index is zero when this average is zero, which suggests that the stress is at a normal level. The index is calculated after each US trading day.

Volatility, followed by credit risk¹⁴ increased the most in February and March 2020, continued to remain high in the following months, and decreased sharply since July. In the first quarter of 2021, economic stability improved for all categories of indicators. In terms of geographical distribution, both the United States, advanced economies (mainly the Eurozone and Japan) and emerging markets have experienced severe economic contraction.

¹³ https://www.financialresearch.gov/

¹⁴ The credit risk calculated by OFR contains measurement measures for credit growth, which represents the difference in borrowing costs for companies with a different solvency. During times of stress, credit differences may 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.

Figure 42 European sentiment index



Source: Eurostat, ASF calculations

The indicators calculated by the European Commission for the degree of confidence in the economy changed their trend in May, after experiencing the strongest decreases in March and April and continued to grow, including in the first quarter of 2021.

The evolution of stock indices in the United States, Germany, Austria, Romania, Hungary, Czech Republic, Poland and Stoxx600 is normalized to facilitate the comparison between capital market developments (zero average, standard deviation = 1) and is presented in the following graph.

With the exception of Poland, capital markets had a rapid growth trend in the first quarter of 2021 which is not supported by economic fundamentals. A strong correction can lead to a steep increase in market risk as economic growth expectations, embedded in long-term bonds, are reduced.

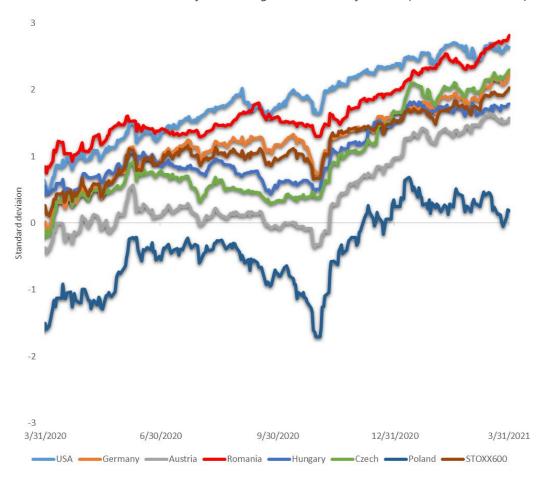


Figure 43 Short-term evolution - extension of the contagion evolution of indices (standard deviation)

Source: Refinitiv, ASF calculations

On February 21, 2020, the US market entered the regime of high volatility followed by Germany. The Romanian market entered the high volatility regime on March 5, 2020, being the last market (in the sample) affected by volatility, which shows a lower sensitivity to external events.

Using a Markov-Switching¹⁵ 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 greatly. The analysis of the high volatility regime indicates that in March and April the contagion was strong for international stock indices. In the following months, volatility decreased, except for the German market, which in October registered a rapid decline in the stock market index. In the first quarter of 2021, as a result of an upward trend in stock market indices, volatility entered a low volatility regime.

¹⁵ Kim, S., Kim, S.Y. and Choi, K., 2019. Modeling and analysis for stock return movements along with exchange rates and interest rates in Markov regime-switching models. *Cluster Computing*, 22(1), pp. 2039-2048.

1 (%) 0.9 0.8 0.7 0.6 0.5 1. The first of th

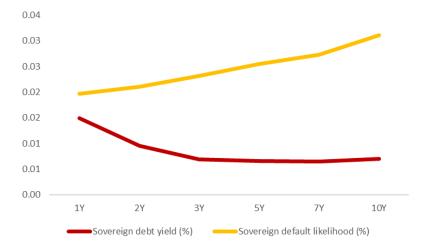
Figure 44 Extension of contagion: high volatility regime (Markov-Switching model)

Source: Refinitiv, ASF calculations

Hungary

Poland STOXX600





Source: Starmine, Refinitiv, ASF calculations

In the first quarter of 2021, the risk of non-payment of short-term sovereign debt for Romania decreased due to the improvement of the economic climate and the forecasts for the growth of economic activity.

3.2. Network of inter-sector balance sheet exposures

One of the already traditional methods used to monitor the level of interconnection between markets is the analysis of balance sheet exposures between sectors or between individual entities. In particular, for entities operating in non-bank financial markets, mostly institutional investors, exposure to several main asset classes and the markets in which they are traded is relevant: government securities, bank deposits or shares.

Private.pension.funds

Government.bonds

Insurance

Banking.deposits

Figure 46 Network of exposures of entities in non-bank financial markets by types of assets as at December 31, 2020

Source: ASF, ASF calculations

The capital market, represented by open and closed investment funds, Fondul Proprietatea and financial investment companies, holds a share of about 27% in listed shares as of December 31, 2020. At the same time, private pensions (privately managed pension funds and voluntary pension funds) hold in the investment portfolio a percentage of approximately 22% in listed shares. The insurance market, composed of insurance companies active on December 31, 2020, invested 0.4% in listed shares. We appreciate that the interconnection of the entities supervised by ASF with the stock markets has a medium to small scale.

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

The largest exposure to the banking sector is held by collective investment undertakings, which hold a 10% share in bank deposits, while private pension funds and insurance companies hold shares of 1% and 2% in bank deposits, respectively. We consider the level of interconnection with the banking system (in terms of balance sheet assets) to be low.

The network of exposures of the entities from the non-bank financial markets shows that, in the case of all the three non-bank financial sectors supervised by ASF, **the main risk exposure is towards the Romanian state**, through the sovereign bonds held in the portfolio. Thus, government securities are held in the investment portfolios of collective investment undertakings in a percentage of about 26%, in a percentage of 67% are found in the investment structure of private pension funds, and insurance companies have invested 42% of their assets in government securities.

3.3. Contagion index for sovereign securities

The contagion index for government securities¹⁶ assesses the extent to which shocks in domestic markets affect other countries, but also the evolution of the contagion phenomena intensity by comparison with previous values of the index (Diebold, 2009).

The calculation of the index is based on a VAR model (2) for a mobile sample of 150 weekly yields of bonds denominated in euro (lei for Romania: 10 years maturity), starting with 2007 to capture the evolution of the index in relation to the value recorded during the sovereign debt crisis of 2011. Bond values 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 (Greece's second bailout). The worsening of market conditions, which arose as a result of the uncertainties generated by Grexit and later by Brexit (2018), resulted in an increase in the contagion on the sovereign credit markets.

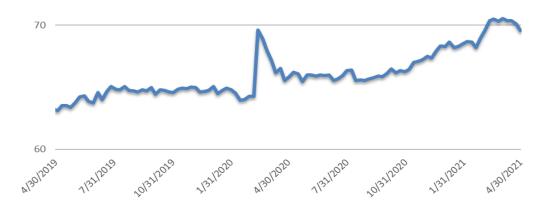
In the sovereign bond market, the contagion between government bond yields rose sharply and intensified in the first quarter of 2020, in February and March, surpassing in speed previous episodes of the spread of the contagion between European economies.

The **contagion index for government securities** increased simultaneously 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 securities, but also against the background of the measures taken by the European Central Bank for market liquidity growth.

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¹⁶ Claeys, P., & Vašíček, B. (2014). Measuring bilateral spillover and testing contagion on sovereign bond markets in Europe. Journal of Banking & Finance, 46, 151-165.

Figure 47 Contagion index for government securities (10 years)



Source: Refinitiv, ASF calculations

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

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

The table below shows that Bulgaria, Romania, the Czech Republic, the Netherlands, Austria, Poland, Hungary, Portugal receive net contagion, while Spain, Italy, Belgium, France and Ireland transmit net contagion. Romania receives 30% contagion on average.

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

Table 8 Contagion received and transmitted in government securities yields (10 years)

	RO	6.6 9	iP A	.U F	R I	NL I	PT	R I	-N	BE	BL	HN	CZ	PO
RO	40.2	5.1	5.1	4.4	5.9	4.4	2.7	3.7	7.9	6.4	0	6.3	4.5	3.3
IT	2.1	29.2	13.6	4.4	8.1	3.2	9.7	9.7	5	9.4	0.2	3.2	0.5	1.6
SP	1.8	12.1	22.8	4.2	9.3	4.8	11	10.1	6.2	10.3	0.5	3.8	0.7	2.5
AU	1.9	5.3	5.4	31	9.7	9.2	4.7	5.3	9.8	13.3	0.3	2.3	1.1	0.6
FR	1.4	8	8.5	6.5	24.1	7.9	5.3	10.3	9	15	0.1	2.8	0.5	0.5
NL	2.8	4.1	6.5	9.5	9.5	28.5	5.1	7.5	8.8	12.8	0.1	3.4	0.1	1.3
PT	1	10.1	12.7	4.6	6.5	5.1	30.1	9.3	4.5	8	0.8	3.6	0.5	3.3
IR	1	9.7	10.9	3.2	10.6	6	7.8	27.9	6.5	11.3	0.2	3.3	0.2	1.4
FN	3.6	5.2	7.8	7.4	8.6	6.3	3.4	6.6	31.3	11.7	0.1	3.5	1.4	3
BE	1.7	7.8	8.7	6.7	13.6	7	6.4	10.8	10	22.8	0.2	2.9	0.5	0.9
BL	0.7	1.2	3	2.5	0.4	1.2	3.6	1.2	1.3	0.9	81.1	1.6	1.1	0.1
HN	4	4.1	4.4	3.1	4.5	3.4	4.5	5.9	4	5.8	0.2	46	2.6	7.3
CZ	6.5	1.4	2.1	1.3	1.4	0.3	1.2	0.4	2.7	1.3	1.2	4.3	70.5	5.3
PO	1.6	2.4	3.7	0.3	0.5	1.6	4.5	1.5	4.9	1.6	0.5	7.9	3.3	65.6

Source: Refinitiv, ASF calculations

3.4. Balance level in European capital markets

The **balance level of the capital market** is the normal market level, an unobservable (latent) variable that can be estimated statistically. Estimating the equilibrium level is important for the analysis of capital market stability, because it provides a reference level for the analysis of the capital market.

Exceeding the balance level may indicate a period of unsustainable growth of the financial market or a change in the balance level in the context of the change of fundamental factors affecting the economy (e.g. technological progress). Falling below the balance level may indicate a temporary period of financial stress (e.g. contagion effects) or a change in the balance level as a result of a period of economic recession.

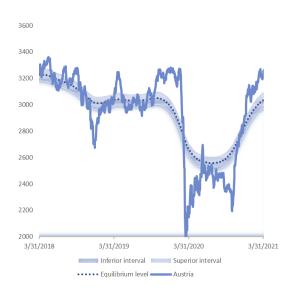
The evolution of the index can be represented as the sum of the average process and the process of economic shocks.

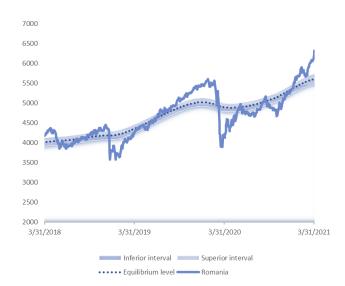
The estimation of the balance level of the Romanian capital market index was performed with a Local Level model estimated with the Kalman filter.

```
\begin{split} &Index_t = average_t + shocks_t, \ shocks_t \sim &NID(0, \sigma_{\varepsilon}^2) \\ &Average_{t+1} = average_t + errors_t, errors_t \sim &NID(0, \sigma_{\epsilon}^2) \end{split}
```

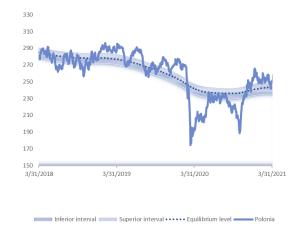
The average dynamics is given by the value from the previous day to which the measurement errors were added and is modeled as a random process. Measurement errors are due to changes in the composition of the index, the shares of existing companies, etc. The balance level of the capital market index is drawn by the average, whose dynamics are latent (unobservable).

Figure 48 Evolution of STOXX600 stock indices, Austria, Romania and Poland compared to the balance level









The graphical representation of the balance level and the confidence bands (90%) indicates the balance level, the confidence intervals for it and the daily closing values for the represented indices.

The results of the estimates indicate that in the first quarter of 2021, with the exception of Poland, the STOXX600 index (proxy for the European capital market), the capital markets of Austria, Romania recorded an increase above the balance level given that the monetary policy rate is low, and the implicit expectations for economic growth in long-term bonds are low. Capital market growth was high in the first quarter and decoupled from economic fundamentals.

The results obtained converge with similar estimates from specialized works and indicate an exuberance of European capital markets.

The estimates do not indicate that the capital market is in a speculative bubble. The empirical definition of a speculative bubble is calculated as an increase in the price of the asset of more than 2σ (standard deviation) above the trend taking inflation into account.

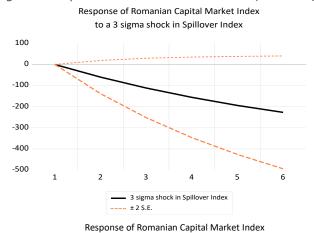
The increase in asset prices on the financial markets was also generated by the reduction of uncertainties on them amid measures to mitigate the COVID-19 pandemic.

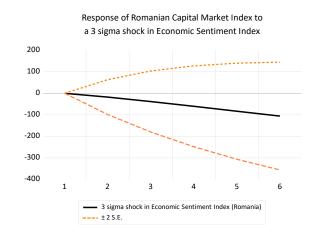
The simulations performed on the Romanian capital market¹⁷ indicate a reduction of the uncertainties generated by the shocks of economic uncertainty.

¹⁷ See Annex 1 of the *Evolution of the capital market in the fourth quarter of 2020* regarding the calculation method and the model used at https://www.asfromania.ro/uploads/articole/attachments/607829cc000c2611893109.pdf

In the case of a shock with an amplitude of 3σ that has a probability of 0.13%, assuming a normal distribution, which occurs once every 3 years, the impact of increasing the systemic risk indicator CISS leads to a decrease in the capital market index in Romania by about 20%. A similar shock for the confidence in the Romanian economy for which the calculated sentiment indicator for the Romanian economy was used, the shock is about 7%. In case of increasing contagion for the economies of Romania, Austria, Poland and Hungary, the impact of the shock is 12%.

Figure 49 Capital market shock simulations (Romania)

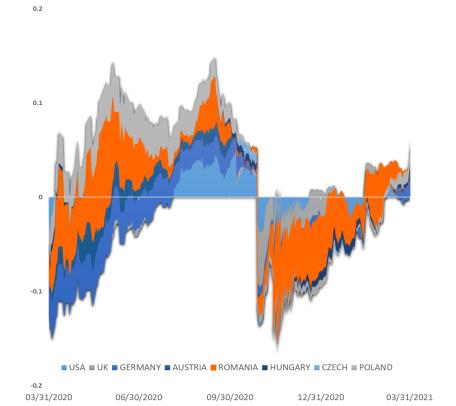






Source: Refinitiv, ASF calculations

Figure 50 Influence of external stock exchanges on domestic stock market yields (historical decomposition of received shocks - VAR model)



Sursa: Refinitiv, calcule ASF

The historical breakdown of shocks shows how much a stock market has been influenced in the past evolution by other stock markets. The historical decomposition of the shocks received by the Romanian stock market index (index calculated by Refinitiv similar to the BET-C index) indicates that currently the local stock exchange is exposed to external shocks of small magnitude. The growth of the Romanian capital market in the first quarter of 2021 is endogenous, fast and strong.

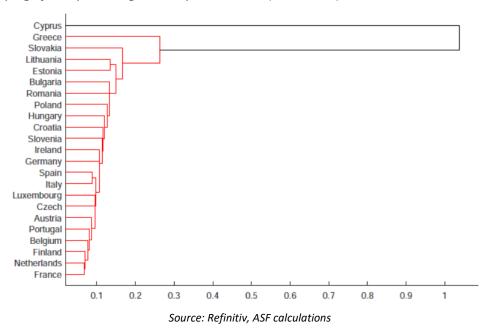
The dendrogram was made based on the distances between the indices of the European capital markets, calculated on the basis of the Spearman degree¹⁸. The resulting data were transformed into a hierarchical cluster type tree, the differentiation being made according to the distance from the median.

¹⁸ Cluster analysis is a method of unsupervised learning that makes inferences from data sets without the need for a dependent variable (y). The observations are grouped according to their similarity in the same group. A distance measure is used to divide the observations according to similarity. The hierarchical clustering algorithm has the following steps:

^{1.} Find the similarity between each pair of objects in the data set using a distance type. For a data set with m objects, there are m * (m-1) / 2 pairs that are grouped in the dissimilarity matrix. The dissimilarity matrix is symmetric of dimension m * m and the element D (i, j) corresponds to the distance between the observations i and j.

The analysis of yields shows that Lithuania, Estonia, Bulgaria, Romania, Poland, Hungary and Croatia are grouped in the long term (2006-2021) in the same cluster, which indicates a close dynamic. In the long run, the distances between markets are fading.





The yield analysis shows that Romania, Estonia, Slovenia, the Czech Republic, Lithuania, Bulgaria and Croatia are grouped in the short term (2020-Q1 2021) in the same cluster, which indicates a close dynamic of their yields. In the short term, the dynamics of European markets were different, which led to increasing the distances between them and their clear differentiation into distinct groups. Increasing the distances between European financial markets implies a decrease in their dependencies.

$$d_{st} = 1 - \frac{(r_s - \overline{r}_s)(r_t - \overline{r}_t)'}{\sqrt{(r_s - \overline{r}_s)(r_s - \overline{r}_s)'}\sqrt{(r_t - \overline{r}_t)(r_t - \overline{r}_t)'}}$$

where r_{sj} is the rank of x_{sj} for x_{1j} , .. x_{mj}

 r_s and r_t are the coordinate vectors depending on the rank for x_s and x_t

$$\overline{r}_s = \frac{1}{n} \sum_j r_{sj} = \frac{(n+1)}{2}$$

$$\overline{r}_t = \frac{1}{n} \sum_{i} r_{tj} = \frac{(n+1)}{2}$$

^{2.} Group the objects in a binary cluster tree, hierarchically by linking the pairs of objects in the immediate vicinity using the link function. The link function uses the distance information generated in step 1 to determine how close the objects are to each other. Binary clusters are grouped into larger clusters until a hierarchical tree is formed.

^{3.} Determining the number of clusters is necessary to partition the hierarchical tree into clusters. There are ways to check the cut that can be arbitrary Verification of data clustering can be done by checking dissimilarity. In a hierarchically clustered object all data is linked at a certain level. The length of the connection between two clusters (which is different from the distance between observations) is called the cophenetic distance.

Two data sets are compared: the first data set is the result of the grouping function between the data and the second is given by the distances used to create the hierarchy. If the cophenetic correlation is close to 1 then the results obtained are close to the natural ordering.

Spearman distance is calculated as

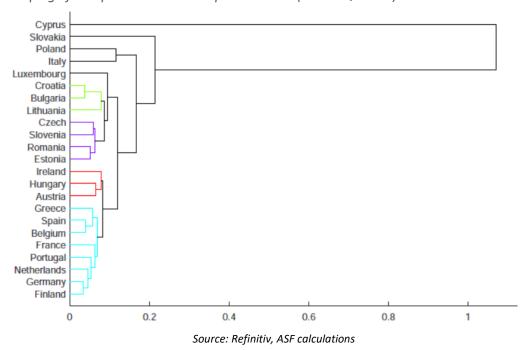


Figure 52 Grouping of European short-term capital markets (2020 - Q1 2021)

3.5. Composite dynamics index of non-bank financial markets

Due to the mutual exposure between them, facilitated by the financial instruments held in the investment portfolios, there are common risk factors that influence the dynamics of non-bank financial markets.

Although a possible financial shock may affect all three sectors at the same time, its impact can be measured with different frequency and with a certain gap. Some of the supervisory data for capital markets and pension funds are available daily, weekly or monthly, usually with a gap of one period, and for the insurance sector the data are available quarterly with a gap of two months.

A mixed frequency indicator is designed to integrate and extract information from time series available at different periods: daily, monthly, quarterly, etc. and to provide a trend signal for a heterogeneous data set whose trend is unclear¹⁹.

Shocks in financial markets, as well as events that can lead to rapid changes in the macroeconomic environment, can significantly influence financial intermediation both by contagion and by increasing stress on the portfolio of institutional investors.

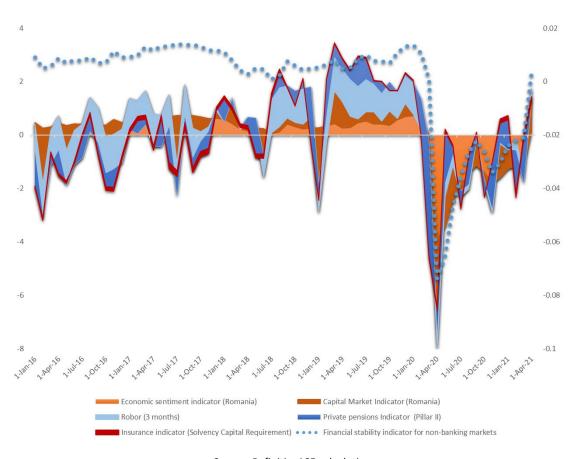
The stability indicator for non-bank financial markets is constructed as a monthly indicator estimated from mixed frequency data. The purpose of the indicator is to signal the financial instability in non-bank financial markets. The mixed indicator built for non-bank financial markets is composed of the following time series:

¹⁹ Acatrinei, M., 2020. Financial stability indicator for non-bank financial markets. Journal of Financial Studies, vol. V, no. 9, November 2020

- the monthly closing prices of the Romanian capital market index calculated by Refinitiv were used for the capital market. We have chosen an index calculated by Refinitiv to ensure comparability with similar indices calculated for European economies;
- for the private pension sector we calculated the average monthly return for the private pension administrators from pillar II. The data are available on the website of the Romanian Financial Supervisory Authority;
- for the insurance sector, we selected the SCR indicator, which represents the solvency capital requirement, for non-life insurance companies. Insurance data are quarterly and should inform whether there is a general reduction in the solvency of insurance companies;
- · Robor monthly data series (3 months);
- for the sentiment index for the Romanian economy, the deseasonalized data available on the Eurostat website were used.

All data (pensions, capital market, insurance, economic sentiment index, interest rate) are expressed as z-score (mean 0 and standard deviation 1).

Figure 53 Financial stability indicator for non-bank financial markets



Source: Refinitiv, ASF calculations

The financial stability indicator has been estimated at a monthly frequency and is useful for studying the current evolution of non-bank financial intermediation by taking into account the dependence between the three sectors. The sharp decline in the indicator in the first two quarters of 2020 due to the COVID-19 pandemic indicated a sharp deterioration in financial stability. The indicator turned positive in early April 2021, which shows that tensions in the three non-bank financial markets have continued for about a year since the shock generated by COVID-19. The results coincide with theoretical simulations which show that following a 1 σ shock that disrupts the stability of non-bank financial markets, they return to normal in about 1 year.

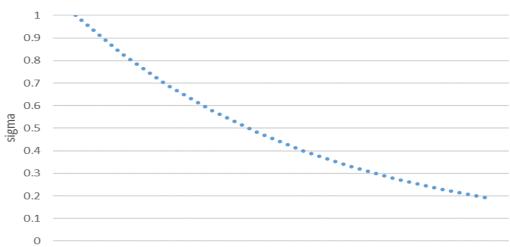


Figure 54 Impulse response function (1σ shock)

The improvement in the financial stability indicator at the end of the first quarter is due to the contributions from the sentiment indicator, capital market indicator, pension indicator. Robor (3 months) and the insurance indicator had a negative evolution.

4. Financial instruments and investments market stability

The two important segments of the Romanian capital market, namely the collective investment undertakings and the stock market, experienced in 2020 an increasing volatility, correlated with a similar trend observed for most capital markets in the region.

