KPMG

Importance and key benefits of life insurance and private pensions

April 2018

A study prepared as part of a financial education campaign organized by APPA and sponsored by Metropolitan Life

about this study

The study was prepared by KPMG Advisory SRL during the first quarter of 2018, as part of a financial education campaign organized by APPA – Association for Insurance Promotion and sponsored by Metropolitan Life, aimed at increasing awareness on the role and key benefits of life insurance and private pensions sector for the individual, the economy and the national social security system.

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1. Executive summary

Overview of current context

The current economic outlook is positive and favours growth, although further reforms are needed to achieve long term sustainable development

- GDP growth in 2017 was 6.9%, the second highest in the EU
- The unemployment rate reached historical lows, at 4.9% of active population
- The budget deficit is close to the 3% target, indicating that further administrative reforms are needed
- Population ageing puts additional pressure on government spending and may limit long term economic growth

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Romanians still have a significant gap in their standard of living compared to the average EU citizen; while their financial wealth is growing, they are not saving for the long term

- GDP per capita is at one third of the EU average, while 39% of population is still at risk of poverty or social exclusion
- Financial assets held by population have doubled since 2009, however almost 40% are kept in bank accounts and deposits, which are unlikely to safeguard their financial well-being on the long term
- Romania has the lowest level of financial intermediation in the EU and financial markets are lacking depth and diversity; pension funds and insurance companies account for only 10% of total financial sector assets, although pension fund assets are growing rapidly

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The life insurance market is growing, however main ratios are significantly below EU and CEE averages

- Life insurance volumes are growing faster than non-life insurance, but the later segment remains prevalent; life insurance accounts for only 20% of total insurance premiums, compared to 60% EU average
- Romanians spend on average 18 euros for life insurance policies per annum, while Czech and Slovaks spend 10 times more; the average annual spending for life insurance per capita at EU level is 1,300 euros
- Life insurance penetration (measured as percentage of premiums in GDP) lags below 0.3% despite the accelerated economic growth, which shows that other factors such as reduced financial literacy and lack of fiscal incentives are holding back the sector

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Privately managed (Pillar II) pensions were introduced as part of a substantial reform of the public pension system in response to demographic pressures and budgetary constraints

- Starting 2008, for people aged 35 or less at that time a portion of the mandatory pension contributions (currently 3.75%) has been redirected into individual accounts, owned by the participants and managed by private pension funds
- A decade after implementation, Pillar II pension funds accumulated RON 37 billion in assets, consisting of contributions of participants and capitalized returns
- Between 2008 and 2016, Romanian private pension funds produced annualized returns of 5.3% after fees and inflation, among the best of any retirement schemes in Europe

Importance and key benefits of life insurance and private pensions

Life insurance and private pensions are major sectors of the world economy

- In 2016, total life insurance premiums amounted to USD 2.6 trillion, that is 3.5% of the global GDP
- Private pension assets in OECD countries reached their highest level in history at over USD 38 trillion (126% of the OECD area GDP) in the same year, and are growing faster than the GDP in most countries across the world

The fundamental function of life insurers and private pension funds is to provide financial protection to individuals and families; by fulfilling this basic role, they benefit the economy in multiple ways:

- They are important suppliers of attractive long term saving products for the population, stimulating saving behaviour and smoothing consumption over time
- They are large institutional investors, directing significant volumes of funding towards financial markets and strategic, long-term projects; at EU level, 40% of household savings totaling EUR 13 trillion were channeled through the insurance and pension funds sector
- Thus they contribute to the development of well-functioning capital markets and to the overall economic growth and stability

Life insurance and private pensions may help reduce the pressure on social security budgets, strained by deteriorating demographics

- Based on the current trends, Romania's population is expected to decline by 2050 to 16.4 million people with a median age of 47 years, as a result of declining birth rates, emigration and increased life expectancy
- As a result, there will be less workers which will contribute towards the pension budget of more pensioners, making it difficult for the public system to ensure pension adequacy while maintaining budget sustainability
- To address the demographic pressures, in many EU member states the public pay-as-you go pension schemes are complemented by pre-funded, privately managed mandatory or voluntary pillars;
- In Romania, Pillar II pensions will be an important source of additional income during retirement for its participants, even based on the reduced contribution of 3.75%

Multiple sources of post-retirement income are needed to achieve an adequate income replacement rate, measured as the ratio of post-retirement income to earnings before retirement

- A theoretical example of an individual retiring in 2048 shows that Pillar I can only provide a replacement rate of 37%, as compared to the recommended target of 70%
- Regular contributions to private pensions and towards a life insurance product with saving component can increase the income replacement rate to almost 60%
- Thus, an individual earning the average national salary and making regular contributions towards Pillar I, Pillar II and a life insurance product during his entire work life would achieve a total post-retirement income of about RON 2,610, of which RON 1,650 from Pillar I, RON 670 from Pillar II and RON 290 from life insurance (all amounts in 2017 purchasing power parity)

Key opportunities and challenges

Financial literacy is one of the key factors influencing people's attitude towards life insurance and long term savings