The *collective investment undertakings market* is strongly interconnected with the evolution of financial instruments trading markets and the banking market, both the performance of funds and net capital flows to these entities being dependent on the level of market interest rates, bond yields and stock market indices.

A significant number of entities operate on the *collective investment undertakings market* (investment funds classified in different types depending on the structure of investments, companies that manage them and depositories), and each such category of entities faces in the usual activity specific risks.

The market for financial instruments and investments is the second largest market supervised by the ASF (3.92% of GDP), in terms of the value of assets of supervised entities, but also the most complex in terms of the large number of types of entities operating in this market, their very different mechanisms of operation, the very rich and varied legislation at European, international and implicitly at local level.

The financial instruments and investments market identifies at least the following important types of entities authorized, supervised and regulated by the ASF:

- collective investment undertakings (mutual funds) along with their administrators, depositors and distributors. Within this very broad category there are important differences between:
 - o collective investment undertakings (UCITS usually open-end investment funds of various types, including money market funds or exchange-traded funds) and alternative investment funds (AIF can be both open-end and closed-end funds, this category includes the 5 SIF and Fondul Proprietatea);
- the stock market, managed by the Bucharest Stock Exchange, along 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 intermediaries, both financial investment services companies (SSIF) and local credit institutions and intermediaries from other Member States;
- issuers of traded credit instruments or equity instruments that are subject to authorization by the ASF and to the monitoring of the fulfillment of transparency requirements towards investors.

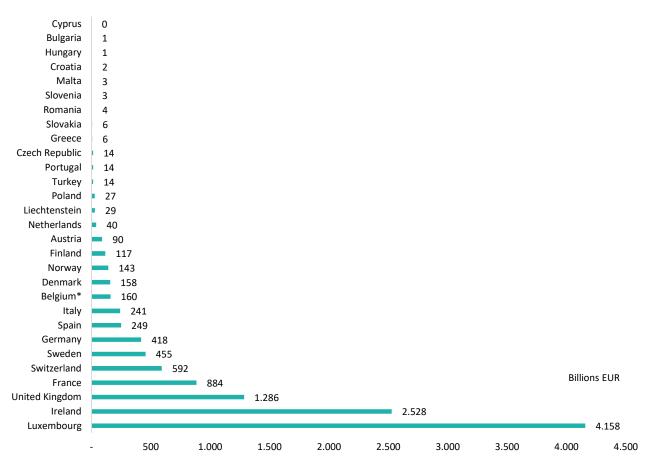
4.1. Collective investment undertakings in a European context

According to data published by EFAMA (European Fund and Asset Management Association), at the end of 2020, compared to the end of 2019, there were increases in net assets, both in the case of collective investment undertakings (+ 5.95%) and in the case of alternative investment funds (+5.58%).

According to EFAMA statistics, in the fourth quarter of 2020, the cumulative value of the net subscriptions of collective investment undertakings (UCITS) was around EUR 226 billion compared to the fourth quarter of 2019, when the European UCITS market recorded net subscriptions worth Lei 148 billion. Net subscriptions of alternative investment funds (AIF) in Europe increased from around EUR 43 billion (fourth quarter 2019) to EUR 64 billion (fourth quarter 2020).

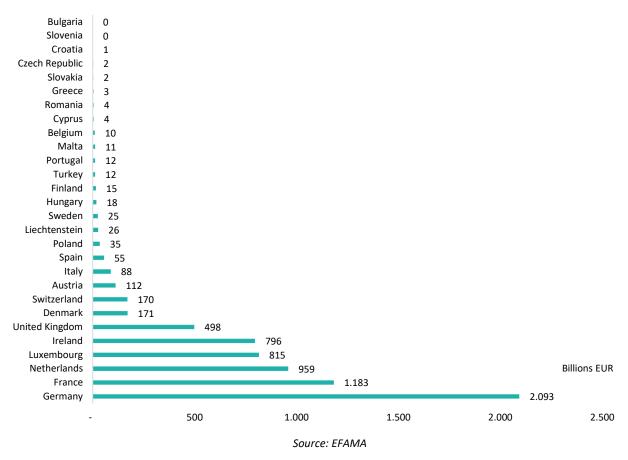
The largest increases in net subscriptions were recorded in the case of share UCITS, which recorded net inflows of EUR 121.82 billion in the fourth quarter of 2020, while ARIS (Absolute Return Innovative Strategies) funds were at the opposite pole, with net outflows of around EUR 5.82 billion. In the case of the AIF, the highest value of net inflows was found in diversified funds (+ € 21.69 billion), while guaranteed funds recorded net outflows of EUR 652 million.

Figure 55 Net assets (EUR billion) of collective investment undertakings in Europe at December 31, 2020



Source: EFAMA





At the level of the fourth quarter of 2020, 23 of the 29 European countries recorded net inflows into UCITS, including Ireland (EUR 110.96 billion), Luxembourg (EUR 56.55 billion) and France (21.90 billion) in terms of the highest values of net inflows in the fourth quarter of 2020. From the perspective of the net assets of UCITS, there was an increase of 5.95% at the end of the fourth quarter of 2020 compared to the end of the fourth quarter of 2019.

At the end of the fourth quarter of 2020, 20 countries recorded net inflows into the AIF, the largest of which were in the case of Germany (EUR +41.35 billion), the Netherlands (EUR +7.94 billion) and Ireland (+4, EUR 17 billion). The net assets of alternative investment funds stood at EUR 7.121 billion at December 31, 2020, up 5.58% compared to the end of the fourth quarter of 2019.

As of December 31, 2020, the investment fund market in Europe included 63,999 investment funds (up 1.46% compared to the number at the end of 2019: 63,080), of which 34,351 collective investment undertakings (UCITS), respectively 29,648 alternative investment funds (AIF).

4.2. Collective Investment Undertakings

The total value of the assets of collective investment undertakings (UCITS) in Romania is Lei 41.42 billion as of December 31, 2020, increasing by about 5% compared to the previous quarter. At the end of 2020, in Romania were operating a number of 18 investment management companies (SAI), 82 open-end investment funds (FDI), 26 closed-end investment funds (FII), 5 financial investment companies (SIF), Fondul Proprietatea and 4 depositories.

Table 9 Number of UCITS and SAI

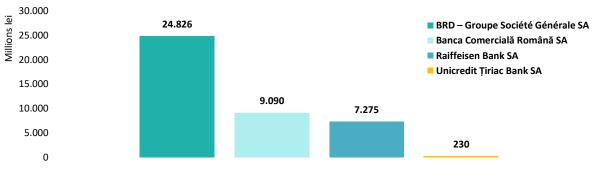
Entity satagony	31.12.2009	31.12.2018	31.12.2019	31.12.2020
Entity category	No. of entities	No. of entities	No. of entities	No. of entities
Investment management companies	20	18	18	18
Open-end investment funds	51	78	82	82
Closed-end investment funds	16	24	26	26
Financial investment companies	5	5	5	5
Fondul Proprietatea	1	1	1	1
Depositories	9	4	4	4

Source: ASF

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

The number of investors in closed-end investment funds is much lower than that of investors in FDI. Thus, at the end of December 2020 the number of investors in FDI increased compared to the end of 2019 by 5,2555 investors, and the number of investors in FII stood at 88,562 investors (most of them 88,278 people are individual investors).

Figure 57 Depositories of UCITS assets



Source: ASF

The degree of concentration on the market of services for depositing the assets of investment funds is high (among the four depositors BRD - Groupe Societe Generale SA holds a share of approx. 60% of the total assets of investment funds), and in the case of closed-end investment fund managers, the degree of concentration is

medium. For the open-end investment fund market, analyzed from the perspective of the assets managed by the Fund Manager, the Herfindahl-Hirschman index has the value of 0.2306, which shows a high degree of concentration. This is also confirmed by the CR ("concentration rate") indicators.

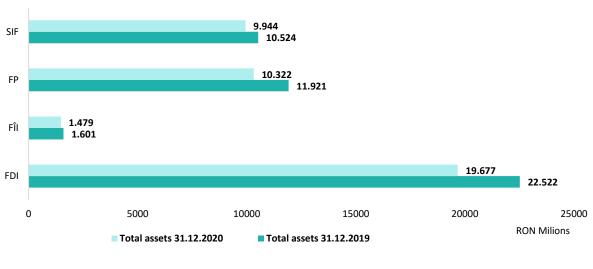
Figure 58 Degree of concentration on the investment funds market in Romania (by net assets as at December 31, 2020)



At the end of the fourth quarter of 2020, the total value of assets of collective investment undertakings (UCITS) in Romania is Lei 41.42 billion, dropping by approximately 11% compared to 2019 and increasing by 5% compared to the third quarter of 2020.

An analysis by category of collective investment undertakings shows that, at the end of 2020, total assets of open-end investment funds (FDI) dropped by approximately 13% compared to the end of December 2019. Also, closed-end investment funds and financial investment companies recorded a drop in total assets compared to the end of 2019.

Figure 59 Evolution of total assets by UCITS categories (RON million)



Source: ASF

From the perspective of the investment structure, FDI are mainly oriented towards fixed income instruments (government securities and bonds), while FII, SIF 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 equity securities with a total value of about Lei 19.69 billion, accounting for about 48% of the accumulated assets of UCITS. Investments in fixed income financial instruments at the level of the entire market are worth Lei 20.28 billion, representing approximately 49% of the total assets of the UCITS.

Table 10 Structure of investment portfolios by UCITS categories and asset classes (RON)

Total assets- 31.12.2020	Open-end funds	Closed-end funds	SIF	FP	TOTAL
Shares	1,063,385,156	1,115,900,915	8,261,699,329	9,246,701,746	19,687,687,145
Bonds	4,640,144,646	47,024,208	161,006,870	-	4,848,175,724
Government securities	10,260,488,086	-	-	380,268,285	10,640,756,370
Deposits and available	3,600,056,587	97,426,277	402,267,345	694,413,203	4,794,163,413
UCITS / AOPC securities	1,155,036,881	139,611,944	1,003,497,688	-	2,298,146,513
Other	- 1,042,361,329	79,298,739	115,157,425	963,022	- 846,942,142

Source: ASF

On December 31, 2020, compared to the end of 2019, there is an increase of 4.48% in investments made in government securities and a decrease in investments made in shares (-12%) and in UCITS / AOPC securities the drop was 8%, simultaneously with a reduction in deposits and cash (-16%) and bonds by about 28%.

The structure of FDI portfolios 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 securities (52%), followed by listed corporate bonds (22%).

Regarding the structure of FII investments, it is found that they are mainly oriented towards investments in shares, which hold a share of approximately 75% of the total assets of the FII, of which about 70% of the total assets represent 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 approximately 3% of total assets, being significantly lower compared to the share of investments in FDI shares.

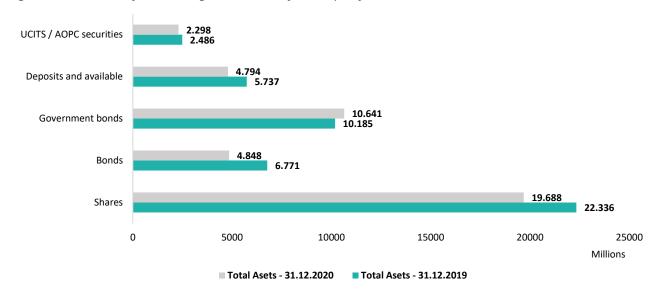


Figure 60 Evolution of the strategic allocation of UCITS portfolios

Source: ASF

At the end of December 2020, 82 open-end investment funds operated in five categories: equity funds (26), bond funds (31), diversified funds (14) 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 will be maintained in 2020 for investment strategies oriented towards fixed income 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 asset classes (bonds and equities) is significant.

Table 11 Structure of net assets by categories of Open-End Investment Funds

FDI depending on investment policy	Net assets Dec 31, 2018 (lei)	Net assets Dec 31, 2019 (lei)	Net assets Dec 31, 2020 (lei)
Equity funds	598,334,414	881,052,086	984,348,733
Diversified funds	3,919,533,165	3,212,103,191	2,850,911,952
Bond funds	14,224,982,174	17,972,448,926	15,432,129,149
Monetary funds	234,108,591	-	-
Mixed funds	432,323,219	433,418,300	384,075,582
TOTAL	19,409,281,562	22,499,022,503	19,651,465,416

Source: ASF

The highest share in FDI's cumulative net assets is held by bond funds, about 79%. Diversified funds rank second in terms of market share, accounting for about 14% of FDI's cumulative net assets.

Among the categories of closed-end investment funds, diversified funds hold a share of over 43% in the accumulated net assets of the FII, which shows that the interest of investors in closed-end funds for this asset class is significant. In terms of market share, diversified funds are followed by equity funds (38% of net assets). Thus, at the end of 2020, about 82% of the total net assets managed by FII are coordinated by equity and diversified funds. The net assets of the closed-end bond fund, amounting to Lei 1.66 million, represent only 0.11% of the cumulative net assets of the FII.

From the perspective of the structure of FII investments, it is found that they are mainly oriented towards investments in shares, which hold a share of approximately 75% of the total assets of the FII, of which about 70% of the total assets represent 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 approximately 3% of total assets, being significantly lower compared to the share of investments in FDI shares.

The main risks to which the open-end investment funds market is exposed remain 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, market risk is a concern, normal considering the profile of institutional investors of these entities, which is managed mainly through diversification and risk hedging operations in case of currency risk.

SIF Banat-Crişana (SIF1), SIF Moldova (SIF2) and SIF Oltenia (SIF5) are the financial investment companies that recorded the highest values for net assets at the end of 2020.

At the end of 2020 compared to the end of 2019, the accumulated net assets of SIF decreased by approximately 6%, and the financial investment company that had the largest depreciation of net assets is SIF Oltenia (SIF5), of about 15%.

Table 12 Synthetic evolution of the five financial investment companies

DATE	lu di aatawa	SIF1	SIF2	SIF 3	SIF4	SIF5
DATE	Indicators	Banat-Crișana	Moldova	Transilvania	Muntenia	Oltenia
	NAV (lei)	2.8087	2.2684	1.4905	1.8310	2.8327
31.12.2009	Market price	1.1300	1.1400	0.680	0.710	1.270
31.12.2009	Discount (%)	59.77%	49.74%	54.38%	61.22%	55.17%
	Net assets (lei)	1,541,528,936	1,177,520,257	1,627,806,279	1,477,676,967	1,643,350,549
	NAV (lei)	5.4928	2.0417	0.5412	1.9061	3.8274
	Market price	2.2000	1.25	0.3440	0.8200	1.8000
31.12.2020	Discount (%)	59.95%	38.78%	36.44%	56.98%	52.97%
	Net assets (lei)	2,826,268,753	2,002,820,552	1,170,308,202	1,495,583,187	1,998,469,509
	No. of shares issued	515,422,363	980,981,287	2,162,443,797	784,645,201	522,149,143

Source: ASF, BSE, SIF Reports

Fondul Proprietatea registered a value of total assets of Lei 10.26 billion at the end of December 2020, dropping by approximately 14% compared to December 2019. FP assets were mainly concentrated in Romania.

Table 13 Synthetic evolution of Fondul Proprietatea

Portfolio items	31.12.2018	31.12.2019	31.12.2020
Number of shares issued	9,101,963,263	7,613,970,697	7,210,158,254
Net Assets (lei)	10,232,198,304	11,871,445,440	10,266,911,904
NAV	1.4095	1.7339	1.6974
Portfolio items	0.8830	1.2100	1.4500
Number of shares issued	37.35%	30.22%	14.58%

Source: Fondul Proprietatea

The figure below shows the evolution of net subscriptions (subscriptions - redemptions) of investment funds sold on the local market (both authorized in Romania and abroad), according to information published by the Association of Fund Managers in Romania. The local investment and financial markets climate has generally been favorable for the fund industry (2008-2017), benefiting annually from net capital inflows, even during the years of the global financial crisis and the sovereign debt crisis in Europe, but the trend has reversed in 2018 and 2020 (direct effect of the COVID-19 pandemic on investors), when net subscriptions entered negative territory, but in 2019 positive values are recorded.

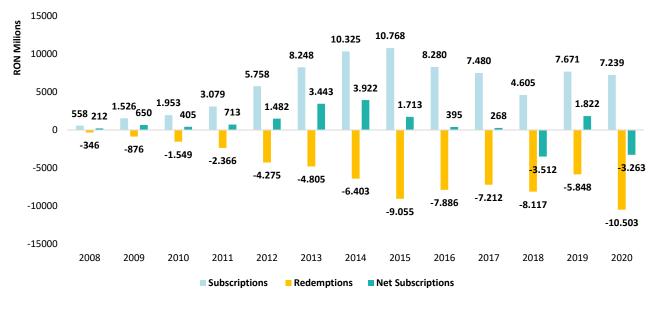


Figure 61 Evolution of net subscriptions (FDI, FII and foreign funds)

Source: AAF

4.3. The stock market

In January 2021, the BET index exceeded the psychological threshold of 10,000 points, so that at the end of March and the beginning of April 2021 it reached over 11,000 points. As of March 31, 2021, all local stock market indices increased by over 13% compared to the end of 2020.

Tahle 14 Annua	al variation of loca	al stock market indices us	. variation of the Consumer Pri	ce Index

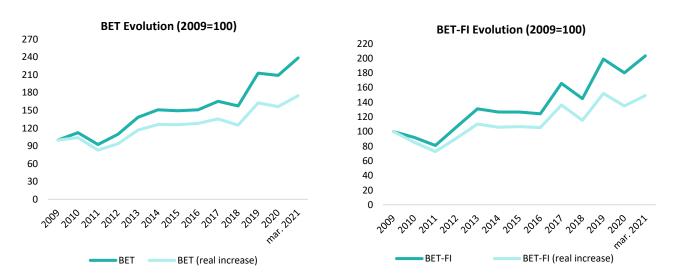
Year	BET	BET-BK	BET-FI	BET-NG	BETPlus	BET-TR	BET-XT	BET-XT-TR	IPC
2010	12.3%		-8.00%	29.50%			1.90%		8.00%
2011	-17.70%		-12.00%	-20.70%			-13.80%		3.10%
2012	18.70%		31.20%	2.60%			19.90%		4.90%
2013	26.10%	19.10%	23.30%	6.10%			23.40%		1.60%
2014	9.10%	3.70%	-3.20%	5.70%			6.30%		0.80%
2015	-1.10%	2.60%	0.00%	-14.00%	-1.30%	3.10%	0.30%		-0.90%
2016	1.20%	0.20%	-1.90%	-3.00%	1.70%	9.70%	0.50%	8.40%	-0.50%
2017	9.40%	22.80%	33.40%	10.80%	10.70%	19.10%	14.50%	23.80%	3.30%

2018	-4.80%	-11.60%	-12.60%	-7.40%	-4.80%	4.30%	-7.60%	0.50%	3.30%
2019	35.13%	29.68%	37.27%	30.26%	34.26%	46.90%	34.45%	45.57%	4.00%
2020	2.25%	5.40%	-2.19%	-3.53%	2.33%	7.58%	-0.17%	4.83%	2.06%
2021*	14.11%	14.75%	12.86%	15.92%	14.15%	14.16%	13.67%	13.72%	2.13%

Source: BSE, ASF calculations, *last valid date March 31, 2021

Local stock market indices generally had significant developments in the years following the global financial crisis, both in terms of actual dynamics and in relation 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, BSE passed to the status of emerging market. Although there were negative evolutions of the indices during 2020 due to the crisis generated by the COVID-19 pandemic, towards the end of the previous year and in the first quarter of 2021, the indices show a favorable evolution. The most significant increase on March 31, 2021 compared to December 31, 2020 was recorded by the BET-NG index (+ 15.92%), followed by the BET-BK index (+ 14.75%).

Figure 62 Comparative evolution of BET and BET-FI indices



Source: Datastream, INSSE, ASF calculations

After the financial crisis of 2007-2009, the evolution of the Romanian capital market was strongly affected by the sovereign debt crisis of 2011. The BET index dropped by 8% in 2011, while the BET-FI index dropped by approximately 20%. The BET index rose by 139%, in nominal terms, in March 2021 compared to 2009, and in real terms (excluding inflation) by 75%, while the BET-FI index rose by 104%, and in real terms by 49%. As can be seen from the chart above, both indices registered a remarkable evolution in the first quarter of 2021.

In the period 2012-2019, the market capitalization relative to the gross domestic product reached a maximum of 12.4% at the end of 2013, after which it experienced a downward evolution, dropping to about 9% of GDP in 2018, and in 2019 it reached the level of 10.5% of GDP, after which in 2020 the market capitalization is known at a value of 9.6%. 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 implicitly of stock indices) which was lower than GDP growth in nominal terms.

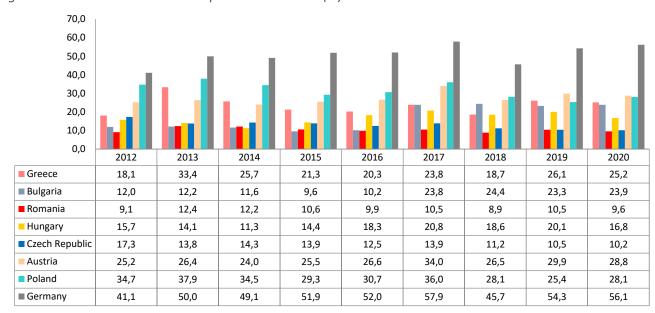


Figure 63 Domestic stock market capitalization in GDP (%)

Source: FESE, ASF calculations

In the first quarter of 2021, the cumulative value of transactions for the main market and MTS increased by 35%, from Lei 3.69 billion in the first quarter of 2020, to Lei 4.98 billion in the first quarter of 2021. Starting with March 2021 new government securities issues were launched in the Fidelis program of the Ministry of Public Finance, which largely led to this increase in the value of government securities transactions. Therefore, the most significant amount of Lei 387.61 million was made on the issue with the symbol R2203A denominated in lei and due in the spring of 2022. The issue of securities with the symbol R2403A, maturing in 2024 were processed for a value of Lei 331.94 million.

The number of transactions carried out on the Bucharest Stock Exchange (BSE) increased by 37.09% in the first quarter of 2021 compared to the first quarter of 2020.

Table 15 Structure of transactions carried out at BSE (BSE and MTS market), according to the value corresponding to each type of instrument

Type of instrument		March 31, 2021	Variations March 31, 2021 vs. March 31, 2020 (%)			
Type of instrument	No. of	Value (lei)	Value share in the	No. of	Value	
	transactions	Value (lei)	total (%)	transactions	Value	
Shares, including rights	332.388	2.719.752.072	54.56%	32%	-22%	
Other bonds, including						
EUR-BOND, EUR-TBILLS and	8.926	1.207.263.301	24.22%	225%	1375%	
EUR-TBONDS						
Structured products	32.208	192.855.200	3.87%	29%	40%	
Government securities	9.111	858.714.021	17.23%	182120%	855390%	
Fund units	2.730	6.097.636	0.12%	43%	19%	
Total	385.363	4.984.682.231	100.00%	37%	35%	

Source: BSE

All the Romanian stock market indices registered positive evolutions, at the end of March 2021, compared to the end of 2020. The BET reference index, which captures the evolutions of the most traded companies on the regulated market of BSE, had an increase of approximately 14% on March 31, 2021 compared to the end of 2020.

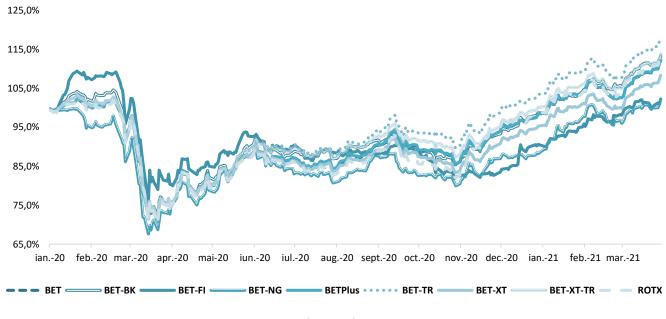


Figure 64 Evolution of BSE indices during January 2020-March 2021 (Dec 31, 2019 = 100)

Source: BSE

The BET-NG index, a sector-type index that reflects the evolution of companies listed on the regulated market of BSE that have the main field of activity energy and related utilities, registered on March 31, 2021 the most significant rise, of approximately 16%.

Also, all BSE indices showed positive evolutions at the end of March 2021 compared to March 2020. Therefore, the increases registered were between 23.27% (BET-FI index) and 54.41% (BET-TR index).

BSE regulated market

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

The total value traded in equity dropped by 54% in the first quarter of 2021 compared to the first quarter of 2020, and the number of transactions dropped by about 37%.

The value of transactions in equity securities (shares, rights and fund units) rose by approximately 39% (shares and rights) and by 19% in the case of fund units in Q1 2021, compared to the value recorded in the same period of the previous year.

The highest traded value in the last two years was in September 2020 (Lei 2.7 billion), being supported by the sale of 1.7 billion shares, worth Lei 561 million, existing in OMV Petrom S.A. through an accelerated private placement offer, followed by the shares issued by Societatea Energetică Electrica (EL), Banca Transilvania (TLV) and Fondul Proprietatea (FP).

The Ministry of Public Finance issued government securities in the amount of 17.09% of the total transactions carried out in Q1 2021 and EUR-TBONDS in the amount of 18.95% of the total transactions carried out in the first quarter of 2021. The shares remain the dominant financial asset class, with a share of 54.56% of the total value traded on the BSE on March 31, 2020.

On the first 5 places in the ranking of the most liquid companies whose shares were traded on the main market of BSE were, further, TLV (Banca Transilvania SA), FP (Fondul Proprietatea), SNP (OMV PETROM SA), BRD (Banca Română pentru Dezvoltare - Groupe Societe Generale SA) and Teraplast (TRP), cumulating transactions of over 58% of the total value traded on the main BSE market.

The market capitalization showed a positive evolution during the analyzed period. The highest value was registered in 2019 (+ 26%) compared to the end of 2018 which was influenced by the political framework in Romania. In addition, at the end of the first quarter of 2021 there was a rise of 16% compared to the end of 2020 and a drop of 0.75% compared to the end of 2019. At the same time, at the end of March 2021 there was an increase of approximately 49% compared to the end of March 2020, when the capitalization dropped due to the uncertainties caused by the COVID-19 pandemic.

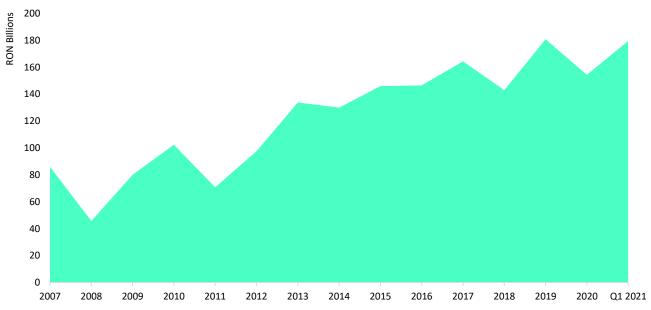


Figure 65 The evolution of the BSE capitalization (shares)

Source: BSE

The multilateral trading system (MTS) within BSE

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

As of March 31, 2021, there were 291 instruments available for trading on MTS: 276 instruments tradable on the XRS1 market and 15 instruments tradable on the XRSI market. The number of instruments available for trading is declining.

During the first quarter of 2021, approximately 96 thousand transactions were carried out on MTS in a total value of about Lei 320 million, rising by 155% compared to the value registered in the same period of the previous year. In the first quarter of 2021, the instruments preferred by investors on MTS were shares, whose value represents about 81% of the total traded value.

The companies whose shares were most often traded in Q1 2021 were NRF (Norofert SA), AG (Agroland Business System) and SAFE (Safetech Innovations).

4.4. Intermediaries

At the end of December 2020, a total of 27 intermediaries were operating on the BSE market, of which 16 Financial Investment Services Companies (SSIF), 4 local credit institutions and 7 entities authorized in other EU Member States.

At the end of December 2020, a total of 20 intermediaries were active within the MTS, of which 15 Financial Investment Services Companies (SSIF), 4 local credit institutions and an investment firm authorized in another EU Member State.

Table 16 Categories of regulated market intermediaries managed by BSE and MTS

Category	Registered in the CNVM Register in 2009*	BSE Dec 31, 2020	MTS Dec 31, 2020			
Financial Investment Services Companies (SSIF)	63	16	15			
Local credit institutions	15	4	4			
Investment firms from other EU Member States	802	4	1			
Credit institutions from other EU Member States	117	2				
Branch of a credit institution in other EU Member States		1				
TOTAL	997	27	20			
* registered in the CNVM Register (Bucharest Stock Exchange and the Monetary - Financial and Commodity Exchange Sibiu)						

Source: BSE, ASF calculations

Some of the intermediaries that ceased their activity during this period were also important names with significant market share, which took the strategic decision to give up as a result of the pessimistic forecasts regarding the future evolution of the activity indicators.

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

At the end of December 2020, the most active intermediaries on BSE (regulated market and MTS) were the SSIF, the value intermediated by them being of approximately Lei 23 billion. Local intermediaries (SSIF and credit institutions) accounted for about 86% of the total intermediated value.

Of the intermediaries authorized in other EU Member States that traded on spot markets, the most active were investment firms, which accumulated a market share of 10.35%.

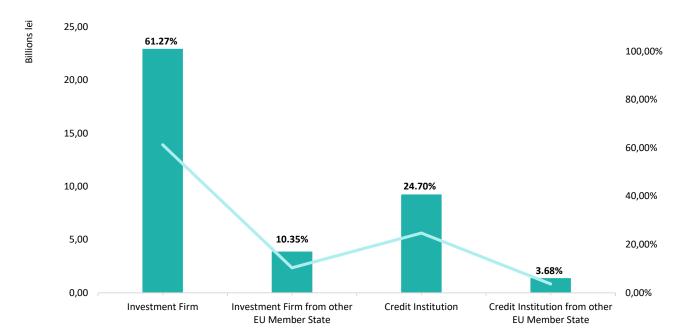


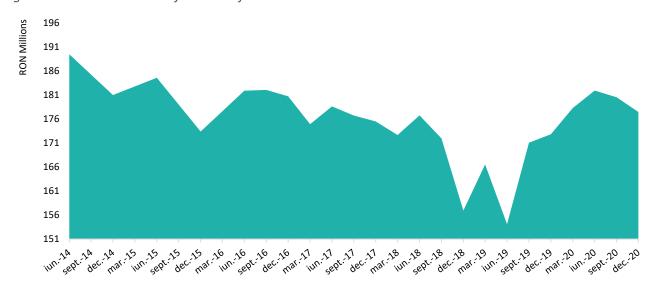
Figure 66 Value traded on spot markets by categories of intermediaries as of December 31, 2020

Source: BSE, ASF calculations

The top 10 companies hold about 92% of the total brokered value by 2020. Of these, 6 are Financial Investment Services Companies (SSIF), two local credit institutions, an investment firm authorized in another EU Member State and a credit institution from another EU Member State.

In December 2020, the cumulative value of SSIF own funds increased compared to December 2019 by approximately 3%, reaching the level of Lei 177 million and temporarily reversing the declining trend of this indicator value.

Figure 67 Cumulative value of SSIF own funds

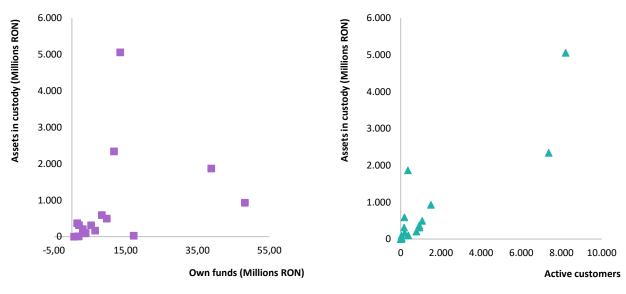


Source: ASF

At the end of December 2020, the SSIF had in custody a cumulative value of assets of lei 12.87 billion (approximately EUR 2.71 billion), representing both customer cash and financial securities held by them.

The cumulative number of SSIF active customer accounts at the end of December 2020 was 22,126 (an investor can have accounts opened with several intermediaries simultaneously). The graphs below show that the value of assets in custody is generally correlated with the number of active accounts.

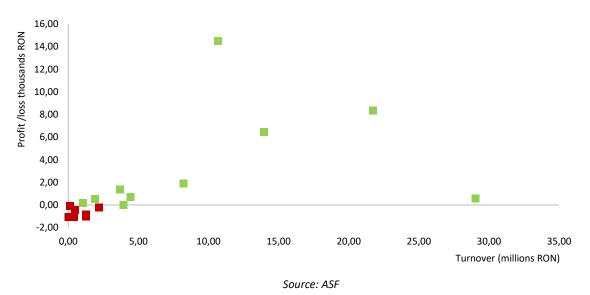
Figure 68 Value of assets in custody reported in terms of own funds (left), compared to the number of active accounts (right)



Source: ASF

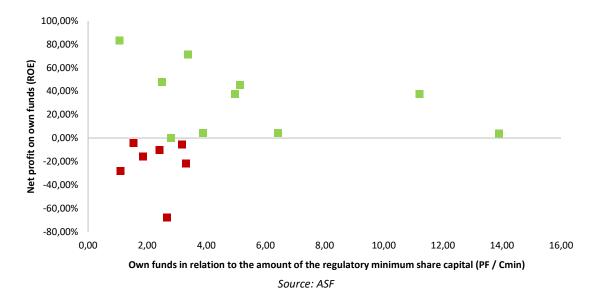
In 2020, the profit made by intermediaries (SSIF) rose compared to 2019. Therefore, 10 companies out of 17 managed to report profit²⁰ in a cumulative amount of Lei 34.49 million, while 7 companies recorded a cumulated loss of Lei 4.78 million. Also, the value of assets in custody increased in 2020 compared to 2019 by 17%, from Lei 11.02 billion to Lei 12.87 billion.

Figure 69 Financial results of SSIF



The value of own funds in 2020 had a positive evolution as a whole by 2.68% compared to 2019.

Figure 70 Distribution of SSIF according to the level of own funds and the net result in 2020



²⁰ The results presented are in accordance with the preliminary balance sheets for December 2020, the audited financial results not being available at the date of the report.

4.5. Market infrastructure institutions. Central Depository

The Central Depository, along with the Bucharest Stock Exchange, is the most important infrastructure institution of the local capital market. It fulfills multiple roles, of which the most visible and important are those of record of holdings and ensuring the completion of clearing and settlement processes. At 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 of 23 July 2014 on improving the settlement of securities in the European Union and on the central depository of securities, being entered in the Register of Central Depositories of ESMA. The authorization confirms that the Central Depository meets CSDR requirements, has an important role in creating a 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 in the context of the classification of BSE as an emerging market by FTSE Russell in 2019, and starting with the end of September 2020 BSE was promoted to "emerging market" status, following a decision taken by the financial evaluation agency FTSE Russell.

At the same time, the Central Depository is the only institution in Romania authorized to issue LEI codes²¹ for legal entities in 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 administrator of the financial instruments settlement system (RoClear) and fulfilling the function of registrar for joint stock companies.

The Central Depository also offers participants a multitude of other related services, being constantly concerned that they be harmonized with European practices, at high standards, with minimal risks and low costs, by:

- **Stability** by ensuring safe and efficient services that facilitate 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 along 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 17 Summary of net local clearing and settlement activity in national currency

Year	Number of settled transactions	Value of settled transactions (thousand lei) VTD	Value of transactions after clearing (thousand lei) VTC	Degree of clearing (%) =100x(1-VTC/VTD)
2021*	384,638	6,086,451.12	767,743.91	87.39%

²¹ Legal Entity Identifier

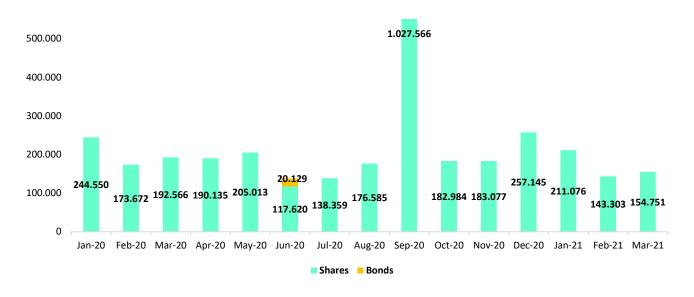
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2020	998,169	29,807,692.44	5,209,477.85	82.52%
2019	598,986	27,133,713.55	5,541,291.42	79.58%
2018	669,299	28,269,201.66	4,177,188.24	85.22%
2017	1,045,162	31,942,174.32	5,317,097.26	83.35%
2016	1,015,204	24,822,286.01	4,250,144.82	82.88%
2015	1,095,125	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 March 2021

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 using the single counted principle.

Figure 71 Transaction value (RON thousand) for 2020 and 2021



Source: Central Depository

4.6. Potential risks and vulnerabilities on the capital market

The year 2020 was marked by the outbreak of the COVID-19 pandemic, which induced instability and sharp declines in international capital markets, with restrictions imposed in many countries contributing to increased

uncertainty among investors. The level of stress in the European financial system, according to the composite indicator calculated by the European Central Bank, returned to pre-crisis levels.

In March 2020, trading conditions were significantly deteriorated due to the effects of COVID-19, but since the end of October 2020, there has been an improvement in conditions in the US and Euro area financial markets, according to Bloomberg estimates.

The turbulence index on international stock markets calculated by Bank of America Merrill Lynch peaked in March 2020, amid concerns about the effects of the first wave of COVID-19, but recovered during 2020, and at the end of April 2021 it is on a downward trend and is positioned below the value of 0.

The two components of the capital market (stock exchange and collective investment undertakings), due to their specific role and operating conditions, face different sets of risks. Thus, for the market of collective investment undertakings the most relevant are the investment risks, the credit risk and the liquidity risk. Furthermore, they are generally managed adequately throughout the market, by diversifying and complying with the investment policies assumed in the prospectuses of the funds. The low complexity of the market means that, for the time being, these risks are not amplified by the use of financial leverage, complex financial instruments (e.g. derivatives, structured, bonds resulting from securitization, etc.) not having a significant share in total assets (3.75% of GDP at the end of 2020). The high level of concentration of storage services remains high in 2020, 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. In March 2020, there is a high episode of volatility on the stock market, compared to 2019, these being determined by the economic effects caused by the COVID-19 pandemic. Thus, in the first part of 2020, the international stock exchanges were significantly deteriorated due to the COVID-19 pandemic, and since April there is a return, the most significant evolution being registered by the stock exchanges in the United States of America. In the local stock market, the high volatility triggered by the COVID-19 pandemic began to decrease significantly, returning to the level before the pandemic. Currently, the volatility of the Bucharest Stock Exchange indices remains low, and the regime remains medium to low for the time being. The COVID-19 pandemic had a direct and strong impact on the local stock market, due to the fear of investors.

Despite the deteriorating macroeconomic context and the growing risks on the financial markets, there was an increase in liquidity on the local capital market in 2020 compared to 2019, both in terms of the value traded and the number of transactions. The total value traded on the BSE and MTS market reached the level of 18.73 billion in 2020, increasing by 54.05% compared to 2019. The number of transactions performed on the BSE rose by 70.99% in 2020, compared with the previous year.

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

The Investor Compensation Fund (ICF) was established in June 2005 and aims to compensate investors in the event of members' inability to return funds and/or financial instruments due or belonging to investors, which were held on their behalf during the provision of financial investment services or the management of individual investment portfolios.

Starting with January 1, 2012, ICF has the obligation to compensate investors equally and non-discriminatorily within a maximum ceiling representing the RON equivalent of EUR 20,000/individual investor.

4.7. Bucharest Stock Exchange - Emerging Secondary Market

Starting with September 21, 2020, the Romanian capital market is included in the Emerging Markets indices, according to the classification of the global index provider FTSE Russell. Initially, FTSE Russell included the Romanian capital market on the list of countries that have a substantial potential to move to emerging market status in the short or medium term, in September 2016. After three years on the monitoring lists, FTSE Russell announced that Romania meets the necessary requirements to acquire the status of Secondary Emerging Market.

Therefore, Romania meets the 9 quality criteria of the FTSE for the status of Secondary Emerging Market according to the FTSE scheme for the classification of countries. The promotion of Romania to the status of Emerging Market after 25 years from the re-establishment of the local stock exchange, a fundamental institution of the Romanian capital market, represented an unprecedented success.

Two Romanian companies, Banca Transilvania (TLV), the most traded company from BSE, and Nuclearelectrica (SNN), a listed company in which the Romanian state is the majority shareholder, have met the necessary criteria to be included, starting with September 21, in All - Cap indices dedicated to Emerging Markets, according to the classification of the global index provider FTSE Russell.

At the end of 2020, the first place in the ranking of the most liquid companies whose shares were traded on BSE on the main market (Regular) is occupied by Banca Transilvania (TLV), which holds a share of over 30% of the total traded value. Fondul Proprietatea (FP), BRD - Groupe Societe Generale (BRD), OMV Petrom (SNP) and Romgaz (SNG) were ranked next in this top. The 5 financial investment companies are included in the ranking, while the banking and energy sectors remain best represented in the top of stock market liquidity.

Table 18 Ranking of the 20 most traded companies on BSE in 2020

Symbols	Value (lei)	% of total value main market 2020	No. of transactions	% of total transactions	Closing price 2020 (lei)	Closing price 2019 (lei)	% Price change
TLV	2,835,421,798	30.44%	132,719	17.95%	2.25	2.359	-4.7%
FP	1,300,861,197	13.96%	33,783	4.57%	1.45	1.21	18.1%
BRD	840,826,890	9.03%	48,494	6.56%	15.84	14.86	6.4%
SNP	823,228,454	8.84%	53,072	7.18%	0.3635	0.447	-20.7%
SNG	817,040,784	8.77%	52,431	7.09%	28.1	37.1	-27.8%
EBS	450,026,276	4.83%	44,648	6.04%	121.7	160.35	-27.6%
SNN	441,572,560	4.74%	47,816	6.47%	17.86	14.25	22.6%
EL	235,962,582	2.53%	22,931	3.10%	12.55	10.65	16.4%
TGN	232,505,937	2.50%	23,907	3.23%	283	360	-24.1%
TRP	189,952,808	2.04%	31,140	4.21%	0.438	0.2172	70.1%
SIF5	142,258,241	1.53%	20,341	2.75%	1.8	2.56	-35.2%
TEL	111,253,701	1.19%	15,592	2.11%	25.6	19.75	25.9%
M	101,308,903	1.09%	10,311	1.39%	11.2	5.67	68.1%
DIGI	98,391,512	1.06%	6,707	0.91%	34.7	33.4	3.8%
SIF3	90,156,697	0.97%	17,907	2.42%	0.344	0.392	-13.1%
SIF4	60,819,338	0.65%	14,161	1.91%	0.82	0.844	-2.9%
WINE	56,718,308	0.61%	5,496	0.74%	22	22	0.0%
SIF1	54,507,669	0.59%	9,607	1.30%	2.2	2.73	-21.6%
SIF2	52,709,211	0.57%	9,947	1.34%	1.25	1.61	-25.3%
COTE	44,851,360	0.48%	11,520	1.56%	76.2	79.6	-4.4%
TOTAL cumulated	8,980,374,227	96.41%	612,530	82.82%			
TOTAL traded	9,315,233,754	100.00%	739,556	100.00%			

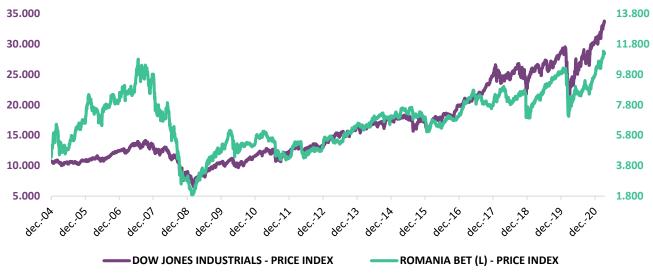
Source: BSE, ASF calculations

At the end of 2008, the BET index fell by more than 70% due to the global crisis, and as a result of the effects generated by the COVID-19 pandemic, it marked a drop of over 24% in March 2020, significantly lower than the one 12 years ago.

The value of BSE's capitalization in 2008 decreased by approximately 47% compared to 2007, and in 2020 there was a loss of about 15% compared to the previous year. At the end of 2020, the value of BSE's capitalization as a share in GDP represents 14%, increasing compared to the value it held at the end of 2008 (8.5%).

The Bucharest Stock Exchange had a positive evolution in 2020, despite the effects of the COVID-19 pandemic. The BET index, a reference for the local capital market, which captures the evolutions of the most traded companies on the regulated market of BSE, experienced a rise of 29% on December 31, 2020 compared to March 2020.

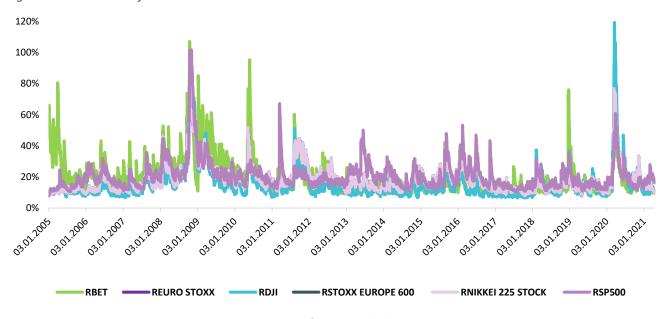
Figure 72 Evolution of the DJI index and BET index



Source: Refinitiv, ASF calculations

The main feature of 2020 was the general increase in volatility as a result of the widening of the health and financial contagion, with the immediate effect of significant declines in stock market indices linked to the prospects for a sharp decline in global GDP.

Figure 73 Volatilities of the main international indices VS BET index



Source: Refinitiv, ASF calculations

From the perspective of the liquidity of the local capital market, in September 2020 the highest traded value (shares) was registered, in the amount of Lei 2.70 billion, being also the month in which BSE promoted to the status of emerging market, the investors being thus driven by this new status of the capital market.



Figure 74 Evolution of monthly transactions (shares) and capitalization of BSE

Source: BSE

At the end of 2020, the market capitalization on the regulated market reached the level of Lei 154.37 billion, dropping by approximately 15% compared to the previous year. It is noted that in March 2020, the stock market capitalization of BSE (shares only) dropped significantly, amid investor fears about the COVID-19 pandemic. The lowest level of stock market capitalization, Lei 113.85 billion, was registered on March 18, 2020.

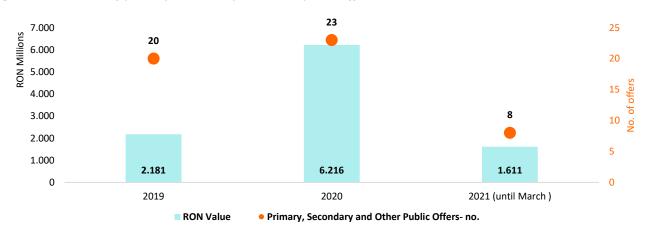


Figure 75 Evolution of primary, secondary and other public offers- no.

Source: BSE

According to the available data, most of the primary, secondary and other public offers were made on the Bucharest Stock Exchange in 2020 and a value of Lei 6.21 billion is registered. During 2020, several companies and the Ministry of Public Finance used the capital market to finance themselves through issues of shares and bonds, both in lei and euros.