- Romania has a large gap to fill as regards the financial literacy of its population; only 1 in 5 adults have an understanding of basic financial products, placing Romania on the last place in Europe with 21% financial literacy rate
- As a result, financial inclusion, measured as access to financial products (bank and saving accounts, loans and payments), is also the lowest in the European Union; according to 2017 World Bank data, four out of ten Romanians did not have a current account, while only 19% of Romanians were saving for old age

National level policies related to financial education are essential for promoting financial literacy and financial inclusion

- Significant work is already underway in various member states to develop and implement national strategies for financial education; an OECD survey indicates that in 2016 19 out of the 28 EU member states were planning, developing, implementing or revising a national strategy
- The experience of EU member states indicates that best results are derived from coordinated efforts of multiple stakeholders, including governments, local industry, regulatory and supervisory authorities, consumer organisations and NGOs
- In Romania, a national strategy for financial education in Romania is still to be designed; while a number of institutions and organisations have recently taken initiatives in this area, inequality of opportunity remains a challenge

At low levels of income per capita, basic needs take priority over insurance expenditure and old age savings

- Romanians allocate 70% of their consumption expenditure to basic items such as food, clothing, housing and health; as such, they are left with little additional income to invest in financial services and products that might ensure their future financial security
- As the standard of living improves and GDP per capita grows, life insurance penetration is expected to rise; however, as demonstrated by the experience of Western economies, this will also depend on public policies regarding social security, taxation of life insurance and pension products and redistribution of income between generations

Regulation and technology shape the way the industry communicates and engages with consumers, providing opportunities to strengthen confidence and enhance product accessibility and affordability

- New regulations coming into effect in 2018 – PRIIPs, IDD and GDPR – as well as the Solvency II framework implemented starting 1 January 2016 come as a response to previous shortcomings and failures within the industry and are aimed at strengthening consumer protection via improved conduct of business rules and disclosure requirements
- Life insurance and annuity products are traditionally perceived as complex, difficult to understand and costly; new technologies are helping the industry shape its response to renewed customer expectations for transparency, speed, convenience and for an engaging, personalised experience

2. Overview of life insurance and private pensions sector

Romania has been one of the fastest growing economies in the European Union in the recent years. However there are still significant gaps in terms of available income and in the general standard of living of its population compared to the European average, and even to most Central and Eastern European economies. This is also reflected in the level of life insurance expenditure, which is among the lowest in Europe, as well as in the level of savings available to supplement the post-retirement income of Romanian citizens.

Private pensions can play an important role in ensuring an adequate level of income at the old age. The public pension system is under pressure in the context of deteriorating demographics, reflected by an increase in the average age of population and a decrease in number of workers that will contribute to the public pension budget in the future.

In many cases, especially for low income individuals, Pillar II pensions will be the only source of additional income besides the public pension, contributing towards a better income replacement rate and helping them maintain a reasonable standard of living after retirement.

Life insurance also has the potential to contribute to the development of the Romanian economy. In the most advanced European economies, life insurance plays an important role in alleviating the risk of poverty, by providing financial security to individuals and families in face of unexpected life events such as death and disability. Life insurance also acts as a saving instrument for population and channels significant volumes of long-term funds towards financial markets and other sectors in need of investments, contributing to the overall economic growth and stability.

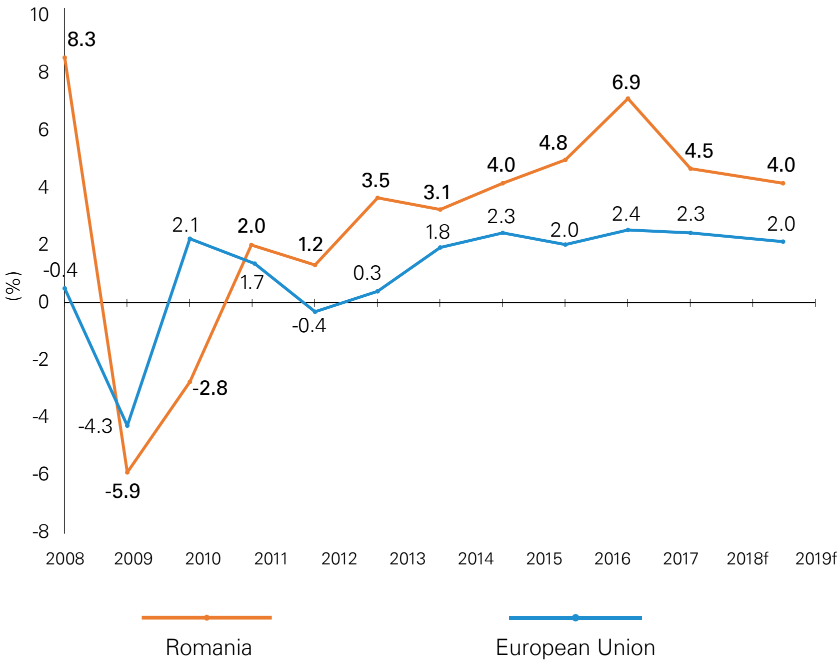
2.1 Overview of current context

Romania has made considerable progress in the last two decades in developing a competitive market economy. Its accession to the European Union in 2007 was a catalyst for structural reforms and a driver for economic growth. The 2008 global financial crisis had a significant negative impact on the Romanian economy, which suffered one of the highest contractions in Europe in 2009. However, following a few years of economic recession and sluggish growth, the pace of economic recovery has accelerated and in 2017 Romania posted a record GDP growth of 6.9%, one of the highest in the EU. This performance is in line with the general trend at EU level, where Central European economies are growing faster than their western counterparts, and is expected to continue in the following years, although at a slower pace.