4.8. The impact of the COVID-19 pandemic on the capital market

The current crisis is not only a global health emergency, but also a global economic crisis, as most countries have adopted strict quarantine policies to prevent the spread of the virus, their economic activities being abruptly halted. Limiting and restricting transport between countries has led to a slowdown in global economic activity. As a result of the panic created at the level of consumers and companies, the usual consumption patterns have changed and thus market anomalies have been created.

The effects of the COVID-19 pandemic are considerable and have directly affected stock markets around the world, with the rapid spread of the virus unexpectedly changing the global outlook. The analysis provides evidence of significant negative effects on the Romanian capital market caused by COVID-19 between January 2020 and April 2021.

The analysis focuses on studying the way in which the Romanian stock market reacted to the evolution of the COVID-19 pandemic. In order to identify the links, daily frequency data from January 2020 to April 2021 were used for the following markets: USA, Italy, China and Romania. In order to achieve the objective, it was decided to select an extended number of variables, such as: the BET stock index, the new number of COVID-19 cases in China, USA, Italy and Romania. The ARDL (Autoregressive Distributed Lag) model was used, which allows the study of the cointegration between variables, respectively the presence of short-term or long-term causal relationships.

The graphs below show the evolution of the number of new cases due to COVID-19 in the USA, Italy, China and Romania, as well as the evolution of the BET index. In terms of the number of new cases of COVID-19, the US recorded the highest figures and Italy ranked second. Although the COVID-19 pandemic started in China, it can be observed that the number of infected people was significantly lower than in the USA and Italy.

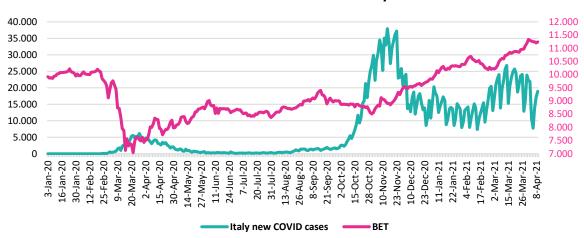
Developments in capital markets are difficult to predict in the current context. Comparison with other past financial crises is not feasible, but it may work to a limited extent if we refer only to the financial losses generated by the effects of the spread of COVID-19. In times of uncertainty, market volatility increases, along with contagion effects, so that the correlations between markets become much closer.

Figure 76 Evolution of the number of new infections and of the number of COVID-19 deaths

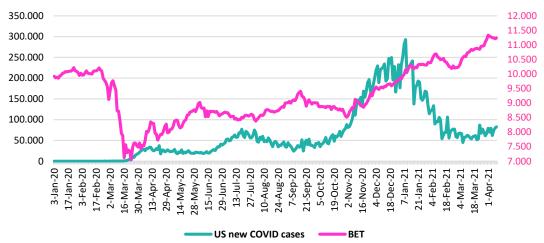
Number of new COVID-19 infections in China and BET index



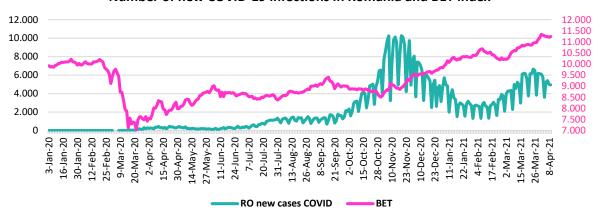
Number of new COVID-19 infections in Italy and BET index



Number of new COVID-19 infections in the US and BET index



Number of new COVID-19 infections in Romania and BET index



Source: BSE, Ourworldindata, ASF processing

Figure 78 captures the evolution of the profitability of the BET index, as well as of the most traded shares on the Bucharest Stock Exchange. International stock markets reacted strongly, being influenced by investors' fears, so that in March the highest volatility was registered. This increase was also fueled by the restrictions imposed in order to limit the spread of the COVID-19 pandemic, which had a negative impact on the evolution of stock market indices globally. Two other episodes of high volatility were observed between July and August 2020 and in March 2021.

In the first part of January 2020, the BSE's main index reached the psychological threshold of 10,000 points, but it registered a major decline in March due to the spread of the COVID-19 pandemic globally. Thus, in September 2020, the main index, BET, marks a rise of about 18% compared to March, when it dropped by 24% compared to December 2019.

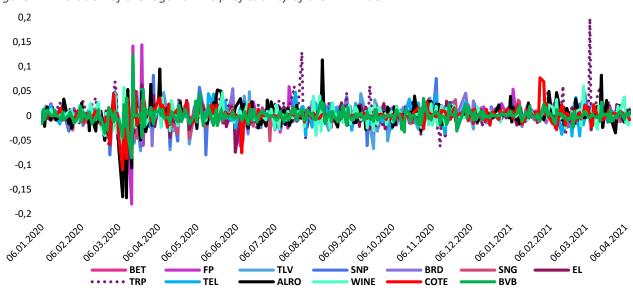


Figure 77 Evolution of the logarithmic profitability of the BET index

Source: BSE, ASF processing

According to the correlation matrix, positive correlations were found between the number of new infections in Italy and the BET index (0.529), as well as between the number of new infections in Romania and the BET index (0.520). A positive correlation, but significantly lower, was established between the number of new infections in the USA and the BSE index (0.477).

Table 19 Correlation matrix of the analyzed variables (March 2020-April 2021)

	BET	New COVID-19 infections in China	New COVID-19 infections in Italy	New COVID-19 infections in Romania	New COVID-19 infections in USA
BET	1.000	0.039	0.529	0.520	0.477
New COVID-19 infections in China	0.039	1.000	0.058	0.073	0.483
New COVID-19 infections in Italy	0.529	0.058	1.000	0.880	0.602
New COVID-19 infections in Romania	0.520	0.073	0.880	1.000	0.634
New COVID-19 infections in the USA	0.477	0.483	0.602	0.634	1.000

Source: BSE, Ourworldindata, ASF

The empirical results from the ARDL models (the model was applied over the period October 2020-April 2021, which includes the second and third wave of the COVID-19 pandemic) confirmed both negative short-term relations (from Italy and China to the Romanian capital market), as well as long-term (from Italy to the BET index).

Between the selected COVID-19 variables and the BET stock index, a single unidirectional causal relationship is identified: from the number of new cases in China to the BET index. Thus, according to the Granger causality test, the variables that represent the evolution of the COVID-19 epidemic in Italy, USA and Romania have no causality on the main BSE index.

Table 20 Causal test results

Null Hypothesis:	Prob.
DCHINA_NOI_CAZURI_COVID does not Granger Cause RBET	0.0261
RBET does not Granger Cause DCHINA_NOI_CAZURI_COVID	0.8609
DITALIA_NOI_CAZURI_COVID does not Granger Cause RBET	0.6151
RBET does not Granger Cause DITALIA_NOI_CAZURI_COVID	0.16
DRO_NOI_CAZURI_COVID does not Granger Cause RBET	0.4564
RBET does not Granger Cause DRO_NOI_CAZURI_COVID	0.3668
DSUA_NOI_CAZURI_COVID does not Granger Cause RBET	0.6111
RBET does not Granger Cause DSUA_NOI_CAZURI_COVID	0.2567

Source: BSE, Ourworldindata, ASF

The empirical results of the study indicate that the BET index, respectively the shares traded on the Bucharest Stock Exchange, respond quickly to COVID-19, and the reaction varies over time, depending on the stage of the pandemic. The uncertainty and risk induced by the effects of COVID-19 have caused a significant economic impact globally, affecting both advanced and emerging economies. In this context, the financial market reacted strongly, with the economic turmoil associated with COVID-19 having a significant impact.

Insurance market stability

The insurance market in Romania had, in general, a positive dynamic during 2020, without extreme fluctuations of the parameters aimed at financial stability, according to the reports submitted to the Authority by the companies authorized and regulated by the ASF. However, **there was a deterioration of solvency and liquidity in the insurance market**, as a result of serious deviations from the legal provisions found in the case of City Insurance SA.

In 2020, the growth trend of the insurance market continued from the perspective of the volume of gross written premiums, supported by the positive dynamics registered by the non-life insurance segment, considering that the life insurance activity decreased slightly during the reference period. From the structure point of view, the domestic market remained dominated by non-life insurance, with a share of 81% in the total volume of gross premiums written by companies authorized and regulated by the ASF, also maintaining the dependence of the Romanian insurance market on car insurance (class A3, CASCO, and class A10, MTPL and CMR). However, there is a slight tendency to diversify the Romanian insurance market and, implicitly, to reduce the dependence of the local market on car insurance, by consolidating the surety insurance (class A15) and health insurance (class A2) segments, which, although they still have a relatively small share in the total volume of gross written premiums, they continued their positive trend observed during the previous years.

The degree of concentration is maintained medium to high on the non-life insurance market, both from the perspective of exposure by insurance classes (3 insurance classes, A10, A3 and A8, hold a share of 84% in the total value of GWP for non-life insurance activity), as well as from the point of view of the market shares held by the insurance companies. An analysis of the volume of gross premiums written by companies by classes of non-life insurance identified a series of segments in which the degree of concentration is maintained at a high level: the MTPL insurance market and guarantee insurance. On the Romanian MTPL market, 2 insurance companies (City Insurance SA and Euroins Romania SA) have a cumulative market share of 75%, while the insurance market is dominated by the presence of City Insurance SA and Onix Asigurări SA, which hold a share of over 79% of the local guarantee insurance market. There is a high degree of concentration in the case of other insurance classes, but they have a insignificant share in terms of the volume of underwriting in the total volume of GWP for non-life insurance.

The solvency and liquidity risk increased on the Romanian insurance market, amid the adjustments made by the ASF regarding the indicators related to City Insurance SA, the leader of the Romanian insurance market, given that ASF acknowledged that the largest part of the money availabilities of the company City Insurance SA were reported by the company in a bank account that does not exist, to a bank company with which the insurer did not have contractual relations. Thus, the solvency and liquidity indicators of City Insurance SA have been severely distorted since 2017, but for the indicators for 2020, ASF has made adjustments to reflect the lack of cash, resulting in negative equity of eligible funds to cover the requirements of capital both on December 31, 2020 and on March 31, 2021 for the company City Insurance SA, as well as a need for liquid assets in the total amount of about Lei 845 million (as of March 31, 2021) to cover the gross approved claim provision (the company's short-term obligations to policyholders).

During 2020, there was an increase in the risk of conduct of insurance companies, measured by the number of petitions and non-compliance notifications registered by consumers at the ASF targeting the insurance market. An analysis of the structure of petitions and non-compliance notifications by insurance classes shows that approximately 95% of the petitions registered for the insurance - reinsurance sector concern class A10 (compulsory motor third party liability insurance). Also, 31,793 petitions, representing over 90% of the total number of petitions and non-compliance notifications uniquely registered with the ASF for the insurance sector, concern the insurance companies Euroins Romania SA and City Insurance SA. In the case of both insurance companies, there was a significant increase in the number of petitions and non-compliance reports in 2020 compared to the previous year, with 58% more petitions registered in the case of Euroins, and 177% more in the case of the company City Insurance.

Considering the latest evolutions and trends on the insurance market and the dynamics of the main indicators of City Insurance and Euroins Romania, the Financial Supervisory Authority has intensified its supervision and control activities in the case of the 2 companies. Following the supervision and control process, the Authority identified a series of deficiencies in the activity carried out by the companies, including non-compliance with the solvency capital requirements and / or the minimum capital requirements, a series of sanctions and measures being imposed to correct the identified deficiencies, in order to protect consumers and ensure the financial stability of the insurance market, given the significant positions held on the MTPL market by the 2 insurance companies.

In order to strengthen the capacity of the insurance companies to meet their short-term obligations towards the insured, the supervision process highlighted the need to regulate the requirement for companies to hold liquid assets above the level of the gross claim provision, in the case of non-life insurance, respectively the gross claim reserve and other amounts due to the contractors and beneficiaries, in the case of the life insurance activity. Although the insurance companies submitted to ASF an additional report on the liquidity ratio, there was no legal requirement on the minimum level of this ratio.

In this sense, the ASF Rule no. 46/2020 for the amendment and completion of the Rule no. 21/2016 of the Financial Supervisory Authority on the reports regarding the insurance and/or reinsurance activity was approved.

ASF Rule no. 46/2020 regulates the liquidity indicator, which companies must determine and report monthly and which is calculated as the ratio between the market value of some assets considered liquid and the short-term obligations of insurers towards policyholders. In order to determine the liquidity indicator, elements of the calculation method of the liquidity coefficient provided by the previous regulations were taken over, but, unlike the latter (which related to the amount between the net claim provision and 50% of the part ceded to reinsurers from the gross claim provision), it refers to the entire gross value of claim provision.

The new way of calculating the liquidity indicator, which takes into account the full value of the approved gross claim provision, will allow a better coverage of the short-term obligations of insurers towards policyholders, leading to increased liquidity in the Romanian insurance market.

5.1. The insurance market in a European context

The crisis generated by COVID-19 has overlapped with a European economic environment characterized by low yields and a high level of uncertainty, which has led to an intensification of these vulnerabilities from the perspective of insurance companies. In this context, the high degree of uncertainty and the existing challenges have led to an increase in the risk of maintaining very low long-term interest rates and a sudden revaluation of risk premiums, which has shown a tendency to increase the risk of solvency, profitability and reinvestment for insurance companies. A sudden revaluation of risk premiums can lead to a decrease in the value of insurers' investment portfolios. Very low interest rates, higher risk premiums and the potential increase in liquidity requirements, in the context of an increase in compensation and redemption values could increase the risk of inefficient asset allocation, in the sense that the assets do not correspond to the characteristics of the liability. In addition, uncertainty about capital markets could also help increase the risk that asset allocations will be ineffective.

It can be noted that the portfolios of insurance companies both at European level and in Romania are mainly oriented towards investments in bonds. Unlike the investment structure of EEA insurers, in Romania government bonds have a much higher share (85%).

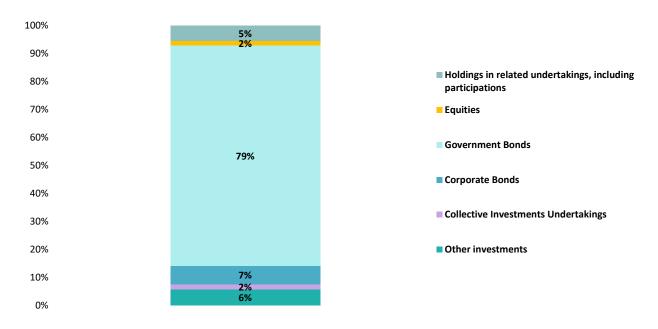
Unlike insurance companies in Romania, insurers in Europe have focused on greater investment diversification, in search of higher returns, given that one of the main vulnerabilities of European insurers is related to the persistence of the prolonged environment of very low interest rates.

100% 13% 90% ■ Holdings in related undertakings, including participations 80% Equities 70% 31% Government Bonds 60% 50% Corporate Bonds 40% 27% ■ Collective Investments Undertakings 30% Derivatives 20% 19% Other investments 10% 3% 4% 0%

Figure 78 Aggregate investment structure of insurance companies in Europe (Quarter IV 2020, 31 countries)

Source: EIOPA, ASF calculations

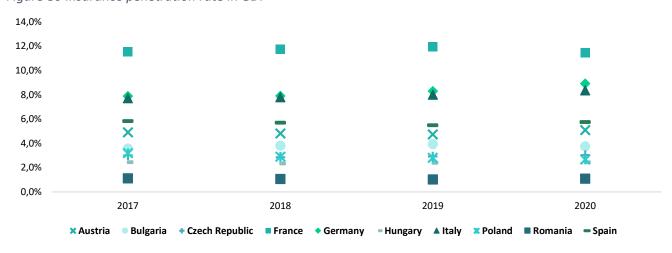
Figure 79 Aggregate investment structure of insurance companies in Romania (Quarter IV 2020)



Source: EIOPA, ASF calculations

The degree of insurance penetration in GDP, an indicator calculated as the ratio between the value of gross written premiums and gross domestic product (GDP), registered significant values in the case of France during the analyzed period. In 2020, France (11.5%) recorded the highest value, followed by Germany (8.9%), Italy (8.4%) and Spain (5.7%). In the case of Romania, there is a slightly increasing trend regarding the degree of insurance penetration in GDP, in 2020, indicating a value of about 1.15%. The degree of insurance penetration in GDP increased slightly in Romania amid the increase in the volume of gross written premiums, but the decrease in GDP in 2020 compared to 2019 due to the impact of the current health crisis also had an effect on this trend.

Figure 80 Insurance penetration rate in GDP



Source: EIOPA, Eurostat, INS, * ASF data, ASF calculations

The density of insurance, calculated as the ratio between the value of gross written premiums on the territory of a state and the number of its inhabitants, is an indicator that shows how much the average inhabitant of a country spends on insurance products. In 2020, France also occupied the first position in this indicator (3,882 euro/inhabitant), followed by Germany (3,575 euro / inhabitant), Italy (2,315 euro/inhabitant) and Austria (2,144 euro/inhabitant). In the case of Romania, in 2020, the insurance density was at a value of 130 euro/inhabitant, rising by about 3% compared to the previous year.

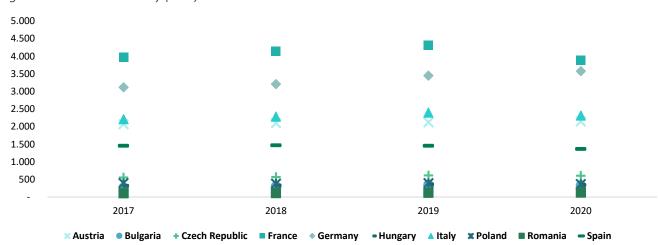
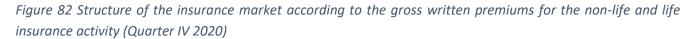
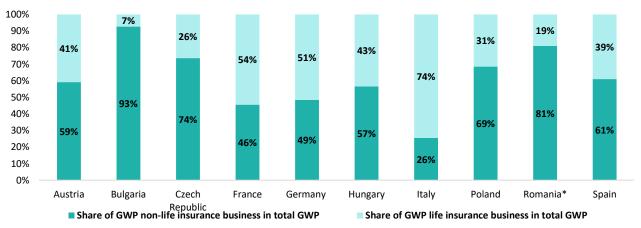


Figure 81 Insurance density (EUR)

Source: EIOPA, Eurostat, INS, *ASF data, ASF calculations

The share of life insurance activity in the total insurance sector in Romania from the perspective of the volume of gross written premiums is at a low level compared to the other analyzed EU states. In 2020, the volume of gross written premiums for the life insurance segment registered a modest drop, while the value of premiums written for the non-life insurance business rose slightly, which led to a drop in the share of the life insurance segment to 19% in total subscriptions.





Source: EIOPA, ASF calculations, * ASF data

Regarding the solvency of the European insurance system, according to published statistics, the SCR rate at the level of the insurance market in the 31 countries reporting to EIOPA stood at 2.18 in the fourth quarter of 2020, and the median SCR rate was at a value of 2.10.

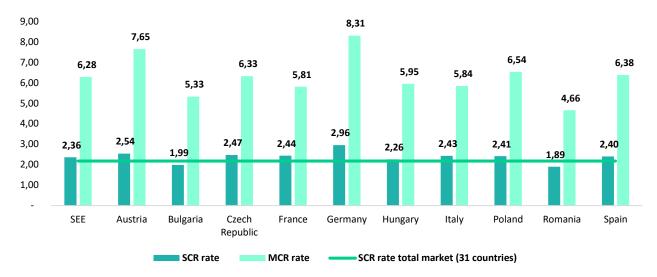


Figure 83 Solvency Capital Requirement (SCR) and Minimum Capital Requirement (MCR) rates (Quarter IV 2020)

Source: EIOPA

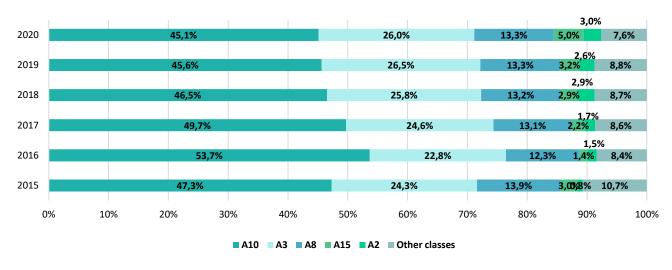
Although Romania registers lower levels of these indicators compared to the European average, the development prospects of the insurance sector remain favorable. Therefore, increasing the confidence of consumers in the insurance industry, launching new insurance products and adapting them to the needs of the population, as well as the development of financial education remain effective ways to strengthen the insurance sector in Romania.

5.2. The degree of market diversification

Unlike the European insurance market in which the life insurance segment is better represented, in Romania, it still has a lower share of about 19% of gross written premiums, the market being dominated by non-life insurance, respectively car insurance.

Compared to the period 2017-2019, we note a decrease of the share of the life insurance activity in 2020, as a result of the drop of the volume of gross written premiums for this segment, respectively of the rise of the subscriptions in case of non-life insurance.

Figure 84 Share of gross written premiums by insurance classes in total gross written premiums for non-life insurance business

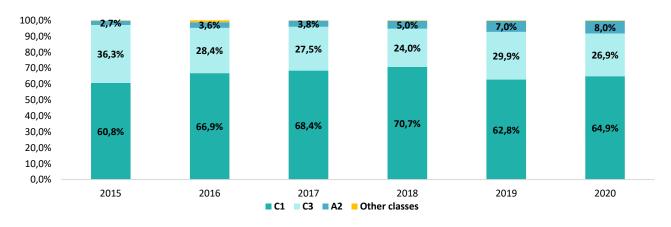


Source: ASF

By non-life insurance classes, there is a concentration of insurance activity in Romania, due to the fact that there is a growing interest in car insurance (classes A3 and A10). Compared to 2016, when the share of the car insurance segment had the highest value in the analyzed period, of approximately 76%, there is a slight decrease of this share in recent years, standing at 2020 at a value of approximately 71% of the total gross written premiums for the non-life insurance activity.

A change in the trends on the insurance market observed in recent years is the consolidation of the health insurance segment. The increase of the share of this insurance class both in terms of the volume of gross written premiums for non-life insurance and for life insurance, indicates a tendency to increase the degree of diversification on the Romanian insurance market.

Figure 85 Share of gross written premiums by insurance classes in total gross written premiums (LI)



Source: ASF

In the case of life insurance, the degree of concentration on insurance classes remains high, class C1, Life insurance, annuities and additional life insurance, accumulating about 65% of the volume of gross premiums written for the life insurance activity.

5.3. Claim rate

In 2020, the gross indemnities paid by insurance companies for non-life and life insurance activities (including partial and total redemptions and maturities) amounted to about Lei 6.95 billion, representing approximately 60% of the total volume of gross written premiums during 2020. There is a slowdown in the growth of the amount of gross compensation paid in the reference period compared to the annual dynamics recorded in previous periods.

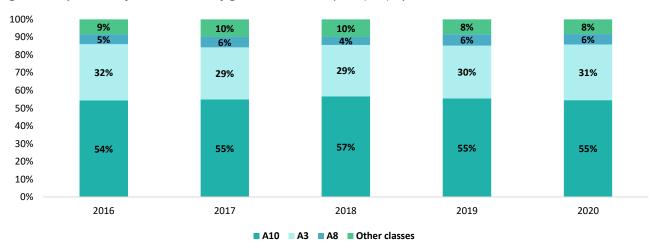


Figure 86 Dynamics of the structure of gross allowances paid (NLI) by classes

Source: ASF

The gross claims paid for car insurance (classes A10 and A3) have a cumulative share of 86% in the total gross claims paid by companies for the non-life insurance activity.

In 2020, the largest shares in gross claims paid for life insurance (including maturity and partial and total redemptions) were held by insurance class C1 (Life insurance, annuities and supplementary life insurance) and class C3 (Life insurance and annuities, related to investment funds).