GRAPH 1

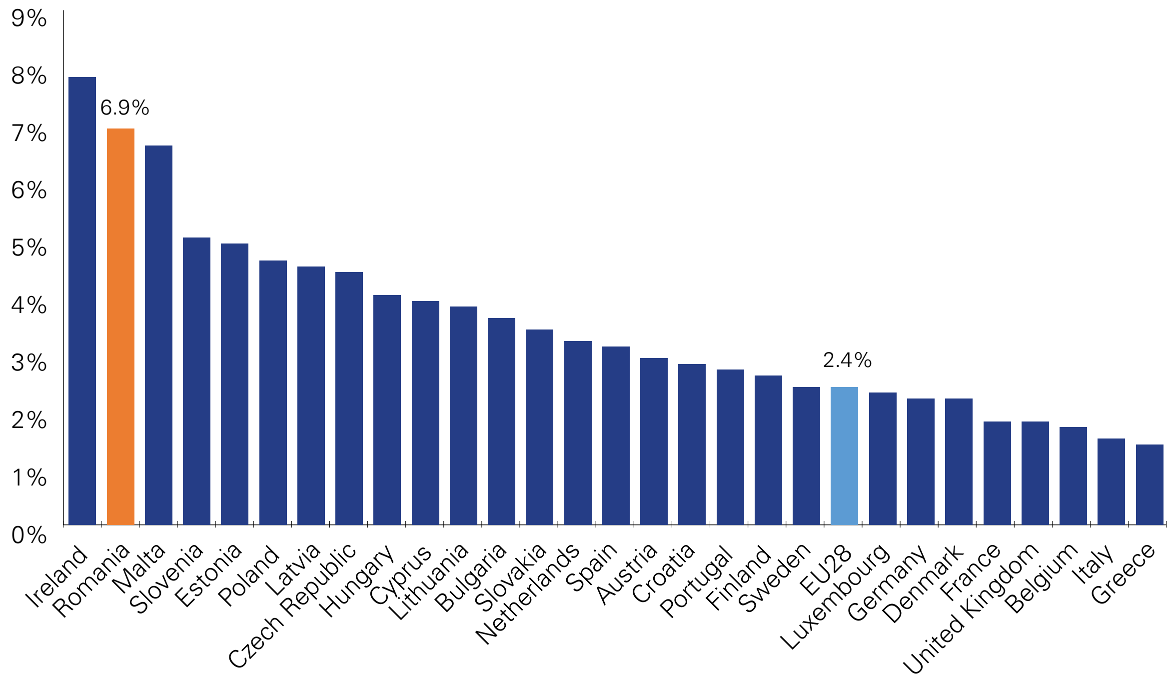
Annual GDP growth, Romania vs. EU

Source: Eurostat Database, European Commission forecast, KPMG analysis; f = forecast