5.4. Technical reserves

The technical reserves of local insurers increased in 2020, mainly as a result of the positive trend in underwriting. At the end of December 2020, the insurance companies had built up gross technical reserves totaling approximately Lei 18.85 billion, increasing by 6% compared to the end of 2019 (Lei 17.82 billion), distributed over the two categories of insurance as follows:

- the gross technical reserves constituted for the non-life insurances registered a volume of Lei 10.45 billion, representing 55% of the total technical reserves. In their structure, premium reserves (40.8%) and approved claim provisions (39.5%) continue to dominate, followed by gross unapproved claim provisions (15.4%);
- for life insurance, the companies set up reserves amounting to Lei 8.40 billion, a level corresponding to a share of 45% of the total technical reserves. The mathematical reserve represents about 87% of the total technical reserves set up for life insurance.

Table 21 Structure of gross technical reserves for non-life insurance as at December 31, 2020

	31.12.2020	Share of the total	A10	А3	A8	Share of significant classes
	lei	(%)	lei	Lei	lei	(%)
Premium reserve	4,264,490,665	40.80%	1,485,874,261	1,260,424,908	626,975,459	79.10%
Reserve for approved claims	4,131,292,119	39.52%	2,572,125,358	561,341,356	362,007,996	84.61%
Reserve for unapproved claims	1,614,253,997	15.44%	1,297,964,266	88,255,178	67,995,915	90.09%
Other technical provisions	443,258,746	4.24%	29,451,164	107,639,298	220,610,800	80.70%
Total technical reserves related to non-life insurance	10,453,295,527	100.00%	5,385,415,049	2,017,660,740	1,277,590,170	83.04%

Table 22 Structure of gross technical reserves for life insurance as at December 31, 2020

	Dec 31, 2020 (lei)	Share in the total (%)
Premium reserve	690,858,415	8.22%
Mathematical reserve	7,299,099,758	86.86%
Reserve of benefits and rebates	116,659,302	1.39%
Other technical reserves	296,234,010	3.53%
Total technical reserves related to life insurance	8,402,851,485	100.00%

Source: ASF

5.5. 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 contracts, thus limiting the maximum claim incurred in case of insured events with significant financial impact.

Thus, reinsurance programs are a tool to limit/reduce the risk exposure of insurers, thus reducing the capital requirement and improving solvency. For this purpose, the insurers transfer to the reinsurance companies a part of the gross written premiums and of the constituted reserves, following to receive a part of the claim paid in case of the insured risks. Therefore, the scope of reinsurance programs is often measured by the level of gross written premiums, reserves and claims paid, respectively.

At the end of 2020, approximately 39.5% of the gross written premiums for the non-life insurance business were sold in reinsurance, the level being slightly higher compared to 2019 (38%), which indicates the maintenance of a relatively similar level of reinsurance policies from local companies.

Table 23 Evolution of GWP and net reinsurance premiums for the period 2016-2020 for NLI

Period	GWP (lei)	Net reinsurance premiums (lei)	Degree of retention	Degree of yield in reinsurance (%)
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%
2019	8,734,210,208	5,426,479,935	62.13%	37.87%
2020	9,281,000,982	5,612,596,968	60.47%	39.53%

As a result of the protection they received through reinsurance treaties, a similar percentage of the total gross claim paid for the non-life insurance business, of about 42.6%, were recovered by local companies from reinsurers during 2020.

Table 24 Evolution of GCP and net reinsurance GCP for 2016-2020 for NLI

Period	GCP (lei)	Reinsurance net claims (lei)	Degree of retention	Degree of yield in reinsurance	
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	5,769,804,707	3,404,907,722	59.01%	40.99%	
2020	5,862,518,682	3,365,871,485	57.41%	42.59%	

Source: ASF

At the same time, from the gross technical reserves established for the non-life insurance activity at the end of December 2020, about 42% were related to the reinsurance cessions.

Traditionally, there are important differences in reinsurance policy between life insurance and non-life insurance activities. In the case of life insurance, insurance companies generally take on a much larger share of the subscribed risk.

Due to the fact that insurance premiums are generally anticipated, and the claims, in case of occurrence of the insured event, are fixed by contract for each event, therefore more predictable, life insurance companies do not resort to reinsurance as often as non-life insurance companies.

Table 25 Evolution of GWP and net reinsurance premiums for the period 2016-2020 for LI

Period	GWP (lei)	Net reinsurance premiums (lei)	Degree of retention	Degree of yield in reinsurance (%)
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	2,256,015,186	2,106,855,807	93.39%	6.61%
2020	2,219,478,274	2,047,718,367	92.26%	7.74%

Source: ASF

Table 26 Evolution of GCP and net reinsurance GCP for the period 2016-2020 for AV

Period	GCP (lei)		GCP (lei)		Degree of yield in reinsurance	
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%		
2020	232,822,808	201,807,073	86.68%	13.32%		

5.6. Liquidity of insurance companies

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 claims, for which there are generally mandatory (relatively short) time limits required by applicable law.

The liquidity ratio is determined as the ratio between the liquid assets provided by the rules and the short-term obligations of the insurers towards the insured. According to prudential requirements, its value must be greater than one. Traditionally, liquidity is much higher for life insurance activities where risks are easier to model and experience fewer structural changes over time (mortality table values are generally stable in the short and medium term, and changes in the long term are gradual). Therefore, it is generally unlikely that life insurance companies with an adequate level of reserves and solvency will face liquidity problems.

However, the level of liquidity is very relevant in the 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. Under these conditions, both the structure of investments and the liquidity and volatility of the market are relevant to the ability of companies to dispose in a timely manner of the amounts necessary to pay the approved claims on time and at fair value of compensation.

Given the above-mentioned purpose of the liquidity ratio, it must be made up of high-quality assets with an active, liquid and transparent market.

Table 27 Liquidity ratio for each of the insurance categories as at 31 December 2020

	Liquid assets (million lei)	Short-term liabilities (million lei)	Liquidity ratio
NLI*	6,732	3,016	2.23
LI	6,488	1,393	4.66

Source: ASF, * ASF adjustments are included regarding the indicators of City Insurance SA

In order to regulate the requirement for companies to hold liquid assets above the level of gross claim provision in the case of non-life insurance activity, respectively of the gross claim provision and other amounts due to contractors and beneficiaries, in case of life insurance activity, the. ASF Rule no. 46/2020 for the amendment and

completion of the Financial Supervisory Authority Rule no. 21/2016 on the reports regarding the insurance and/or reinsurance activity was approved.

ASF Rule no. 46/2020 regulates the liquidity indicator, which companies must determine and report on a monthly basis and which is calculated as the ratio between the market value of some assets considered liquid and the short-term obligations of insurers towards policyholders.

In order to determine the liquidity indicator, elements of the calculation method of the liquidity coefficient provided by the previous regulations were taken over, but, unlike the latter (which refers to the amount between the net claim provision and 50% of the part ceded to the reinsurers in the gross claim reserve), refers to the total gross value of the approved claim provision.

5.7. Solvency of insurance companies

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



Figure 87 Evolution of surplus assets over debts (billion lei) of insurance companies

Source: ASF, annual reports, * for 2020 are included the ASF adjustments regarding the indicators of City Insurance SA

The surplus of assets over debts was approximately Lei 5.58 billion as of December 31, 2020, rising by 3.9% compared to the value recorded at the end of the previous year.

The Solvency Capital Requirements (SCR) calculated under the Solvency II regime varied between 2016 and 2020 between Lei 2.83 billion and Lei 3.45 billion, increasing over time as a result of the risks to which insurance companies are exposed. A comparative analysis between the situation recorded at the end of 2020 and the one existing on December 31, 2019 indicates a rise in the solvency capital requirement (SCR) of approximately 7%, respectively a rise of about 1% in the case of the minimum capital requirement (MCR).

However, it is found that, at the level of the insurance market, the surpluses of assets over debts (equity of insurance companies) had, starting from the first year of application of the regime, values likely to cover the capital requirement calculated according to Solvency II at the level of the entire insurance market.



Figure 88 Evolution of the Solvency Capital Requirement (SCR) and the Minimum Capital Requirement (MCR)

Source: ASF, annual reports, *for 2020 are included the ASF adjustments regarding the indicators of City Insurance SA

The value of own funds eligible to cover the solvency capital requirement was at the end of 2020 at the level of Lei 5.55 billion, slightly increasing, by 2.4% compared to the value recorded on December 31, 2019.

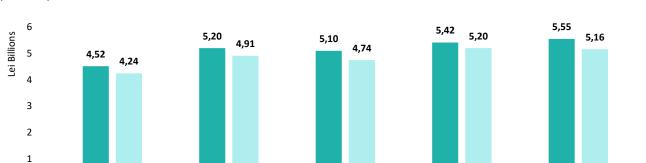


Figure 89 Evolution of own funds eligible to cover the solvency capital requirement, respectively the minimum capital requirement

Source: ASF, annual reports, * for 2020 are included the ASF adjustments regarding the indicators of City Insurance SA

2018

2019

■ Total eligible own funds to meet the MCR

2017

■ Total eligible own funds to meet the SCR

2016

2020*

At the market level, the SCR and MCR rates were greater than one both at the end of 2020 and in the period 2016-2019. Compared to the previous year, on December 31, 2020, both the market SCR rate and the market-wide MCR rate recorded drops of about 4% and 1.9%, respectively, as shown in the following figure.

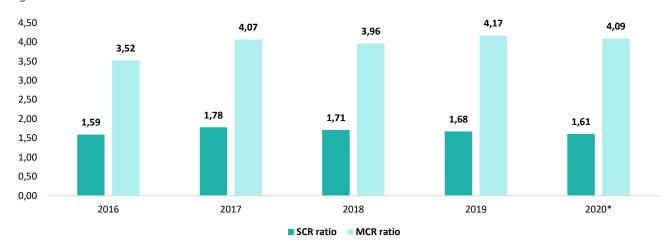


Figure 90 SCR and MCR rates at market level

 $Source: ASF, annual\ reports,\ *\ for\ 2020\ are\ included\ the\ ASF\ adjustments\ regarding\ the\ indicators\ of\ City\ Insurance\ SA$

5.8. Profitability and costs

The combined damage rate is an important indicator of the profitability of insurance companies, from the perspective of the total costs they have for the administration of policies (costs related to claims and distribution and administrative expenses). A combined damage rate greater than one indicates losses for insurers (cumulative costs in excess of gross premiums received on policies sold).

The combined damage rate calculated on cumulative data for all classes of non-life insurance stood at 110% in 2020, a relatively similar level compared to the indicator for the previous year (109.42%).

The figure below shows the rates calculated on cumulative data for classes A3, A8 and A10, the main classes of non-life insurance, which together have a significant share in the total market.

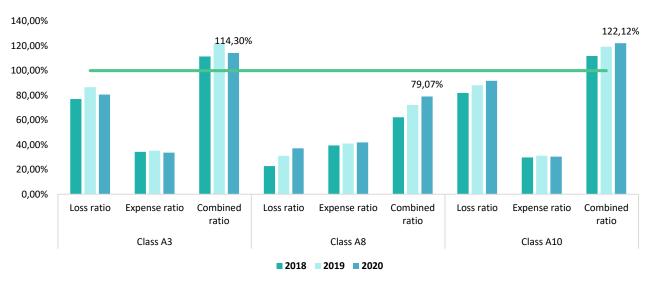


Figure 91 Evolution of the damage rate and the combined damage rate for the main classes of non-life insurance in the period 2018 - 2020

In 2020, there will be a decrease in the combined damage rate for class A3 compared to the same period of the previous year. There is also a decrease in the median of the combined damage rate for class A3, so that 7 of the 14 companies have a combined rate below the median (122.5%). Of the 14 insurance companies that practice CASCO insurance, 2 companies registered on December 31, 2020 a combined damage rate lower than one, but also in the case of the 2 companies, this is very close to the level of 100%.

As of December 31, 2020, the combined damage rate for class A10 (MTPL and CMR) increased slightly compared to December 31, 2019 on the total market. However, all 9 companies authorized by ASF to practice MTPL also recorded combined damage rates greater than one.

5.9. Insurance intermediaries

At the end of 2020, 286 brokerage companies were registered in the Register of Main Intermediaries, of which one brokerage company with temporarily prohibited activity and 6 brokerage companies with activity suspended on request.

The value of premiums brokered by brokerage companies stood in 2020 at a value of Lei 7.86 billion, increasing by over 9% compared to 2019. The increase took place in the context of the appreciation of the volume of brokered premiums both for the non-life insurance activity (+8.75%), as well as for the life insurance segment (+19.38%).

Table 28 Evolution of the degree of intermediation

Perioada	Intermediated premiums (lei)				Intermediation degree (%)		
Perioaua	Total of which:	NLI	Total of which:	NLI	Total of which:	NLI	
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	65.55	79.72	10.66	
31.12.2020	7,859,221,295	7,572,141,348	287,079,947	68.34	81.59	12.93	

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

As a result of the increase in the degree of intermediation and of the gross written premiums, the revenues from the intermediation activity obtained by the insurance brokers in 2020 registered a percentage increase of 10.5% compared to 2019.

Table 29 Income from intermediation activity (lei)

Income from	2017	2018	2019	2020
intermediation activity				
(lei)	971,812,823	1,095,337,930	1,261,778,661	1,394,616,111

Source: ASF

The share of revenues from the intermediation activity in the volume of intermediated premiums at the level of the brokerage market was 17.74% (average commission).

5.10. Potential risks and vulnerabilities in the insurance market

The high degree 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 degree of concentration both for the non-life insurance segment (the dominance of car insurance in the local market is observed) and in terms of life insurance activity.

The highest values of underwriting are registered by car insurance, classes A10 (MTPL and CMR) and A3 (CASCO), which represent approximately 71% of the non-life insurance market.

Table 30 Share of gross written premiums by insurance classes in total gross written premiums for non-life insurance activity

Non-life insurance class	2016	2017	2018	2019	2020
A10	53.7%	49.7%	46.5%	45.6%	45.1%
A3	22.8%	24.6%	25.8%	26.5%	26.0%
A8	12.3%	13.1%	13.2%	13.3%	13.3%
A15	1.4%	2.2%	2.9%	3.2%	5.0%
A13	2.9%	2.9%	3.1%	3.1%	3.2%
A2	1.5%	1.7%	2.9%	2.6%	3.0%
A9	2.1%	2.2%	1.9%	2.0%	2.1%
A18	1.1%	1.3%	1.5%	1.6%	0.7%
A1	0.7%	0.7%	0.7%	0.7%	0.6%
A7	0.5%	0.5%	0.4%	0.4%	0.3%
A16	0.3%	0.3%	0.3%	0.3%	0.2%
A5	0.1%	0.1%	0.1%	0.1%	0.2%
A6	0.3%	0.3%	0.3%	0.2%	0.2%
A11	0.2%	0.2%	0.2%	0.2%	0.1%
A12	0.1%	0.1%	0.1%	0.1%	0.1%
A4	0.1%	0.0%	0.0%	0.0%	0.0%
A17	0.0%	0.0%	0.0%	0.0%	0.0%
A14	0.1%	0.0%	0.0%	0.0%	0.0%

Table 31 Share of gross written premiums by insurance classes in total gross written premiums for life insurance activity

Life insurance class	2016	2017	2018	2019	2020
C1	66.9%	68.4%	70.7%	62.8%	64.9%
C3	28.4%	27.5%	24.0%	29.9%	26.9%
A2	3.6%	3.8%	5.0%	7.0%	8.0%
A1	1.1%	0.2%	0.3%	0.2%	0.3%
C2	0.1%	0.0%	0.0%	0.0%	0.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

Source: ASF

The local market's dependence on car insurance has led to losses for insurance companies over time. The registration of combined damage rates greater than one can be noted for classes A10 (MTPL and CMR) and A3 (CASCO) in the period 2018 - 2020, which indicates losses of the companies for these categories of insurance. Also, the gross claims paid for these insurance classes have a value of over Lei 5 billion in 2020, representing 86% of the total gross claims paid for non-life insurance, respectively 73% of the total volume of gross claims paid in the entire market. The gross claims paid for the car insurance classes have a high value also as a share in the total gross written premiums for these insurances, i.e. they represent cumulatively about 76% of the gross written premiums for the two insurance categories (classes A10 and A3).

In this sense, in order to reduce the dependence of the insurance market on car insurance, ASF 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 aimed to increase the degree of financial inclusion, a better understanding by consumers of existing insurance products on the market, as well as to increase consumer confidence.

In order to diversify the insurance market and to develop other insurance segments so as to reduce the dependence of the car insurance market, working groups aiming at the development of the agricultural and health insurance markets have also been set up at the ASF level.

A number of measures have been proposed for health insurance since 2016 (including technical clarifications on the application 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 insurance from a share of 1.5% in 2016 to 3.0% in 2020 for health insurance similar to non-life insurance in the total gross written premiums for the entire non-life insurance activity, respectively from 3.6% in 2016 to 8.0% in 2020 for those assimilable to life insurance in total gross written premiums at the level of the life insurance market.

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

Also, there is an increase in the degree of concentration on the Romanian insurance market from the perspective of the volume of gross premiums written by insurance companies. The CR3 indicator, used by the Competition Council, which represents the value of the cumulated market shares of the first 3 insurance companies from the perspective of the volume of gross written premiums, registered on December 31, 2020 a value of about 54% on the non-life insurance segment, increasing compared to the level registered in the same period of the previous year (51.5%). Compared to 2016, when the CR3 indicator registered a value of 41%, we have witnessed during the last years a significant increase of the indicator, and implicitly of the degree of concentration on the non-life insurance market.

In the analyzed period (2016-2020), the change of the ranking of the companies that subscribed the highest volume of gross written premiums can be noted. In 2016, the ranking was dominated by the companies Allianz Țiriac Asigurări (14.5%), Omniasig VIG (14.0%) and Asirom VIG (12.4%), but, starting with 2017, the companies City Insurance and Euroins Romania have recorded significant increases in market share, thus consolidating their positions on the non-life insurance market in Romania. These increases took place as a result of the bankruptcy of Carpatica, but also in the context of the modification of the business strategies of some companies that decreased their volume of gross written premiums for certain classes of non-life insurance. Asirom VIG's market share dropped from 12.4% (in 2016) to 5.8% in 2020.

Currently, the company City Insurance is the most important player on the non-life insurance market in Romania, with a market share of 24.9%, rising by almost 143% compared to 2016.

Table 32 Ranking of the top 10 insurance companies by volume of gross written premiums for non-life insurance business

	2	016	2017	2018	2019	2020
CITY INSURANCE	10	.2%	16.3%	18.5%	21.9%	24.9%
OMNIASIG VIG	14	.0%	13.8%	14.6%	15.0%	14.9%
EUROINS ROMANIA	11	.2%	14.1%	12.5%	14.7%	14.1%
ALLIANZ - TIRIAC ASIGURARI	14	.5%	14.2%	14.6%	13.7%	12.1%
GROUPAMA ASIGURARI	11	.7%	11.6%	12.1%	12.1%	11.0%
ASIROM VIG	12	.4%	10.9%	9.1%	4.9%	5.8%
GENERALI ROMANIA	7.	.4%	7.1%	6.5%	6.4%	5.4%
UNIQA ASIGURARI	6	.2%	5.0%	4.4%	4.3%	4.0%
PAID	1	.9%	1.9%	1.9%	1.8%	1.8%
ONIX ASIGURARI	0	.4%	0.4%	0.7%	0.7%	1.7%

Table 33 Ranking of the top 10 insurance companies by volume of gross written premiums for life insurance business

	2016	2017	2018	2019	2020
NN ASIGURARI DE VIATA	39.6%	36.6%	36.7%	36.6%	38.5%
BCR ASIGURARI DE VIATA VIG	14.9%	17.5%	17.4%	16.4%	16.8%
BRD ASIGURARI DE VIATA	7.1%	6.6%	8.7%	13.1%	11.0%
ALLIANZ - TIRIAC ASIGURARI	6.5%	6.7%	6.9%	7.3%	8.5%
SIGNAL IDUNA	2.4%	2.6%	3.5%	4.5%	5.8%
GENERALI ROMANIA	4.1%	3.3%	5.4%	6.7%	5.4%
ASIROM VIG	7.0%	6.3%	6.4%	5.2%	4.4%
UNIQA ASIGURARI DE VIATA	3.1%	2.9%	4.0%	3.6%	3.8%
GRAWE ROMANIA	2.7%	2.2%	2.1%	2.0%	2.1%
GROUPAMA ASIGURARI	1.9%	1.7%	1.6%	1.6%	2.1%

Source: ASF

Following the analysis of the volume of underwriting of insurance companies by non-life insurance classes, a series of insurance segments were identified in which the degree of concentration is very high, the respective insurance categories being dominated by a small number of companies from the perspective of written premium volume. Regarding the non-life insurance activity, on the market of the compulsory motor third party liability insurance (MTPL) and guarantee insurance there is a very high degree of concentration.

Table 34 Ranking of the top 3 insurance companies according to market shares held by the main classes of nonlife insurance in 2020

3.13.3 (700111)	CR3	57.1%	(%GWP)	CR3	75.9%
share (%GWP)	Uniqa Asigurări	10.1%	Market share	Omniasig VIG	12.9%
Class A13 - Market	Allianz Țiriac Asigurări	17.3%		Groupama Asigurări	22.1%
	Omniasig VIG	29.7%	Class A2 -	Allianz Țiriac Asigurări	40.9%
	CR3	51.4%	(70GVVF)	CR3	86.8%
share (%GWP)	Groupama Asigurări	13.6%	(%GWP)	ABC Asigurări Reasigurări	7.4%
Class A8 - Market	Allianz Țiriac Asigurări	17.6%	Market share	Onix Asigurări	33.8%
	Omniasig VIG	20.2%	Class A15 -	City Insurance	45.6%
	CR3	81.2%	(//ddv/r)	CR3	66.7%
share (%GWP)	Allianz Țiriac Asigurări	6.2%	(%GWP)	Allianz Țiriac Asigurări	17.4%
Class A10 - Market	Euroins România	30.0%	Market share	Groupama Asigurări	21.9%
	City Insurance	45.0%	Class A3 -	Omniasig VIG	27.4%

Source: ASF, CR3 = indicator calculated as the sum of market shares related to the first 3 companies from the perspective of the volume of gross written premiums

Class A10: Civil liability for the use of land motor

vehicles (MTPL and CMR)

Class A3: Land vehicles, excluding rolling stock

(CASCO)

Class A8: Fire and natural disasters

Class A15: Warranties

Class A13: General civil liability, excl. the one mentioned in

classes A10 - A12 Class A2: Health

Degree of concentration on the MTPL market

On December 31, 2020, the following 9 insurers authorized by ASF for MTPL insurance activities were operating on the insurance market: Allianz-Ţiriac Asigurări SA, Asigurarea Românească - Asirom Vienna Insurance Group SA, Societatea de Asigurare - Reasigurare City Insurance SA, Euroins România Asigurare - Reasigurare SA, Generali Romania Asigurare Reasigurare SA, Grawe Romania Asigurare SA, Groupama Asigurări SA, Omniasig Vienna Insurance Group SA and Uniqa SA.

The degree of concentration remains high on the market of compulsory motor third party liability insurance (MTPL) in Romania, so that the first 2 insurers accumulated approximately 75% of the MTPL insurance portfolio in Romania, in 2020.

The companies with the largest share in the MTPL insurance market were City Insurance, Euroins and Allianz Tiriac, which together held over 80% of the market as of December 31, 2020.

Table 35 Evolution of market shares registered for MTPL insurance 2016-2020

Item	Company	2016	2017	2018	2019	2020	
1	CITY INSURANCE	Y INSURANCE 16.14%		33.32%	39.03%	43.49%	
2	EUROINS	20.57%	27.42%	26.60%	32.29%	31.37%	
3	ALLIANZ - TIRIAC	9.49%	7.74%	8.38%	7.03%	6.38%	
4	OMNIASIG VIG	8.92%	6.76%	7.90%	7.57%	6.16%	
	ASIROM VIG	17.34%	15.08%	12.00%	3.17%	4.06%	

Item	Company	2016	2017	2018	2019	2020	
6	GRAWE	0.00%	0.13%	0.83%	2.17%	3.32%	
7	GROUPAMA	7.00%	5.54%	6.56%	4.98%	2.97%	
8	GENERALI	5.09%	4.66%	3.28%	2.76%	1.61%	
9	UNIQA	4.91%	2.58%	1.14%	1.01%	0.64%	

Degree of concentration on the guarantee insurance market

The guarantee insurance market in Romania (class A15) also registers a high degree of concentration, rising in 2020 compared to the period 2016-2019.

It is found that the insurance market is dominated by the presence of 2 companies, **City Insurance and Onix Asigurări**, which had a cumulative market share of over 79%, calculated taking into account the volume of gross premiums written for this category of insurance. The significant increase of the concentration on this segment of the insurance market took place, mainly due to the consolidation of the position on this market of the City Insurance company, in which case an increase of the share from 12% in 2016 to about 46% is observed in 2020. Also, the company Onix Asigurări, after a drop registered in 2017, resumed its tendency to increase the volume of gross written premiums for guarantee insurance, being in 2020 at a market share of approximately 34%.

Table 36 Evolution of market shares registered by the first 10 insurance companies according to the volume of gross premiums written for guarantee insurance (class A15) in the period 2016-2020

Item	Company	2016	2017	2018	2019	2020
1	CITY INSURANCE	12.3%	20.6%	34.3%	47.1%	45.6%
2	ONIX ASIGURĂRI	26.4%	16.5%	25.0%	21.0%	33.8%
3	ABC	13.2%	11.5%	11.2%	9.4%	7.4%
4	EUROINS ROMÂNIA	2.5%	17.7%	2.5%	2.2%	4.6%
5	EXIM ROMÂNIA	4.2%	5.3%	3.0%	3.7%	3.0%
6	OMNIASIG VIG	4.7%	3.3%	3.9%	3.3%	1.9%
7	GROUPAMA	0.4%	0.3%	0.5%	0.5%	0.9%
8	ASITO KAPITAL	2.1%	2.0%	1.2%	1.4%	0.8%
9	ALLIANZ - ȚIRIAC	2.6%	1.9%	1.6%	1.8%	0.7%
10	ASIROM VIG	0.6%	1.1%	1.2%	1.1%	0.7%

Source: ASF

Solvency risk

Following the supervision and control activity, ASF found an **increase in the solvency risk** at the end of 2020 on the Romanian insurance market. The main cause of the deterioration of the solvency of the insurance system were the serious deviations from the legal provisions found in the case of City Insurance SA. Starting with 2017,

the company reported the existence of cash at a bank, which have been used since 2017 in the calculation of eligible funds to cover capital requirements, but in connection with which ASF found that there were no contractual relations between the company City Insurance SA and the respective bank. Considering the serious irregularities identified, ASF made adjustments of the solvency indicators related to the insurance - reinsurance company (SAR) City Insurance SA, including by excluding the cash availabilities reported by the company to the respective bank, resulting in the existence of negative own funds (approx. Lei -149 million) and, implicitly, of a degree of coverage of the solvency capital requirement of approximately -0.33.

Table 37 Solvency indicators of City Insurance SA as at December 31, 2020, as a result of the adjustments made, taking into account the lack of cash reported by the company

Solvency indicator	Values reported by the company (lei)	Results adjusted by ASF taking into account the lack of bank cash in the bank's records (lei) '		
Total equity available to cover the Solvency Capital Requirement (SCR)	468,415,688	-148,837,422		
Total eligible own funds to cover the Solvency Capital Requirement (SCR)	468,415,688	-148,837,422		
Solvency Capital Requirement (SCR)	375,186,929	455,532,029		
Degree of SCR coverage with eligible own funds (SCR rate)	1.25	-0.33		

Source: ASF

Liquidity risk

At the level of the insurance market, there is an increase in liquidity risk, due to the decrease in liquidity of City Insurance SA, as a result of ASF's information of the lack of cash reported by the company to a bank, and of changes in legislation regarding the calculation of the liquidity coefficient, the new legal provisions having the objective of ensuring a better coverage of the companies' obligations towards the insured, thus contributing to the protection of consumers and to the consolidation of the financial stability of the insurance market.

Taking into account the new information on the lack of cash and the legislative changes, as of March 31, 2021, the value of the liquid assets of City Insurance SA was only about Lei 158 million, while the gross reserve for approved damage (short-term obligations to policyholders) exceeded the value of Lei 1 billion. As a result, at the end of March 2021, the need for liquid assets to cover the short-term obligations of City Insurance SA is in the amount of approximately Lei 845 million, resulting in a liquidity ratio of only 0.16.

Table 38 The value of the liquid assets and of the approved gross claim provision of City Insurance SA on March 31, 2021, as a result of the adjustments made, taking into account the lack of cash reported by the company and the legislative changes regarding the calculation of the liquidity indicator

March 31, 2021	Liquid assets (lei)	Short-term obligations (lei)	Liquidity ratio
City Insurance	157,845,899	1,002,809,576	0.16

Source: ASF

Risk of conduct

In order to ensure a correct treatment and to protect the insurance products clients' rights, **ASF carries out** activities of supervision and control of the observance of the rules of conduct.

The **risk of conduct remained at a high level during 2020**, amid a significant increase in the total number of petitions registered with the Financial Supervisory Authority compared to the previous year.

Out of the total number of 42,774 petitions and non-compliance information registered with ASF, about **97% of them concerned the insurance sector**. In 2020, the number of petitions and non-compliance notifications registered with the ASF for the insurance sector increased by approximately 62% compared to 2019, respectively by 294% compared to 2018 and 416% compared to 2017.

Of the **41,544 petitions and non-compliance notifications** registered in 2020 for the **insurance-reinsurance market, 35,250 petitions and non-compliance notifications** were uniquely registered uniquely, 69% more than the previous year. The main object of the petitions registered for the insurance-reinsurance sector consisted in non-compliance with the provisions of the relevant legislation and with the rules of the Financial Supervisory Authority / contractual conditions, aspect found in 24,953 cases, followed by **non-payment or partial payment of compensation** in 9,859 cases.

In 2020, the most significant share is held by the petitions and non-compliance notifications uniquely analyzed registered for the **non-life insurance** segment, respectively **35,090 petitions**, representing 99.55% of their total number registered at ASF for the insurance-reinsurance market.

An analysis of the structure of the petitions according to the insurance classes shows that the **number of petitions and non-compliance notifications registered for class A10**, compulsory motor third party liability insurance (MTPL and CMR), was 33,446, increasing by about 75% compared to 2019 and **representing approximately 95% of the registered petitions for the insurance-reinsurance sector**.

The insurance companies for which the largest number of petitions and non-compliance notifications uniquely analyzed in 2020 were EUROINS (19,027) and CITY INSURANCE (12,766), the insurers with the highest market shares in the MTPL insurance segment in Romania.

In the case of both insurance companies there is a significant increase in the number of petitions and non-compliance reports compared to 2019. As for EUROINS, the increase in the number of petitions was 58% in 2020 compared to the previous year, while the number of petitions and nonconformity notifications directed against CITY INSURANCE increased by 177% in the analyzed period, from 4,607 in 2019 to 12,766 in 2020.

The cumulative number of petitions and non-compliance notifications registered for the two companies was 31,793, representing over 90% of the total number of petitions uniquely registered at ASF for the insurance sector.

Considering the latest evolutions and trends on the insurance market and the evolution of the main indicators of the companies City Insurance SA and Euroins Romania SA, the Financial Supervisory Authority has intensified the supervision and control activity at the 2 companies.

Sanctions imposed: CITY INSURANCE SA

The Financial Supervisory Authority (ASF) performed at Societatea de Asigurare-Reasigurare City Insurance SA, classified in category 4 - intensive supervision, during 2019-2021, several control actions at the insurer's headquarters (on-site), as well as permanent controls (off-site), actions as a result of which several contravention sanctions consisting in fines were applied, both to the company and to its management, measures in order to remedy the deficiencies found being also imposed.

Following the aspects found in the sustained control action and according to the legal provisions, the Council of the Financial Supervisory Authority decided the following measures and sanctions²²:

Sanctioning the members of the Board of Directors of City Insurance SA, with the main sanction with a fine and the complementary sanction of withdrawal of the approval granted by ASF:

- Renato Szilagyi Chairman of the Board, fine in the amount of Lei 1,000,000 and withdrawal of the approval granted by ASF;
- Buzerea Barbu Mircea Vice Chairman of the Board, fine in the amount of Lei 1,000,000 and withdrawal of the approval granted by ASF;
- Spyridon Stavros Mavrogalos Fotis member of the Board, fine in the amount of Lei 1,000,000 and withdrawal of the approval granted by ASF.

Sanctioning the members of the Supervisory Board of Societatea de Asigurare-Reasigurare City Insurance SA, with the main sanction with a fine and the complementary sanction of withdrawal of the approval granted by ASF:

- Browne Woodthorpe Robert Chairman of the Supervisory Board, fine in the amount of Lei 1,000,000 and withdrawal of the approval granted by ASF;
- Rossler Max Walter Vice Chairman of the Supervisory Board, fine in the amount of Lei 1,000,000 and withdrawal of the approval granted by ASF;
- Pascale Cristian member of the Supervisory Board, fine in the amount of Lei 1,000,000 and withdrawal of the approval granted by ASF;
- Arampova Aelita member of the Supervisory Board, fine in the amount of Lei 1,000,000 and withdrawal of the approval granted by ASF;
- Papanikolaou Epameinondas member of the Supervisory Board, fine in the amount of Lei 1,000,000 and withdrawal
 of the approval granted by ASF.

https://asfromania.ro/ro/a/2091/sanc%C8%9Biuni-%C8%99i-m%C4%83suri-aplicate-de-consiliul-autorit%C4%83%C8%9Bii-de-supraveghere-financiar%C4%83

Suspension of the voting rights related to the shares held by the shareholder Vivendi International S.R.L. In accordance with Art. 163 para. (6) and para. (8) of Law no. 237/2015.

Sanctioning Societatea de Asigurare-Reasigurare City Insurance SA with a fine in the amount of Lei 2,930,766 and establishing in its charge the obligation to submit to the Financial Supervisory Authority, for approval, a financing and recovery plan for restoring the level of eligible own funds to cover capital requirements.

Designation as temporary administrator of the Insured Guarantee Fund in order to temporarily replace the management body of the insurer, with a term of office of 4 months from the date of entry into force of the decision, with the possibility of extending it under art. 36 of Law no. 246/2015.

Following the control actions²³ carried out at **Societatea de Asigurare-Reasigurare City Insurance SA**, one of the deficiencies identified was the late payment of claims related to the MTPL claim files.

In the case of City Insurance SA, it was also found that the company did not formulate in writing offers of justified compensation within the deadline provided by law and did not draw up additional finding processes within the deadline provided by the legislation in force.

Following these findings, the ASF Council decided the following:

Sanctioning Societatea de Asigurare-Reasigurare City Insurance SA, according to the legal provisions, with a fine in the amount of Lei 500,000.

Also, the Financial Supervisory Authority, within the supervision process, requested City Insurance SA relevant information and documents necessary for the verification of the company's reinsurance program²⁴. Reinsurance programs are a tool for limiting / reducing the risk exposure of insurers, implicitly reducing the capital requirement and improving solvency, being part of the risk management strategy of insurance companies. In this context, the efficiency of reinsurance programs is an essential condition for ensuring the financial stability of insurers, in order to meet the obligations arising from the occurrence of insured risks.

As the requested information was not transmitted to the Authority and the executive and senior management of the company did not ensure that the requested information was available so that it could be made available within the set time limit, the **Financial Supervisory Authority was thus prevented, without right, in the exercise of the attributions conferred by law**. Therefore, the ASF Board decided to sanction the members of the Management Board and of the Supervisory Board of City Insurance SA, as follows:

Management Board:

- Mr. Renato Szilagyi, Chairman of the Board a fine in the amount of Lei 530,000;
- Mr. Buzerea Barbu Mircea, Vice Chairman of the Management Board fine in the amount of Lei 500,000;
- Mr. Spyridon Stavros Mavrogalos Fotis, member of the Management Board fine in the amount of Lei 500,000.

Supervisory Board:

- Mr. Browne Woodthorpe Robert, Chairman of the Supervisory Board fine in the amount of Lei 450,000;
- Mr. Rossler Max Walter, Vice Chairmain of the Supervisory Board fine in the amount of Lei 450,000;

²³ https://asfromania.ro/ro/a/692/deciziile-adoptate-de-consiliul-autorit%C4%83%C8%9Bii-de-supraveghere-financiar%C4%83---14.01.2021

²⁴ https://asfromania.ro/ro/a/697/sanc%C8%9Biuni-aplicate-de-consiliul-autorit%C4%83%C8%9Bii-de-supraveghere-financiar%C4%83

- Mr. Pascale Cristian, member of the Supervisory Board fine in the amount of Lei 450,000;
- Mrs. Arampova Aelita, member of the Supervisory Board fine in the amount of Lei 450,000;
- Mr. Papanikolaou Epameinondas, member of the Supervisory Board fine in the amount of Lei 450,000.

Sanctions imposed: Euroins Romania SA

In January 2020, the **unannounced control of Euroins Romania Asigurare Reasigurare SA** was completed (initiated in December 2019), by sanctioning the company with a fine of Lei 100,000, for non-compliance with the legal provisions stipulated in Law 132/2017 and ASF Rule 20/2017 regarding: registration of the claim application in the claim file, answer regarding the claim for compensation and the formulation of the offer, use of the Finding Minutes which does not contain the statement according to which the injured person has the right to address any car repair unit, without any restriction or constraint from the MTPL insurer and the use of reference sources not provided in the insurance legislation.

During July-September 2020, the unannounced control took place at the company Euroins Romania Asigurare Reasigurare SA²⁵. As a result of the control action, a series of deficiencies were found regarding the calculation of technical reserves on March 31, 2020, as well as the erroneous registration of operations for the recognition of reinsurance commissions. As a result of the aspects found, the Council of the Financial Supervisory Authority decided to sanction the company, according to the legal provisions, with a fine of Lei 600,000.

At the same time, following the supervision activity performed on the elements included in the reports submitted by the company for June 30, 2020, a series of deficiencies were found regarding the calculation of technical reserves, in accordance with the requirements of Solvency II legislation (Law No. 237/2015), as well as regarding the way of determining and reporting the basic own funds elements that cover the solvency capital requirement and the minimum capital requirement. **According to the legal provisions, for the deficiencies found ASF applied the following measures**: sanctioning the company with a fine in the amount of Lei 1.5 million; sanctioning the General Manager and the Executive Director with a fine in the amount of Lei 100,000 each and withdrawing the approvals granted by the ASF.

In addition, the company was required to submit to the Financial Supervisory Authority a financing and recovery plan in order to restore the solvency indicators, in accordance with the provisions of the law. **The company must also review the MTPL premium rates**, taking into account the deficiencies found, within 90 days from the date of communication of the decision.

Also, following the control actions²⁶ performed at the company Euroins Romania Asigurare Reasigurare SA, the main deficiency identified was the late payment of the compensations related to the MTPL claim files.

With regard to Euroins, it was also found that it did not make any written notification of the reasons why it did not fully / partially approve the claims within the time limit provided by law and it did not communicate the maximum amount of compensation in the deadline provided by the legislation in force.

²⁵ https://asfromania.ro/ro/a/621/sanc%C8%9Biuni-aplicate-de-consiliul-autorit%C4%83%C8%9Bii-de-supraveghere-financiar%C4%83

²⁶ https://asfromania.ro/ro/a/692/deciziile-adoptate-de-consiliul-autorit%C4%83%C8%9Bii-de-supraveghere-financiar%C4%83---14.01.2021

Following the findings, the ASF Council decided the following:

Sanctioning the company Euroins România Asigurare Reasigurare SA, according to the legal provisions, with a fine of Lei 450,000.

Following the periodic control²⁷ carried out at Euroins România Asigurare Reasigurare SA, the ASF Board decided to sanction the company with a fine in the amount of Lei 500,000 for failure to transmit the compensation offers or notifications regarding the reasons for which the compensation claims were not approved, as well as for late payment of claims.

5.11. The impact of the COVID-19 pandemic on the insurance market

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

The main risk areas identified were:

- the decrease of the value of the assets of the insurance companies as a result of the massive drops registered by the stock exchanges;
- increase in the value of insurers' obligations, arising from the materialization of risks due to the spread
 of COVID-19, especially in the case of health insurance products, death, temporary incapacity for work,
 risk of non-payment of debts that the insured has, insurance attached to banking products, travel
 insurance.

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

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

At the end of the fourth quarter of 2020, both the value of assets and liabilities of insurance companies in Romania (measured according to the principles of Solvency II) increased compared to the end of the last quarter of 2019, before the risk of COVID-19 pandemic. Total assets rose by about 8%, and total liabilities of insurance companies rose by 7% during the period under review. As a result of the positive dynamics of total assets, the value of the surplus of assets over debt also increased during this period, which is the main component of the Tier 1 items related to own funds eligible to cover capital requirements. The significant share of Tier 1 items in the total eligible equity indicates that, at the market level, the capital held by insurance companies in Romania is of good quality (mainly equity).

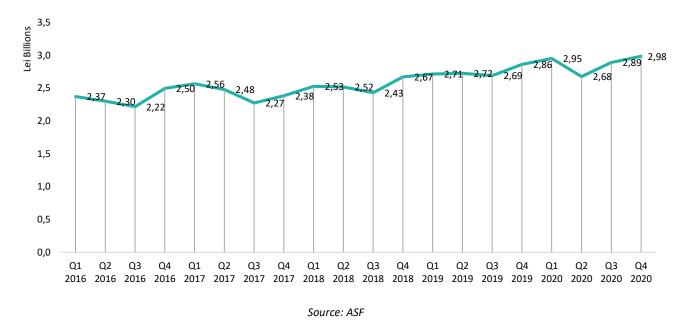
In the context of the spread of COVID-19 and of the strict measures imposed by states in order to prevent the spread with an impact on economic activity, these risks can be joined by the business risk generated by a

²⁷ https://asfromania.ro/ro/a/712/sanc%C8%9Biuni-dispuse-de-consiliul-ASF

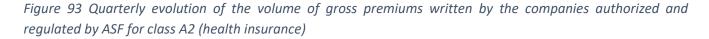
potential drop in the volume of gross written premiums and an increase in the redemptions of the policies in force.

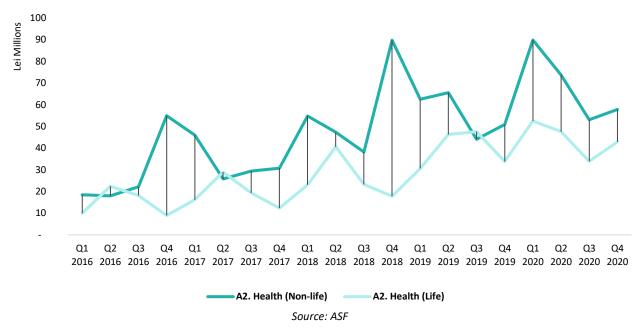
The increase in the volume of gross written premiums in 2020 compared to the previous year is mainly due to the positive dynamics recorded in the first quarter of 2020 and the fourth quarter of 2020, respectively, when the volume of gross written premiums reached the highest quarterly values in recent years (Lei 2.95 billion, respectively Lei 2.98 billion). However, from the underwriting perspective, in the second quarter of 2020 the Romanian insurance market was affected as a result of the effects of the COVID-19 pandemic and of the measures taken to prevent the spread, the value of gross written premiums being Lei 2.68 billion, dropping by 1.8% compared to the second quarter of 2019, respectively by 9.3% compared to the previous quarter.

Figure 92 Quarterly evolution of the total volume of gross premiums written by the companies authorized and regulated by ASF



In the first quarter of 2020, the health insurances registered the highest volume of gross written premiums for both insurance segments: approximately RON 90 million for non-life insurance, respectively lei 52.5 million for life insurance, cumulating in total over Lei 142 million, increasing by 68% compared to the fourth quarter of 2019, respectively by 53% compared to the first quarter of 2019. After the quarterly drops registered in the second and third quarters of 2020, the gross written premiums for health insurance rose in the fourth quarter of 2020, however, the level recorded in the first 3 months of 2020 was not exceeded.





In addition to the measures taken during 2020 in the context of the COVID-19 pandemic outbreak and the intensification of the surveillance and control process in order to ensure the stability of the insurance market and consumer protection, the ASF Rule no. 46/2020 for the amendment and completion of the Financial Supervisory Authority Rule no. 21/2016 regarding the reports on the insurance and / or reinsurance activity was also approved.

The insurance companies submitted to the ASF an additional report on the liquidity ratio, but there was no requirement on the minimum level of this ratio. The supervision process highlighted the need to regulate the requirement for companies to hold liquid assets above the level of the gross claim provision, in the case of non-life insurance, respectively of the gross claim provision and other amounts due to contractors and beneficiaries, in the case of life insurance. Thus, the regulation of the liquidity indicator requirement leads to ensuring the ability of insurance companies to meet their short-term obligations.

For this purpose, Rule no. 46/2020, which regulates the liquidity indicator, which companies must determine and report on a monthly basis and which is calculated as the ratio between the market value of some assets considered liquid and the short-term obligations of insurers to policyholders, was approved.

In order to determine the liquidity indicator, elements of the calculation method of the liquidity coefficient provided by the previous regulations were taken over, but, unlike the latter (which refers to the amount between the net claim provision and 50% of the part ceded to reinsurers from the gross claim provision), it refers to the entire gross value of the claim provision.

Also, the market value assessment methods of some assets such as government securities, bonds and shares have been adjusted, taking into account the value given by the quotations presented by the quotation providers, such as, for example, Bloomberg or Reuters.

In the event of non-compliance with this requirement, companies must restore the level of the liquidity indicator by the maximum date of transmission of the additional liquidity report immediately following the one on which the non-compliant indicator was found, considered as the reference date.

Rule no. 46/2020 stipulates that the first report will be sent for the reference date March 31, 2021, and in case a non-compliant indicator is found, the company must submit a plan with concrete measures and deadlines to be undertaken in order to restore the level of the indicator by June 30, 2021 at the latest, considered as the reference date.

The draft rule for the modification of the Financial Supervisory Authority Rule no. 21/2016 on the reports regarding the insurance and/or reinsurance activity recently went through the public consultation process.

The purpose of the project is to extend the compliance period from June 30, 2021 to September 30, 2021, simultaneously with the clarification of the fact that the gross claim reserve will be taken into account at the **level of the approved gross claim reserve**, not including the unapproved claim reserve.

Stability of the private pension market

The private pension market has had a positive evolution throughout its operation, regardless the episodes of volatility encountered over the years. Thus, on March 31, 2021, the total value of the assets of private pension funds (Pillar II and Pillar III) reached the level of Lei 83.34 billion (euro 16.92 billion). Private pension funds, with predominantly local and regional exposure, have managed to effectively manage the health crisis, so that at the end of 2020 the rates of return of private pension funds were higher than before the crisis. For the private pension market, we assess most exogenous risks at a medium to low level, except for the market risk, which is at a medium to high level. Credit risk remains low, as private pension funds are only allowed to invest in fixed income instruments, which are rated Investment Grade.

6.1. The private pension market in a European context

Individuals can accumulate considerable savings for retirement age through various types of pension plans. Depending on how retirement benefits are calculated and who bears the risk (the participant or employer financing the pension), occupational pension plans can be defined benefits (DBs) or defined contributions (DCs). Thus, in DC type schemes, the participants bear most of the risks, and in DB type schemes the employers who sponsor the pension plan assume a part of the risks, if the value of the assets does not cover the pension rights.