GRAPH 2

GDP growth in EU member states, 2017

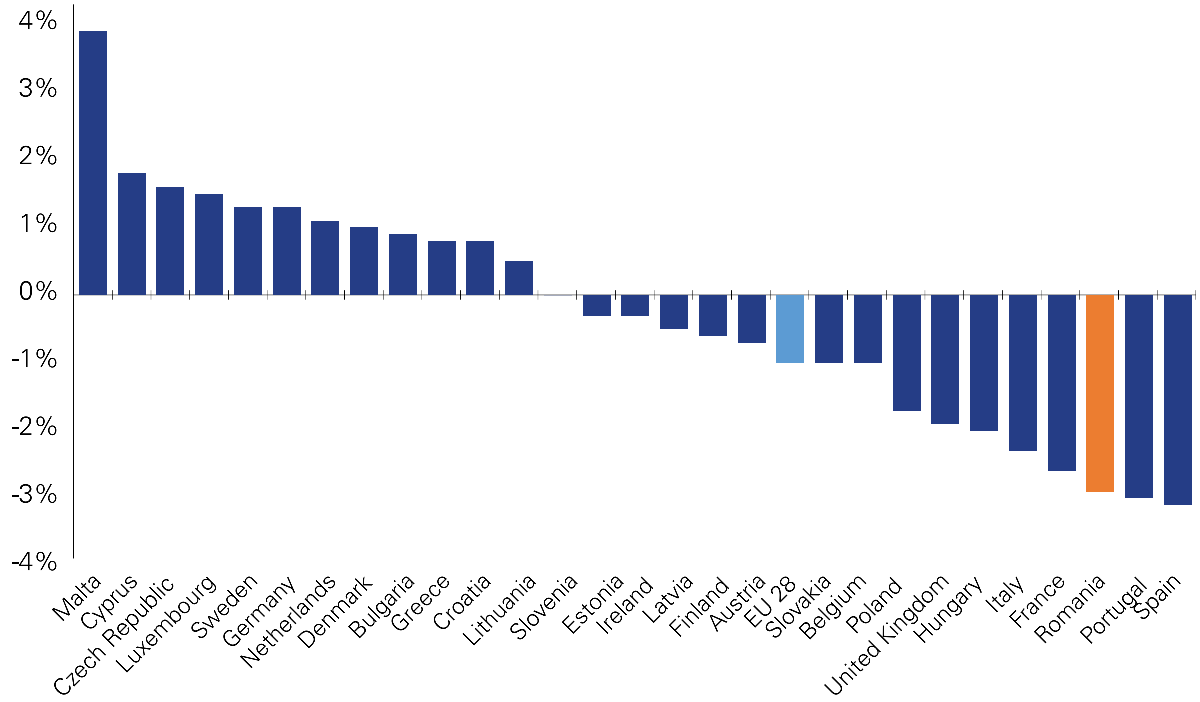


Source: Eurostat Database, KPMG analysis

On the longer term, sustainable growth may be achieved through further investment in infrastructure, education and innovation. The record growth in recent years was mainly driven by private consumption, fueled by government's fiscal stimuli and spending policies such as indirect tax cuts and wage increases implemented in both in the public and private sectors. As a result, the public deficit – i.e. the gap between government income and spending – has widened and is one of the highest in the European Union, just below the 3% target set for the member states. This indicates that further administrative reforms are needed in order to improve tax revenues and to increase effectiveness of public spending, especially in areas that can generate long-term sustainable growth.

GRAPH 3

Government surplus/ deficit as percentage of GDP in EU member states, 2017

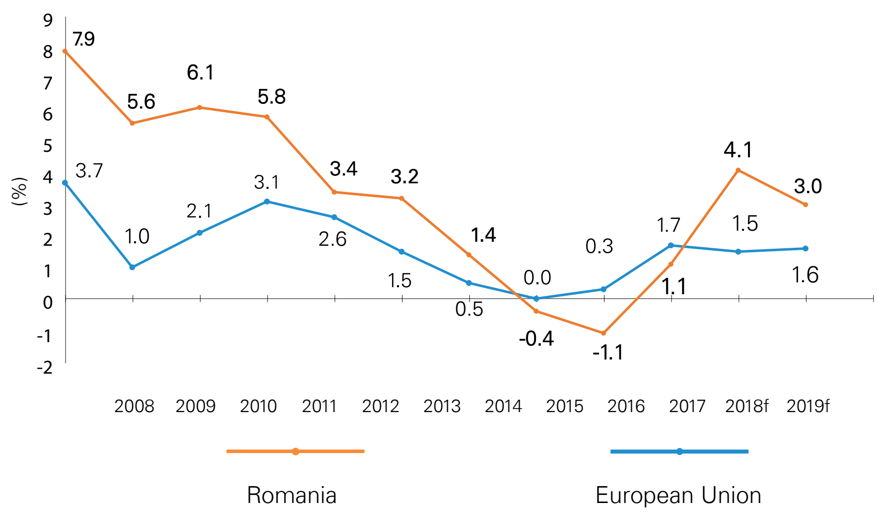


Source: Eurostat Database, KPMG analysis

After several years of persistently low levels, inflation and interest rates are rising, driving macroeconomic volatility. Recent fiscal and spending stimuli, as well as rising fuel prices are pushing inflation up, after a period of deflation that lasted for approximately two years. Macroeconomic forecasts for 2018 were pointing out at the beginning of the year an inflation rate of 4.1% in the absence of corrective actions, outside the target band of 2.5% +/-1% set by the National Bank of Romania. In response, the central bank has started to tighten its monetary policy, implementing two consecutive increases of 0.25 percentage points in the key monetary policy rate during the first two months of 2018.

GRAPH 4

Inflation rate: Romania vs. EU

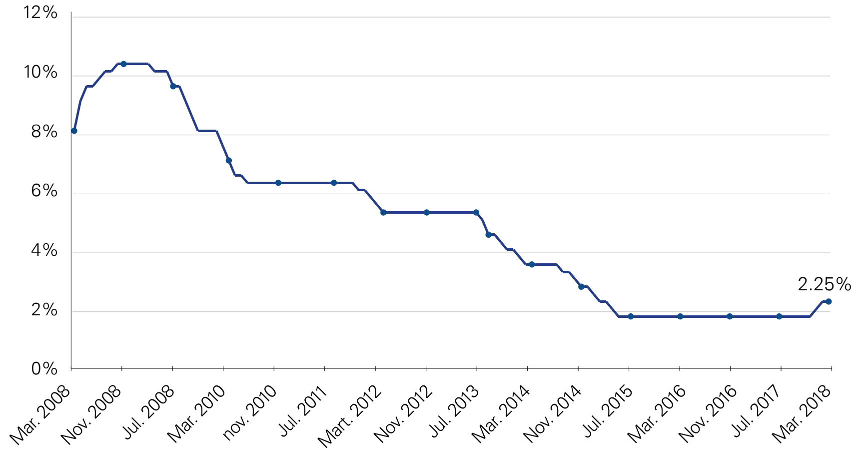


Source: Eurostat Database, European Commission forecast, KPMG analysis, f = forecast

GRAPH 5

Key monetary policy rate, Romania

Source: NBR, KPMG analysis

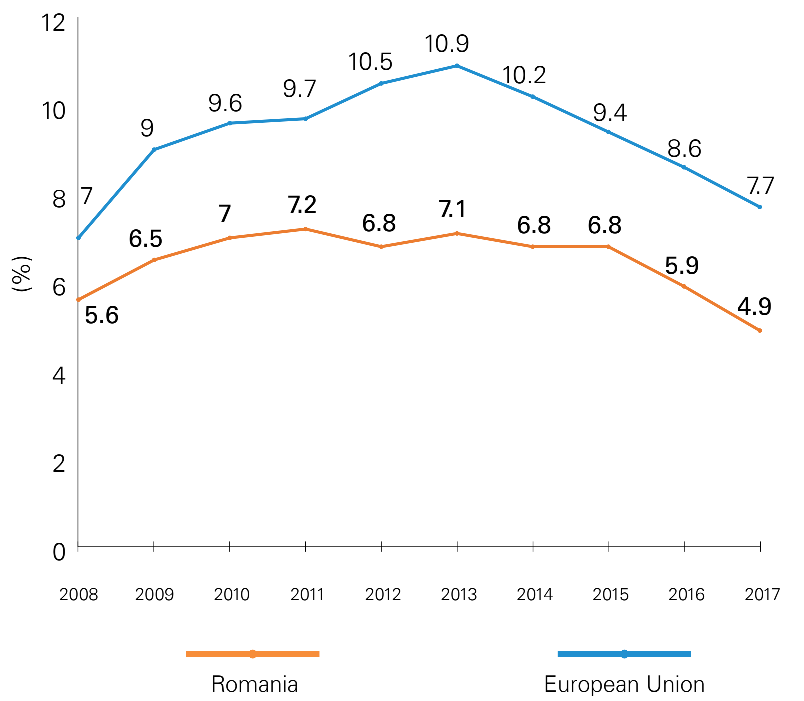


The unemployment rate is at historical low levels, indicating shortages in the labour market. The sustained economic growth that generated new jobs in the recent years, corroborated with the increased migration of workforce to Western Europe following the 2007 accession to the EU, maintained the unemployment rate consistently below the EU average even during the period of economic recession. At 4.9% in 2017, the unemployment rate in Romania is currently one of the lowest since 1990, having reverting to the levels reached before the financial crisis. This points at a scarcity of labour resources which may limit the economic growth in the short to medium term.

GRAPH 6

Unemployment rate, Romania vs. EU

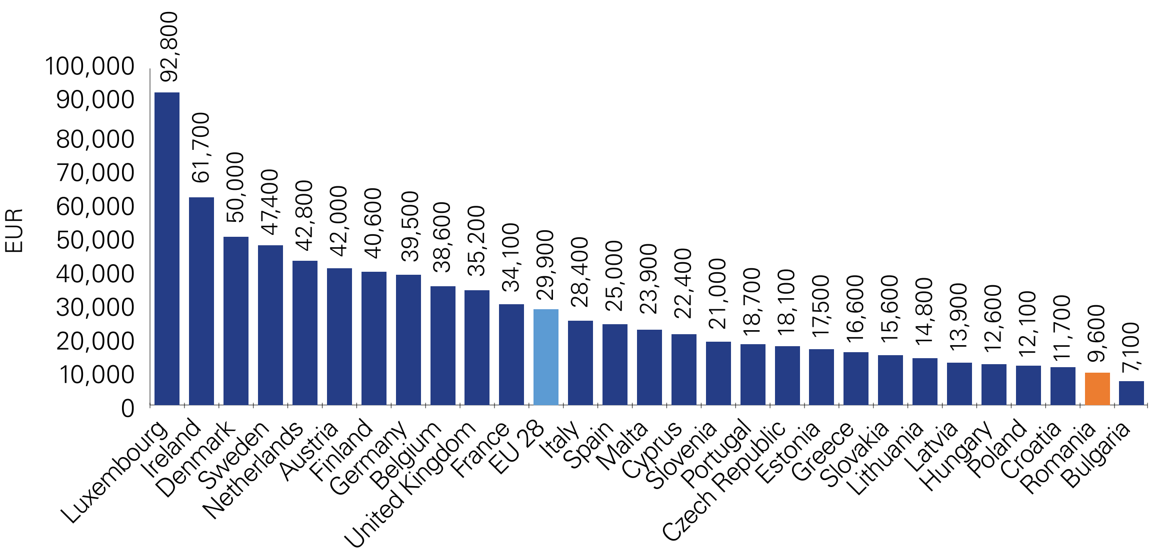
Source: Eurostat Database, percentage of active population, KPMG analysis



Despite the recent economic growth, the income gap is still significant compared to the EU. After more than a decade of EU membership, Romania is still one of the poorest countries of the European Union. The GDP per capita is the second lowest in the EU after Bulgaria, while the disposable income per capita is at 62% (in purchasing power parity) compared to the EU average, although the gap has narrowed significantly since 2005, when the income per capita was 31% of the EU average. Thus, even if the gap in disposable income has halved since pre-accession years, while the minimum salary increased by more than four times (from approximately EUR 55 in 2005 to EUR 230 in 2017), the standard of living for the average Romanian is significantly below that of the average European citizen.