In European countries, we observe a certain degree of heterogeneity in terms of private pension systems. In general, the central-eastern states rely on defined contribution schemes (DCs) and the western states focus on defined benefit schemes (DBs), while only four states also opt for hybrid schemes (Belgium, Liechtenstein, Luxembourg and Spain). Currently, the private pension system in Romania is composed of Pillar II (privately managed pensions) and Pillar III (voluntary pensions), both being defined contributions (DC), and in 2020, the fourth pillar of pensions, respectively the occupational pension scheme (DC), for which occupational pension funds have not yet been set up.

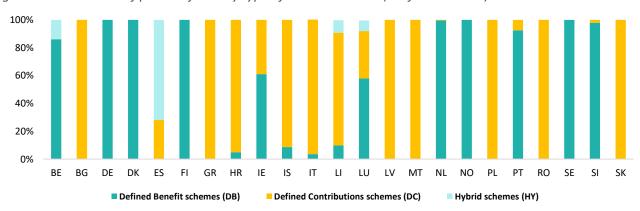


Figure 94 Distribution of pension funds by type of scheme in 2019 (% of total assets)

Source: EIOPA, latest data available for the ES and BE refer to 2018.

In recent years, more attention has been paid to the private pension system, being perceived as an efficient way of saving in the long run. Most states have seen annual increases in pension fund assets over time, with the exception of Poland and Hungary, according to the OECD. Growth has been rapid in countries with a still recent system of private pension funds such as Armenia, Greece or Romania.

Table 39 Degree of penetration of private pensions in 2019 (total assets % GDP)

NL	IS	LI	IE	NO	PT	IT	BE	DE	AT	RO	SI	SE	LU	DK	ES	SK	FI	BG	LV
194%	137%	86%	36%	11%	10%	8%	8%	8%	6%	6%	6%	4%	4%	3%	3%	3%	1%	1%	1%
	Source: EIOPA, for GR (0.06%), HR (0.3%), PL (0.1%) and MT (0.3%) rates are less than 1%																		

The degree of penetration of private pensions differs from state to state, its highest level for 2019 being registered by the Netherlands (194%). In the case of Romania, the penetration rate of private pensions reached the percentage of 6%, above the median level.

Given the mandatory nature of the privately managed pension system in Romania, the legislator has established several mechanisms for the protection of participants, including the minimum rate of return for each risk category of private pension funds. If a fund periodically obtains rates of return below the minimum rate, special supervisory measures are triggered in order to remedy the situation. In the context of a limited number of privately managed pension funds and existing safeguards, a similar approach has been found by managers in the strategic allocation of the investment portfolio, characterized by moderate risk exposure and a preference for the titles issued by the Romanian state at the same time. At European level, the markets of private pension funds are structurally different from the Romanian market. Most products are optional and occupational pension funds predominate in many countries. In this context, the much larger aggregate portfolios of European pension funds are invested in a mix of financial assets, in particular bonds and equities.

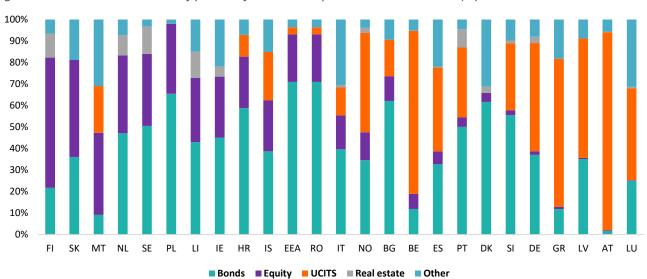
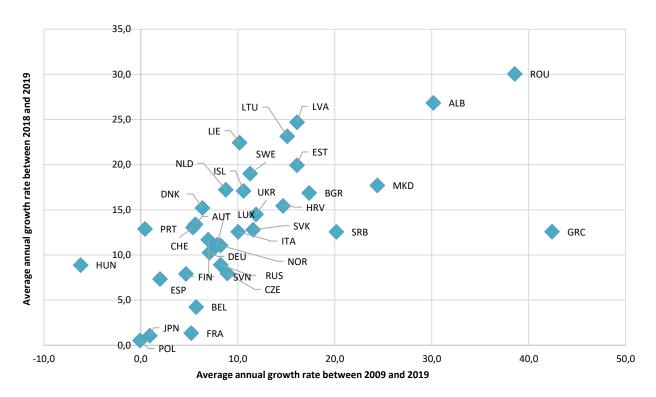


Figure 95 Investment structure of pension funds in European countries in 2019 (%)

Source: EIOPA Financial Stability Report - December 2020

Figure 96 Nominal annual growth rate



Source: Pension Market in Focus 2020

Pension fund assets increased in all European countries in 2019 compared to 2018. According to the OECD, assets in retirement savings plans exceeded USD 50 billion worldwide at the end of 2019, being about double compared to the end of 2009.

The outbreak of the COVID-19 pandemic created instability in global financial markets, leading to losses for retirement savings plans in the first quarter of 2020. OECD forecasts show that OECD pension fund assets fell with 10% in March 2020 compared to the end of 2019. The return of the financial markets in the second and third quarters of 2020 determined the recovery of the financial losses that occurred at the beginning of the pandemic, so that the assets registered higher levels than in the pre-crisis period.

The sharp decline in pension fund assets based on defined benefit schemes (DBs) and declining interest rates have put pressure on sponsors and providers of DB plans in the first quarter of 2020, being backed by policy makers. Even though the international financial markets returned to a positive trend in the second and third quarters of 2020, the financing position of DB-type schemes remained inferior to 2019 in many countries, including the Netherlands, the United Kingdom and the USA.

Fees charged by private pension providers for managing assets/the cost of running pension plans limit the growth of total assets. Tax typologies differ from state to state. Commissions can be charged from contributions or directly from salaries, assets, investment performance or a combination of these. In addition to these usual fees, participants in certain states may be charged a fee when joining a pension fund, transferring their assets or withdrawing from a pension fund. In order to encourage private pensions, some states have reduced these fees (Bulgaria, Estonia, Romania, etc.). In Romania, the commission for the administration of privately managed

pension funds applied to the monthly contributions received was reduced from 2.5% (before December 2018) to 0.5% (starting with 2020). Also, the management fee applied to net assets was modified, which was fixed (0.05%), now being determined according to the rate of return of the pension fund and the inflation rate.

6.2. Recent developments on the private pension market in Romania

The private pension market in Romania, in 2020, was marked by the establishment of the fourth pillar of pensions, respectively the occupational pension system. At the beginning of 2020, the Parliament adopted *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 objective of this new system is to provide an **additional pension component**, financed mainly by employers and in the alternative by employees.

Occupational pension funds are based on a form of social partnership between the employer and his employees, being also a factor of stimulation and reward for employees, as well as their retention. Thus, the employer is the one who proposes the pension scheme for all employees, within the collective labor contract and at the same time represents them in relation to the administrator, who establishes and manages the occupational pension fund, considering his legitimate interest as a contributor to the fund.

Until April 2021, no applications were received for the establishment of occupational pension funds.

The introduction of a new accumulation component in order to obtain an occupational pension will contribute to the development of a culture based on long-term savings and can ensure a flow of domestic capital to the economy through investments made by occupational pension funds. At the same time, the premises are created to ensure a replacement income as high as possible for future retirees, through the joint effort of employers and employees.

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 the total assets under administration, at the level of the entire private pension system, reached at the end of March 2021 the level of Lei 83.34 billion (EUR 16.92 billion), with a number of 8,212,918 participants.

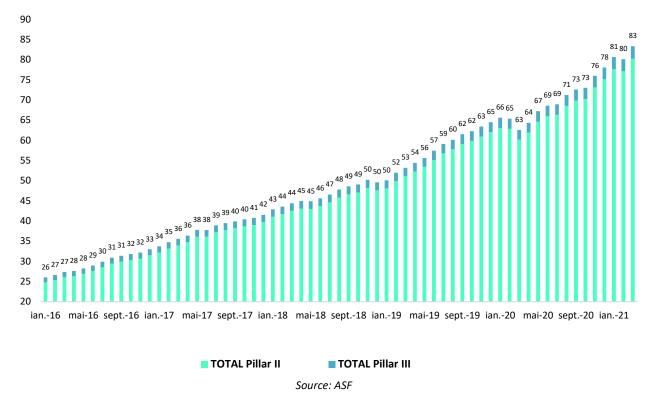
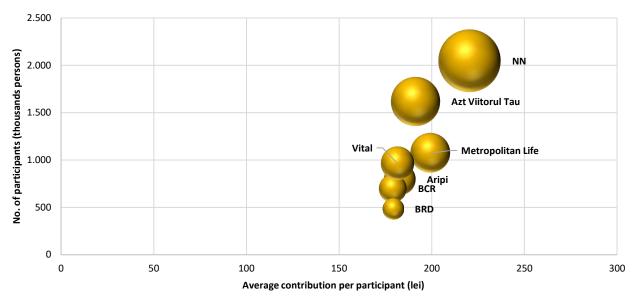


Figure 97 Assets of the private pension system (billion lei)

The private pensions market remained the most significant segment of the non-bank financial market supervised by ASF in terms of asset value, in the first quarter of 2021, holding 7.90% of GDP (GDP value of 2020).

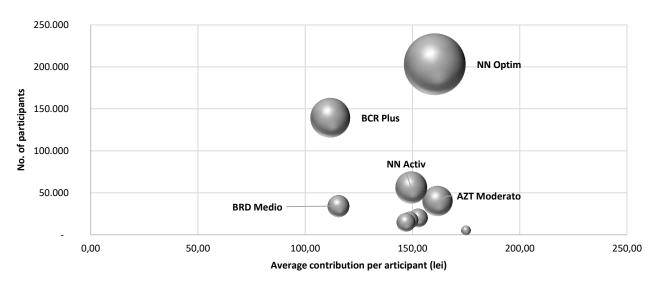
The significant and accelerated growth of the assets of private pension funds during their operation was possible mainly due to the mandatory contributions to privately managed pension funds under Pillar II. These have increased over time as an aggregate effect of changes in contribution rates and as a result of the increase in the gross payroll on which the respective quotas have been calculated, retained and transferred. The contribution to a private pension fund does not represent additional financial obligations for participants, but is part of the individual contribution due to the public pension system. In March 2021, the value of the transferred share was 3.75%. In other words, a percentage of 3.75% of the gross salary income goes to the privately managed pension.

Figure 98 Distribution of privately managed pension funds by average contribution per participant, total number of participants and market share as of March 31, 2021



At the level of privately managed pension funds, the average contribution of the participants in March 2021 was RON 197.13, registering a slight decrease of 1%, compared to the same date of the previous year. The privately managed pension fund with the highest average contribution per participant, but also with the most participants registered was FPAP NN, with a market share of 34.8% (calculated according to the net assets).

Figure 99 Distribution of voluntary pension funds by average contribution per participant, total number of participants and market share as of March 31, 2021



Source: ASF

Regarding the voluntary pension funds, the average contribution per participant in March 2021 was Lei 144.82, rising by 2% compared to March 2020. The voluntary pension fund with the highest level of average contribution per participant and with the highest number of participants is FPF NN Optim, also registering the highest market share according to the net assets (42.7%).

In 2020, gross contributions amounting to Lei 8.91 billion were transferred to the privately managed pension system, by 5% more compared to 2019. In June and July 2020 (the reference months for which the contributions are transferred being April and May) a decrease of the gross contributions was noticed, as a result of the increase of the number of persons entered into technical unemployment, according to the measures imposed by the establishment of the state of emergency on the Romanian territory. In Pillar III, gross contributions amounting to Lei 370 million were transferred in 2020, rising by 8% compared to 2019.

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

Table 40 Administrators and depositories of private pension funds as of March 31, 2021

Administrator	Pension fund (PII)	Market share as of March 31, 2021
NN PENSII SOCIETATE DE ADMINISTRARE A UNUI FOND DE PENSII ADMINISTRAT PRIVAT SA	Privately Managed Pension Fund NN	34.84%
ALLIANZ-ŢIRIAC PENSII PRIVATE SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Privately Managed Pension Fund AZT VIITORUL TAU	21.56%
METROPOLITAN LIFE SOCIETATE DE ADMINISTRARE A UNUI FOND DE PENSII ADMINISTRAT PRIVAT SA	Privately Managed Pension Fund METROPOLITAN LIFE	13.90%
AEGON PENSII-SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Privately Managed Pension Fund VITAL	9.97%
GENERALI SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Privately Managed Pension Fund ARIPI	8.93%
BCR PENSII, SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	BCR Privately Managed Pension Fund	6.86%
BRD SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	BRD Privately Managed Pension Fund	3.93%

Administrator	Pension fund (PIII)	Market share as of March 31, 2021
NN ASIGURĂRI DE VIAŢĂ SA	Voluntary Pension Fund NN OPTIM	42.72%
BCR PENSII, SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Voluntary Pension Fund BCR PLUS	17.68%
NN ASIGURĂRI DE VIAŢĂ SA	Voluntary Pension Fund NN ACTIV	11.62%
ALLIANZ-ŢIRIAC PENSII PRIVATE SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Voluntary Pension Fund AZT MODERATO	10.39%
BRD SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Voluntary Pension Fund BRD MEDIO	5.37%
ALLIANZ-ŢIRIAC PENSII PRIVATE SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Voluntary Pension Fund AZT VIVACE	3.88%
SAI RAIFFEISEN ASSET MANAGEMENT SA	Voluntary Pension Fund RAIFFEISEN ACUMULARE	3.80%

BT PENSII-SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII FACULTATIVE SA	Voluntary Pension Fund PENSIA MEA	3.22%
GENERALI SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Voluntary Pension Fund STABIL	0.98%
AEGON PENSII-SOCIETATE DE ADMINISTRARE A FONDURILOR DE PENSII PRIVATE SA	Voluntary Pension Fund AEGON ESENŢIAL	0.33%

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, the depositors are responsible together with the administrators of the pension funds for the participants' assets.

The latest data on the pension funds market show that asset storage services are provided by three credit institutions authorized by the National Bank of Romania (BNR): BRD, which has the highest share of assets, of approximately 83%, Raiffeisen, 13% and BCR, 4%.

The degree 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 monitoring operational risks for this market segment.

6.3. Fund investment structure

The private pension system in Romania has over time complied with the requirements of prudence, quality and security of portfolios, so that participants' contributions are safe. The investment policy aims at diversifying the portfolios of private pension funds, thus diminishing the market risk of a class of assets, in a period in which there are drops in the prices of other financial assets. Pension funds invest in a mix of financial assets such as shares, corporate bonds, municipal bonds, supranational bonds, government securities, UCITS fund units, bank deposits.

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

Even if in recent years the structure of investments has experienced a slight diversification, the share of fixed income instruments still exceeds the level of 70% of the total.

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
06c. 2018
dec. 2019
dec. 2020
Mar-21

Figure 100 Evolution of the structure of pension fund asset investments (% of total assets)

Bank deposits

UCITS

Other financial instruments

Corporate bonds

At the end of March 2021, the investments of the pension funds were made, in general, locally, in a percentage of 90%, 88% of their financial assets being denominated in lei. Most Romanian instruments are represented by government securities, shares listed on the Bucharest Stock Exchange and bank deposits. Private pension funds are only allowed to invest in fixed income instruments that have the qualification Investment Grade. As of March 31, 2021, a percentage of 64.79% of the total assets of the system were invested in government securities issued by Romania, a country with the qualification Investment Grade. The generally higher level of yields on bonds denominated in lei compared to similar instruments issued in other currencies, combined with the predominantly positive performance of the local stock market led to private pension funds achieving consistent and generally higher returns than inflation.

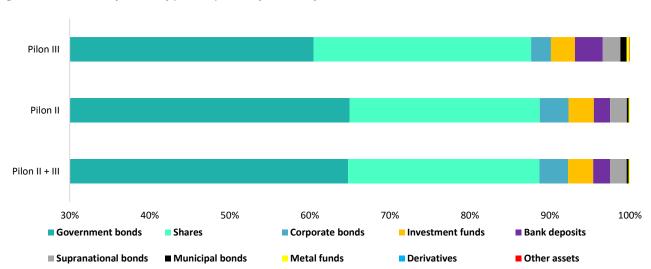


Figure 101 Structure of assets of private pension funds as of March 31, 2021

Shares

Government bonds

Source: ASF

The structure of privately managed pension fund investments (Pillar II) remains mainly oriented towards government securities (65% at the end of March 2021). The next class of assets in importance in the funds' portfolios is represented by investments in listed shares, with a share of about 24%.

The share of government securities in the investment portfolio of voluntary pension funds (Pillar III) was about 60% at the end of the first quarter of 2021, while the shares hold a share of 27% of their total assets.

From an 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 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 6%, at the level of the entire private pension system. In order to minimize this risk, the financial creditworthiness of the issuer is analyzed at the moment of making an investment, being then periodically monitored by the managers.
- Market risk is mainly composed of interest rate risk, spread risk²⁸, risk of falling stock prices and currency risk. In turn, the risk of falling stock prices is composed of the systematic market risk and the individual risk related to issuers whose shares are held in the portfolio.

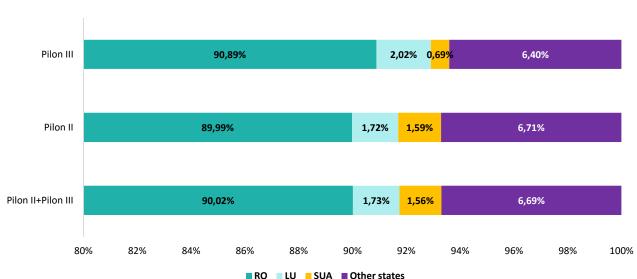


Figure 102 Exposure by country of private pension fund assets as of March 31, 2021

Source: ASF

On March 31, 2021, from the perspective of the country of origin of the issuers of financial instruments held in the portfolios of private pension funds (Pillar II and Pillar III), a share of about 90% is related to the investments of some issuers in Romania.

²⁸ the risk that the value of the bond investment will decrease in value due to the deterioration of the market perception on issuer's quality

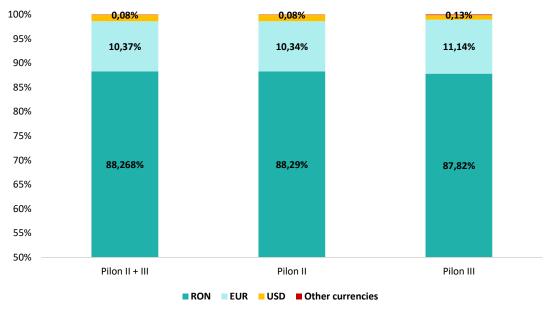


Figure 103 Currency exposure of private pension fund assets as of March 31, 2021

Given the limited exposure to foreign currency-denominated financial instruments (most of which relate to EUR-denominated instruments, about 10% at the aggregate level of the private pension system) and the active hedging policies used by fund managers, foreign exchange risk is at a very low level on March 31, 2021.

6.4. Fund unit yields

The main performance indicator of private pension funds, calculated according to the currently applicable legislation, is the weighted average rate of return of all private pension funds for the last 60 months. Its average for all privately managed pension funds, shown in the chart below, peaked in December 2019 (6.34%), followed by a downward trend caused by the COVID-19 pandemic. After this episode, the evolution of the weighted average rate of return of privately managed pension funds returns to an upward trend, at the end of March 2021 registering 6.10%.

Both minimum rates of return have evolved on the same trend with the weighted average rate of return of all pension funds, being calculated accordingly. In the first quarter of 2021, the minimum rates of return of pension funds for each risk category mentioned were higher than those recorded before the outbreak of the health crisis.

The minimum rate of return of all high-risk funds is calculated as the lower of the weighted average rate of return of all pension funds in the period decreased by 5 percentage points and 40% of the weighted average rate of return of all pension funds during that period.

The minimum rate of return of all medium-risk funds is the lowest of the weighted average rate of return of all pension funds for the period, less 4 percentage points, and 50% of the weighted average rate of return of all pension funds during that period.

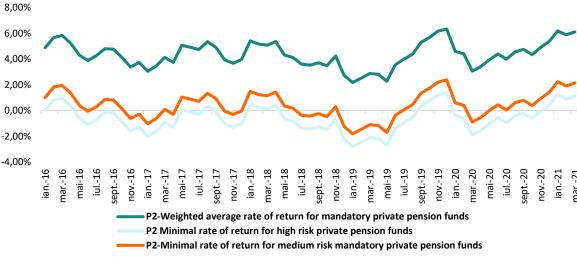


Figure 104 Evolution of profitability rates of privately managed pension funds

Source: ASF

The volatility maintained on the financial markets since the outbreak of the health crisis had a negative effect on the evolution of fund values, but was mitigated by three very important factors: good diversification of stock and bond portfolios, short duration (on average) of bond portfolios and the continuous and significant flow of net monthly contributions collected by the funds. Currently, the values of fund units remain on an upward trend.

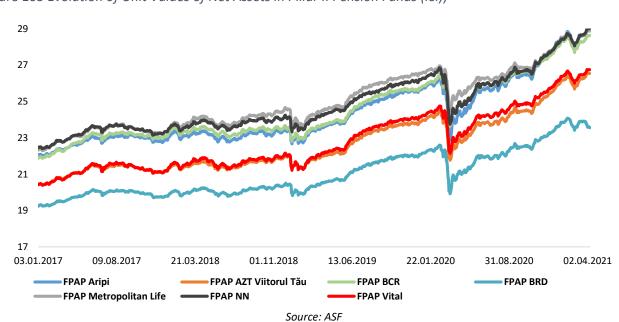


Figure 105 Evolution of Unit Values of Net Assets in Pillar II Pension Funds (lei))

In the long run, for the entire period of operation of private pension funds, their annualized return²⁹ remains high, as shown in the table below.

Table 41 Annualized yield of VUAN in Pillar II from its establishment until April 8, 2021

FPAP Aripi	FPAP AZT Viitorul Tău	FPAP BCR	FPAP BRD	FPAP Metropolitan Life	FPAP NN	FPAP Vital
8.44%	7.81%	8.32%	6.81%	8.46%	8.49%	7.81%

Source: ASF

Due to the similar investment structure, the evolution of fund unit yields related to Pillar III voluntary pension funds follows the same trend as in Pillar II funds, noting that some funds were launched more recently and therefore the long-term performance history in their case is different. In the short term, however, the evolution of yields is very close as a trend in the entire market of private pension funds.

Figure 106 Evolution of Unit Values of Net Assets in Pillar III Pension Funds

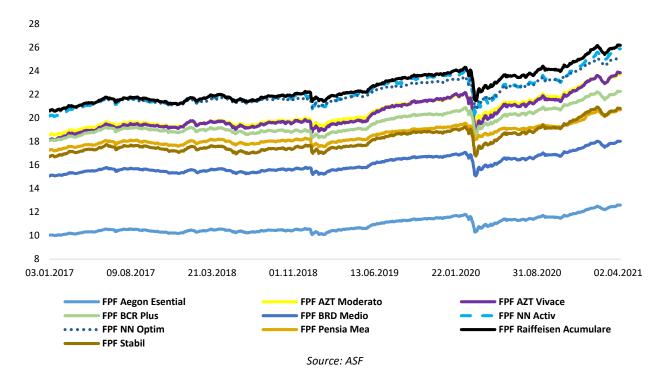


Table 42 Annualized return of NAV in Pillar III from its establishment until April 8, 2021

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
4.17%	6.35%	6.45%	5.87%	5.06%	7.00%	6.93%	5.31%	7.76%	6.23%

Source: ASF

²⁹ Annualized return is the average annual return calculated in the long run, from the establishment of the private pension system to the present

6.5. Technical provisions and financial indicators of the administrators

The architecture of the protection mechanisms of the participants in the private pension system in Romania also includes the prudential financial requirements applicable to fund managers: the minimum level of share capital and the obligation to establish a technical provision calculated actuarially to cover the risk that at retirement the value of the individual's individual assets will be less than the amount of the net contributions made by him. 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 legislation, the calculated level of the provision must be covered by eligible assets (which have a high quality and liquidity), in this case government securities, deposits and current accounts.