GRAPH 7

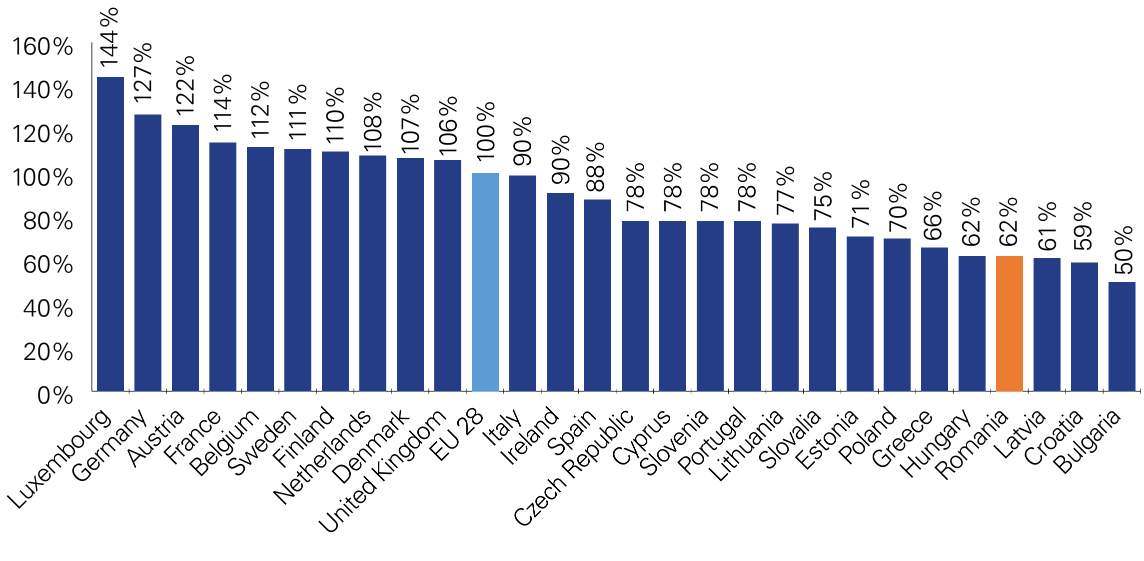
GDP per capita in EU member states, 2017



Source: Eurostat Database, KPMG analysis; current prices, euro per capita

GRAPH 8

Disposable income of households per capita in EU member states, in percentage of the EU 28 average[1], 2016



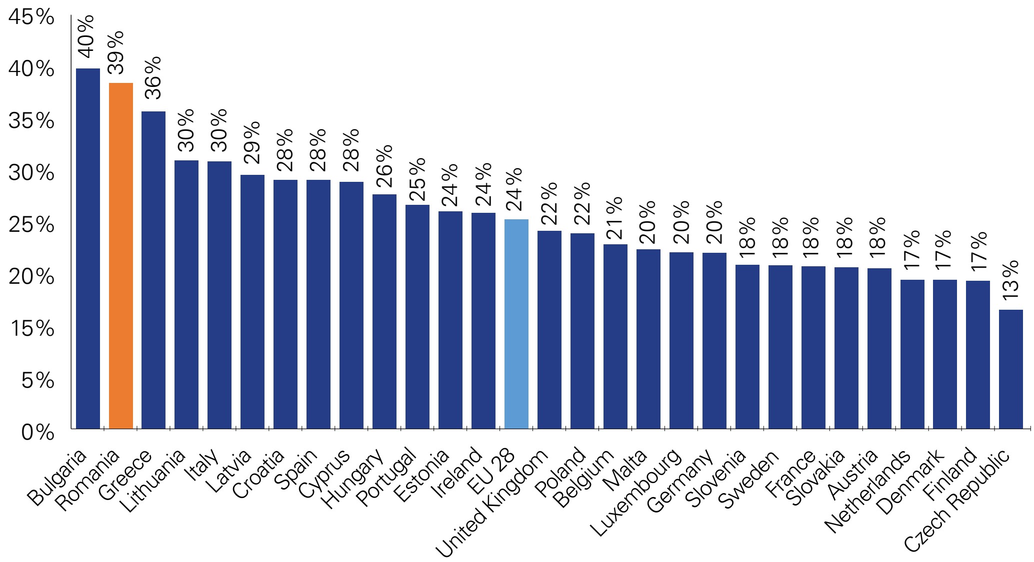
Source: Eurostat Database, KPMG analysis

Almost 40% of Romania's population is at risk of poverty or social exclusion. The low levels of disposable income, correlated with the low social protection expenditure (11.6% of GDP in Romania compared to 19.1% in EU 28 in 2016) and inconsistent anti-poverty policies, make Romania the country with the second highest risk of poverty or social exclusion for population in the EU, after Bulgaria. According to Eurostat data, 39% of Romanians are at risk of poverty after social transfers, meaning that their disposable income is below the national at-risk-of-poverty threshold, i.e. RON 6,530 per year, the equivalent of approximately RON 544 per month per single adult.

1: The indicator reflects the purchasing power of households and their ability to invest in goods and services or save for the future, by accounting for taxes and social contributions and monetary in-kind social benefits. It is calculated as the adjusted gross disposable income of households and Non-Profit Institutions Serving Households (NPISH) divided by the purchasing power parities (PPP) of the actual individual consumption of households and by the total resident population and in this chart is expressed as an index calculated in relation to the European Union (EU28) average set to equal 100.