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

6.6. Potential risks and vulnerabilities in the private pension market

Balanced and prudent diversification has helped the private pension system overcome several episodes of high volatility in the past (for example, August 2015, January 2016, June 2016, June 2017 and December 2018), thus overcoming the period of high volatility from March of the previous year caused by the coronavirus pandemic crisis. Although the beginning of April 2020 started with a calming of the volatility of the private pension system, it remained at a higher level throughout 2020, compared to the period before the pandemic.

Despite temporary episodes of high volatility, pension fund assets have increased year on year, with a growth rate of over 19% in all years since its establishment (the lowest growth rate has been 19.40%, being registered in December 2018), and in December 2020 the assets of private pension funds increased by approximately 21% compared to the end of the previous year.

As a result of GEO no. 114 of December 28, 2018 on the establishment of measures in the field of public investments and fiscal-budgetary measures, amendment and completion of certain regulatory documents and extension of deadlines, a person participating in privately managed pension funds may opt, but not earlier than 5 years of contribution to the respective fund, to transfer 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 March 2021, a number of 724 people had requested the transfer of future contributions to Pillar I, from this point of view the liquidity risk remained stable. Subsequently, by GEO no. 1/2020 regarding some fiscal-budgetary measures and for the modification and completion of some regulatory documents, the article regarding the possibility of transferring the contributions to the public system was abrogated.

Interest rate risk and systemic market risk depend on elements of the overall investment climate, locally and internationally, outside the sphere of influence of fund managers, while the components of spread risk and

individual risk are managed at an appropriate level through portfolio diversification policies applied by fund managers.

The risks related to the stability and good functioning of pension funds are maintained at diminished levels, given the mechanism of operation of the private pension system of contributions defined with guarantees (at the level of the amount of contributions), practically excluding the solvency risk which is the main concern in the case of pension systems based on the definition of benefits (still predominant in Europe both in number and assets).

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

The Private Pension System Rights Guarantee Fund (FGDSPP) was created by Law no. 187/2011 on the establishment, organization and operation of the Private Pension System Rights Guarantee Fund in order to compensate the eventual losses of the participants and/or beneficiaries to the private pension funds, both during the accumulation period of the contributions and after the opening of the right to pension, resulting from the inability of pension managers or providers to honor the obligations undertaken and to ensure the payment of the rights of participants or beneficiaries to private pension funds, in case of impossibility to ensure them by managers or private pension providers.

FGDSPP guarantees private pension funds as follows:

- the guarantee scheme includes all privately managed pension funds (Pillar II), authorized by the ASF, which offer a guarantee required by law according to art. 135, paragraph (2) of Law no. 411/2004, with subsequent amendments and supplements: "(2) The total cumulated amount for the private pension may not be less than the value of the paid contributions, diminished with the transfer penalties and the legal commissions".
- The guarantee scheme includes all voluntary pension funds (Pillar III) authorized by the ASF, which offer a guarantee undertaken through the prospectus of the voluntary pension scheme based on Law no. 204/2006 with subsequent amendments and supplements.

Since its launch and until now, the Guarantee Fund has received under its management, in order to protect the rights of participants in the private pension system, total contributions amounting to Lei 28,326,926 and has obtained through the investment activity net gains amounting to Lei 1,370,200, generating a total yield at the end of 2019 of 4.84%.

The guarantee fund invests only on the Romanian market and is in the category of small, low-risk institutional investors. The financial resources intended to guarantee the rights from the private pension system (annual contributions) were placed during 2019 in the financial instruments allowed by law: government securities issued in lei and bank deposits set up with credit institutions authorized to operate in Romania, which are not under special supervision or special administration procedure, in optimal conditions for diversification, so as to avoid excessive dependence on a particular instrument or issuer that has not exceeded 45% of the assets intended to guarantee rights in the private pension system, except securities issued by the Romanian state.

The structure of the private pension system in Romania provides several mechanisms to protect the rights of participants, among which we mention: segregation of assets between managers and funds, additional checks and validations by depositaries, technical provisions established by administrators, reporting requirements and increased transparency, to which the Private Pension System Rights Guarantee Fund is added. This construction of the market together with the stage of its evolution, which is still in a period of accumulation, determines the maintenance of a low risk on the stability of FGDSPP.

6.7. The impact of the COVID-19 pandemic on the private pension market

The global economy slowed by 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 private pension funds, but their assets have seen major increases from year to year.

The beginning of 2021 was characterized by an uncertainty in the financial markets generated by the third wave of the pandemic. The annualized volatility of the fund units from Pillar II registered the highest level of the analyzed period, in March 2020, as a result of the propagation of the drop of the financial instruments prices on the net assets unit value. Subsequently, the level of annualized daily volatility of privately managed pension funds declined, being still at a higher level than before the COVID-19 pandemic.

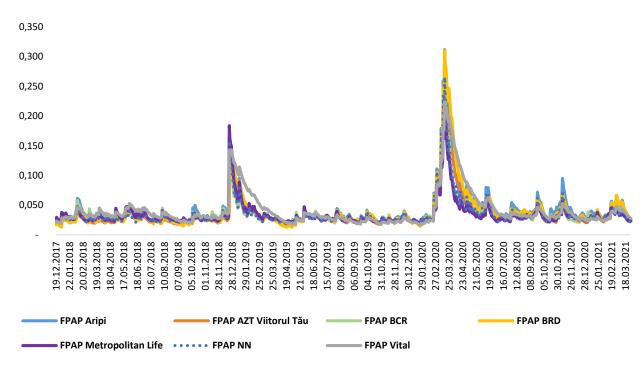


Figure 107 Evolution of the annualized daily volatility of Pillar II pension funds

Source: ASF calculations (Garch model)

Total assets related to privately managed pension funds (Pillar II) started on an upward trend in May 2020, the assets of private pension funds reaching the level before the COVID-19 pandemic broke out and maintaining an upward trend so far.

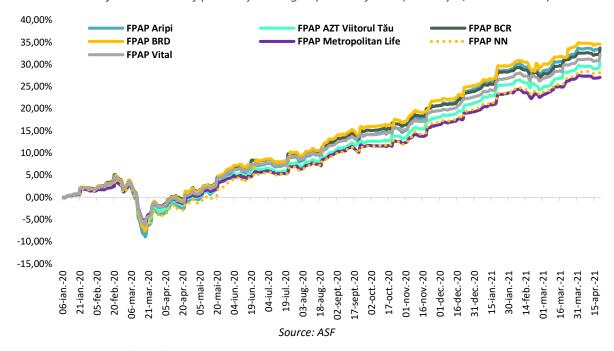


Figure 108 Evolution of total assets of privately managed pension funds (January 6, 2020 = 100%)

The annualized volatility of the fund units in Pillar III recorded the highest level in the period analyzed in March 2020.

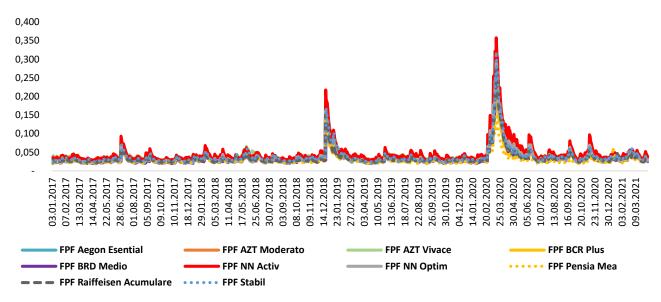


Figure 109 Evolution of the annualized daily volatility of Pillar III pension funds

Source: ASF

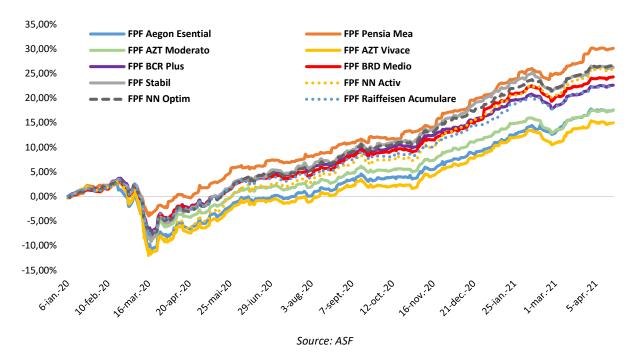


Figure 110 Evolution of total assets of voluntary pension funds (January 6, 2020 = 100%)

The short-term depreciation of financial assets generated by the coronavirus pandemic crisis will not have a significant impact on participants' future pensions, as they are the result of long-term investments. Despite fluctuations in the prices of financial instruments, the total assets of the private pension system remain above the guaranteed value.

Following the context created by the COVID-19 pandemic, ASF requested the managers to implement adequate measures to prevent / manage incidental risks. Some of the main measures requested were:

- the possibility to modify for a period of one year the investment limit of 70% of the total assets invested in government securities issued by the Romanian state, the European Union or the European Economic Area;
- cyber risk management;
- analyses and updates of internal procedures as a result of the increased fluctuation of pension fund portfolios.

Macroprudential policies and oversight

7.1. Macroprudential tools implemented by the ASF

ASF performs periodic analyses on the risks and vulnerabilities identified in the three supervised non-bank financial markets, as well as the opportunity to implement existing macroprudential instruments. To date, the following macroprudential measures have been implemented:

- At the level of the 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):
 - o From January 1, 2016 0.625%;
 - o From January 1, 2017 -1.25%;
 - o From January 1, 2018 -1.875%;
 - o From January 1, 2019 2.5.
- Regarding the countercyclical capital buffer and the capital buffer for systemic risk, so far there are no conditions that require the establishment of a level higher than 0% for this buffer in the case of financial services intermediary companies (SSIF).
- In the case of insurance companies, ASF maintained the previously implemented macroprudential elements:
 - the liquidity index of the insurance companies: monitoring and analysis at least on a quarterly basis of the liquidity coefficient corresponding to the insurance companies;
 - recovery plan;
 - Insured Guarantee Fund.
- For the private pensions market, ASF maintained the macroprudential instrument regarding the restrictions on significant exposures regulated by Law no. 411/2004 regarding the privately managed pension funds, Law no. 204/2006 regarding the optional pensions, Rule no. 11/2011 on investing and valuing the assets of private pension funds;
- In the case of managers of private pension funds, in order to avoid concentrating on a small number of issuers, the limitation of 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 ASF apply requirements for the security of IT systems. These were implemented by Rule no. 4/2018 on the management of operational risks generated by information systems used by entities, authorized / endorsed / registered, regulated and / or supervised by the Financial Supervisory Authority, according to which supervised non-bank financial entities submit annually to ASF self-assessments of IT risks, as well as IT audit reports (whose frequency differs depending on the risk class in which each entity falls).

7.2. Recommendations of the National Committee for Macroprudential Oversight

The National Committee for Macroprudential Oversight issued two new recommendations applicable to the Financial Supervisory Authority in the first 4 months of 2021:

NCMO recommendation no. R/3/2021 on compliance with the provisions of the EBA Guide on the detailing and publication of systemically important indicators - EBA/GL/2020/14 - recommending the National Bank of Romania and the Financial Supervisory Authority, as sectoral supervisors, to comply with the provisions of the Guideline of the European Banking Authority on the detailing and publication of systemically important indicators - EBA/GL/2020/14 from the date on which global systemically important institutions (G-SII institutions) will appear in their jurisdiction and to ensure the enforceability of its provisions in relation to the institutions concerned. At present, there are no G-SII type institutions in the ASF jurisdiction.

NCMO recommendation no. R / 2/2021 on the implementation of ESRB Recommendation / 2020/15 amending ESRB Recommendation / 2020/7 on restrictions applicable to distributions during the COVID-19 pandemic recommending the National Bank of Romania and the Financial Supervisory Authority, as competent authorities, to require credit institutions, investment firms, insurance and reinsurance companies in their area of supervision, as appropriate, to avoid performing any of the following actions, which have the effect of reducing the quantity or quality of own funds at consolidated and / or individual level until at least September 30, 2021:

- a) To distribute dividends or to grant an irrevocable commitment to distribute dividends;
- b) To redeem ordinary shares;
- c) To create an obligation to pay a variable remuneration to a member of a category of staff whose professional activities have a material impact on the risk profile of the financial institution.

Except where the financial institution demonstrates increased caution in carrying out any of those actions and that reduction does not exceed the level of a conservative distribution threshold set by the competent authorities considering several respects:

- the need for financial institutions to maintain a sufficient level of capital to reduce systemic risk and contribute to economic growth, taking into account the risk of deteriorating the solvency position of the real sector due to the pandemic context;
- ensuring that the level of distribution offered by financial institutions is significantly lower compared to the years before the COVID-19 crisis;
- the particularities of each sector within the area of supervision of the respective competent authority.

On the <u>insurance market</u>, ASF applied the ESRB recommendation 2020/15, setting a conservative threshold of at least 130% of the solvency ratio determined as the minimum between the ratio of own funds eligible to cover SCR and SCR and the ratio of own funds eligible to cover MCR and MCR, after deducting from the own funds level the amounts that are planned to be distributed. At the same time, the Financial Supervisory Authority issued the following recommendations applicable to insurance companies:

Recommendation 1

1.1. Companies should update their capital management policy and provide for measures to maintain an adequate level of capital.

Recommendation 2

1.2. Companies should further monitor and evaluate the effects of the COVID-19 crisis on the quantity and quality of own funds covering SCR and MCR.

Recommendation 3

- 1.3. If the assessment provided for in Recommendation 2 shows that the quantity and quality of own funds covering SCR and MCR may be affected, companies should apply the following measures:
- a) to postpone or not to distribute dividends, including not to make firm commitments regarding their distribution:
- b) not to redeem ordinary shares. Recommendation 4
- 1.4. If the assessment provided for in Recommendation 2 shows that the quantity and quality of own funds covering SCR and MCR may be affected, companies should update the remuneration policy and postpone the payment of variable remuneration to persons who can undertake on behalf of companies risks which have a significant impact on their risk profile.

Recommendation 5

1.5. The management of the companies undertakes full responsibility in case it adopts the decision not to apply the measures provided in recommendations 3 and 4, corroborated with the non-observance of the conservative threshold established by the ASF at the level of at least 130% of the solvency degree, especially if those decisions have negative effects on the solvency of companies.

Recommendation 6

1.6. Companies should seek the views of the ASF before taking the decisions set out in Recommendation 5, where it is estimated that the application of those decisions would lead to a degree of solvency below the conservative threshold set by the ASF.

Most insurance companies reported to ASF compliance or intention to comply with the issued recommendations:

Table 43 Centralized situation of compliance with ASF recommendations by insurance companies

Recommendation	Compliance (no. of companies)	Intention to comply (no. of companies)	Noncompliance (no. of companies)
R1	23	3	0
R2	23	3	0
R3a	24	2	0
R3b	24	2	0
R4	22	4	0

R5	19	7	0
R6	20	6	0

For the financial investment service companies, ASF applied the ESRB Recommendation 2020/15, setting a conservative threshold of at least 14% of the total own funds rate.

The Financial Supervisory Authority has issued the following recommendations applicable to financial investment companies:

Recommendation 1

1.1. Financial investment service companies (SSIF) should review the internal process for assessing the capital adequacy of risks and provide for measures to be taken so as to maintain an adequate level of capital.

Recommendation 2

1.2. SSIF should further monitor and assess the effects of the COVID-19 crisis on the quantity and quality of own funds.

Recommendation 3

- 1.3. If the assessment provided for in Recommendation 2 shows that the SSIF cannot maintain the level of the total own funds rate of at least 14%, the SSIF should apply the following:
- a) to postpone or not to distribute dividends, including not to make firm commitments regarding their distribution;
- b) not to redeem ordinary shares.

Recommendation 4

1.4. If the assessment provided for in Recommendation 2 shows that the SSIF cannot maintain the level of the total own funds rate of at least 14%, the SSIF should update the remuneration policy and postpone the payment of variable remuneration to persons who can undertake on behalf of the SSIF risks which have a significant impact on their risk profile.

Recommendation 5

1.5. The management of the SSIF undertakes full responsibility in the event that it adopts the decision not to apply the measures provided for in recommendations 3 and 4, in conjunction with non-compliance with the conservative threshold set by the ASF at least 14% of the total own funds rate, especially if those decisions have negative effects on the solvency of companies.

Recommendation 6

1.6. The SSIF should seek the views of the ASF before taking the decisions set out in Recommendation 5, if it is estimated that the application of those decisions would lead to a decrease in the level of own funds below the conservative threshold set by the ASF.

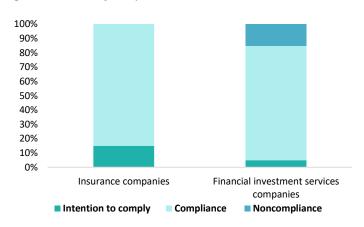
Most financial investment services companies have reported to ASF compliance or intention to comply with the issued recommendations:

Table 44 Centralized situation of compliance with ASF recommendations by financial investment services companies

Recommendation	Compliance (no. of companies)	Intention to comply (no. of companies)	Noncompliance (no. of companies)
R1	11	4	0
R2	14	1	0
R3a	9	0	6
R3b	14	0	1
R4	6	0	9
R5	15	0	0
R6	15	0	0

Figure 111 Share of compliance with ASF recommendations

In total, 85% of insurance companies and 80% of financial investment services companies notified ASF of their compliance with the recommendations issued on restrictions applicable to distributions during the COVID-19 pandemic.



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List of abbreviations

AG = Non-life Insurance

AGA = General Meeting of Shareholders

AOPC = Other Collective Investment Undertakings

APP = Asset Acquisition Schedule
ARDL = Autoregressive Distributed Lag

ARIS = Absolute Return Innovative Strategies
ASF = Financial Supervisory Authority
ATS = Alternative trading system

AV = Life insurance

BCR = Romanian Commercial Bank

BERD = European Bank for Reconstruction and Development

BET = Bucharest Exchange Trading
BNR = The National Bank of Romania

BRD - GSG = Romanian Development Bank - Groupe Societe Generale

BT = Banca Transilvania

BVB /BSE= Bucharest Stock Exchange
CASCO = Casualty and Collision
CE = European Commission
CDS = Credit default swap

CIF = Cost, Insurance and Freight

CISS = Composite indicator of systemic stress
CLIFS = Countrywide index of financial stress

CMR = Convention on the Contract for the International Carriage of Goods by Road

CMU = Capital Markets Union

CNSM/NCMO = National Committee for Macroprudential Oversight
CNSP/NCSP = National Commission for Strategy and Prognosis

CNVM /NSC = National Securities Commission

COVID-19 = Infectious disease caused by the most recently discovered coronavirus

CSD/DC = Central Depository

CSDR = Central Depository Ledger

CR = Concentration rate

DB = Defined benefits

DC = Defined contributions

DLT = Distributed Ledger Technology

DORA = Proposal for a regulation on digital operational resilience for the financial sector

EBA = European Banking Authority
ECB/BCE = European Central Bank

EFAMA = European Fund and Asset Management Association

EIOPA = European pilot project for European financial transparency

EUOPA = European Insurance and Occupational Pensions Authority

ESA = European Supervisory Authorities

ESG = Environment, Sustainability and Governance ESMA = European Securities and Markets Authority

ESRB = European Systemic Risk Board

ETF = Funds traded on the stock exchange

FCI /ICF= Investor Compensation Fund
FDI = Open-End Investment Funds

FED = United States Federal Reserve System

FGA = Insured Insurance Fund

FGDSPP = Private Pension System Rights Guarantee Fund

FIA = Alternative Investment Funds
FII = Closed - End Investment Funds

FinTech = Financial technology

FMI / IMF = International Monetary Fund

FOB = Free on Board

FoE = Freedom of establishment FoS = Free movement of services

FP = Fondul Proprietatea

FPAP = Privately Managed Pension Fund

FSB = Voluntary Pension Fund FSB = Financial Stability Board

FTSE Russell = Financial Times Stock Exchange Russell

G20 = The group of twenty finance ministers and central bank governors

G-SII = Global systemically important insurance companies

HHI = Herfindahl-Hirschman Index HoReCa = Hotels, Restaurants, Catering

HY = Hybrid schemes

IAPC = Harmonized index of consumer prices

IBP = Gross Claims Paid

IFN = Non-bank financial institution
IMM = Small and medium enterprises
INS = National Institute of Statistics

InsurTech = Insurance technology IPC = Consumer price index

IORP II = Directive (EU) 2016/2341 of the European Parliament and of the Council on the

activities and supervision of institutions for occupational pensions provision

IT = Information technology LEI = Legal Entity Identifier

MCR = Minimum Capital Requirements

MF = Ministry of Finance

MiCA = Regulation on crypto-asset markets

MiFID II = Financial Instruments Markets Directive

MSCI = Morgan Stanley Capital International
NBER = National Bureau of Economic Research

OECD = Organization for Economic Cooperation and Development

OFR = Office of Financial Research

OFR - FSI = Financial stress index

OMS/WHO = World Health Organization

OPC/CIS = Collective Investment Schemes

OPCVM/UCITS = Undertakings for the Collective Investment in Transferable Securities

OPEC = Organization of the Petroleum Exporting Countries

ORTL = Longer-term refinancing operations

OTRTL-III = Quarterly longer-term refinancing operations

OUG = Government Emergency Ordinance

PBS / GWP = Gross written premiums

PCA = Analysis of the main components

PELTRO = Pandemic emergency longer - term refinancing operation

PEPP = Pan - European Pension Product

PEPP = Pandemic Emergency Purchase Programme

PIB = Gross domestic product

PSPP = Public sector purchase programme
RCA/MTPL = Motor Third Party Liability Insurance
SAI = Investment Management Company
SCR = Solvency capital requirements
SEE = European Economic Area
SIF = Financial Investment Company
SMT = Multilateral Trading System

SSIF = Financial Investment Services Company

STS = the existing EU framework for simple, transparent and standardized securitizations

SUA/USA = United States of America

TLTRO-III = Targeted long-term refinancing operations

TVA /VAT = Value Added Tax
UE /EU = European Union

UK = UK

US FED = US Federal Reserve

VTC = The value of transactions after clearing

VTD = The value of settled transactions

VUAN/NAV = The net asset value

WTI = West Texas Intermediate

ZEW = Zentrum fur Europaische Wirtschaftsforschung (Center for European Economic

Research)

Insurance classes

Non-life insurance

- A1 accidents
- A2 health
- A3 land vehicles, excluding rolling stock
- A4 rolling stock
- A5 aircraft
- A6 sea, lake and river vessels
- A7 goods in transit
- A8 fire and natural disasters (for goods other than those insurable in classes A3-A7)
- A9 hail, frost and other risks than those specified in class A8 (for goods other than those insurable in classes A3-

A7)

- A10 motor third party liability, for the use of land motor vehicles, including carrier's liability
- A11 civil liability for the use of aircraft, including carrier's liability
- A12 civil liability for the use of sea, lake and river vessels, including carrier's liability
- A13 general civil liability, excluding that mentioned in classes A10-A12
- A14 credit
- A15 guarantees
- A16 financial losses
- A17 legal protection
- A18 assistance for people in difficulty during travel or absence from home or habitual residence

Life insurance

- C1 life insurance, annuities and supplementary life insurance
- C2 marriage and birth insurance
- C3 life insurance and annuities related to investment funds
- C4 tontines
- C5 capitalization operations based on actuarial calculations
- C6 management of collective pension funds
- C7 operations related to the duration of human life, according to the social insurance legislation A1 accidents
- A2 health

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