GRAPH 9

Percentage of people at risk of poverty or social exclusion in EU member states, 2016

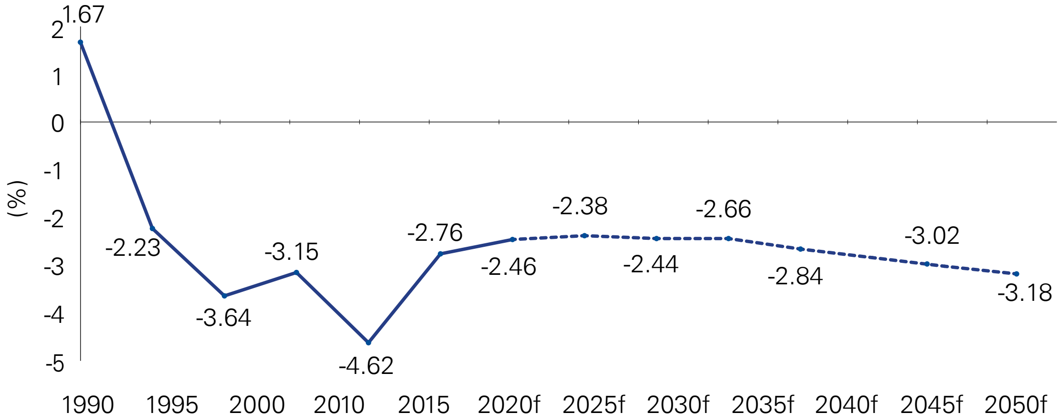


Source: Eurostat Database, KPMG analysis

Deteriorating demographics put additional pressure on the government spending and may limit long-term economic growth. Romania is one of the largest countries of Central and Eastern Europe in terms of population, ranking second in the CEE after Poland and 7th at the European Union level, with approximately 19.7 million of inhabitants in 2017. However, as discussed in Section 3, the negative natural growth and the high levels of immigration are inducing a rapid decline in population. At the same time, life expectancy is increasing, which leads to a higher percentage of older population (65 years and above) and a higher dependency ratio (measured by the ratio of elders to the economically active population). This puts additional pressure on government expenditure and, in the absence of corrective policies, may lead to an increase in public debt, higher social inequalities and slower economic growth in the years to come.

GRAPH 10

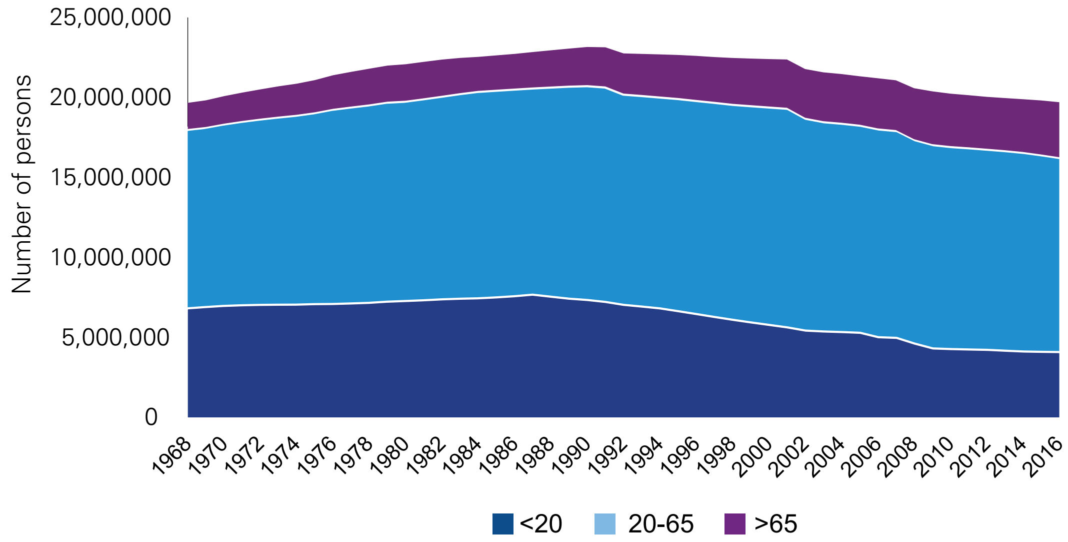
Population change in Romania



Source: KPMG estimates based on data from United Nations, Department of Economic and Social Affairs, Population Division, f=forecast

GRAPH 11

Weight of +65 years citizens in total population, Romania

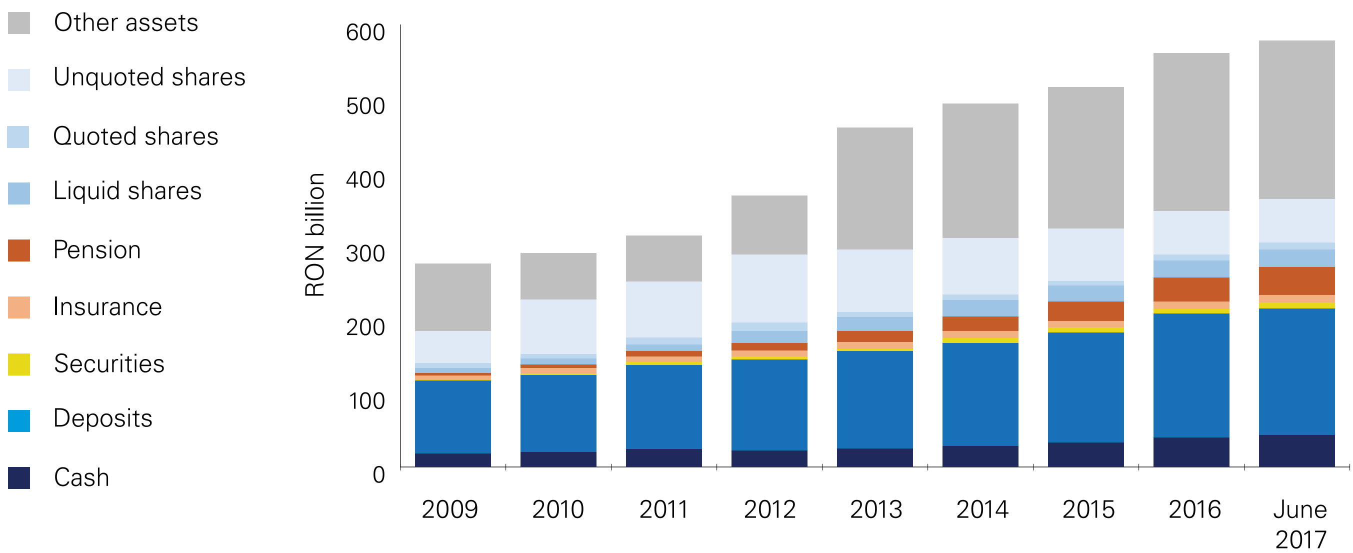


Source: Eurostat Database, KPMG analysis

Financial assets held by the population have doubled since 2009, however almost 40% are placed in bank accounts and deposits. These types of assets are unlikely to safeguard the financial well-being of the population in the longer term, given the low rates of return. Other types of financial investments such as insurance products, pension funds and listed shares still have low volumes, however they have recorded significant increases in the recent years (+46% in pension fund assets, +20% in insurance and +41% in listed shares at June 2017 compared to December 2015), showing a tendency of diversification in investments made by the population as the available income increases and financial markets provide more alternatives.

GRAPH 12

Financial assets held by the population, Romania

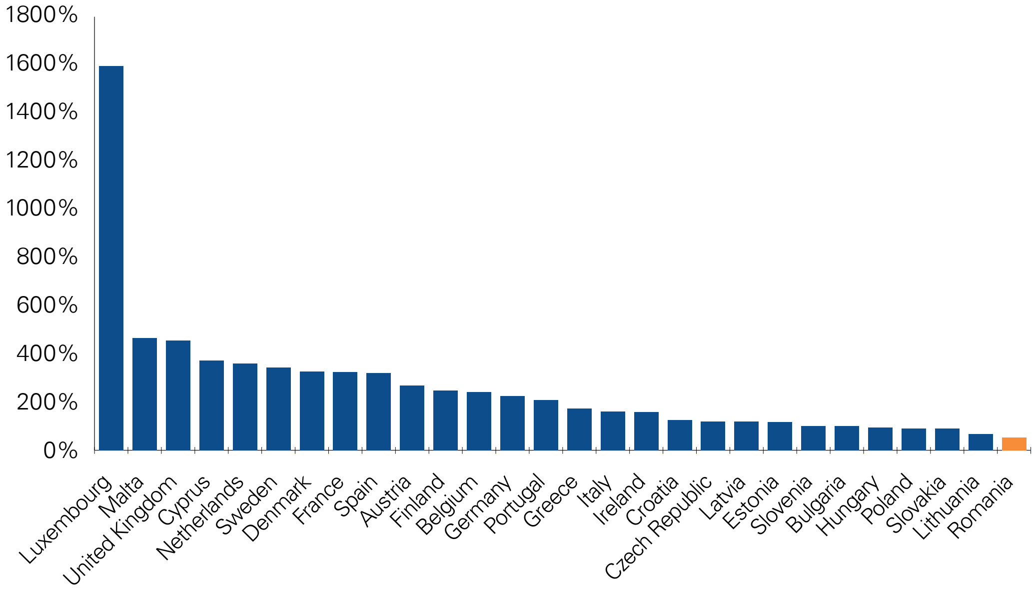


Source: NBR, KPMG analysis

Financial markets are still underdeveloped, lacking depth and diversity. Romania has the lowest level of financial intermediation in the European Union, as shown by the weight of total banking assets in GDP of 52% compared to the EU average of 283%. The financial sector is dominated by banking institutions, which account for more than 75% of total financial sector assets, while pension funds and insurance companies accumulate only 6% and 4% respectively of total assets. The stock market counted only 88 issuers and had a capitalization of RON 164 billion in December 2017, i.e. 19% of GDP, while EU's market capitalization accounted for 64% of the EU GDP at the end of 2016. However, the stock market had made significant advances in the recent years due to a number IPOs of both state-controlled and privately-owned companies.

GRAPH 13

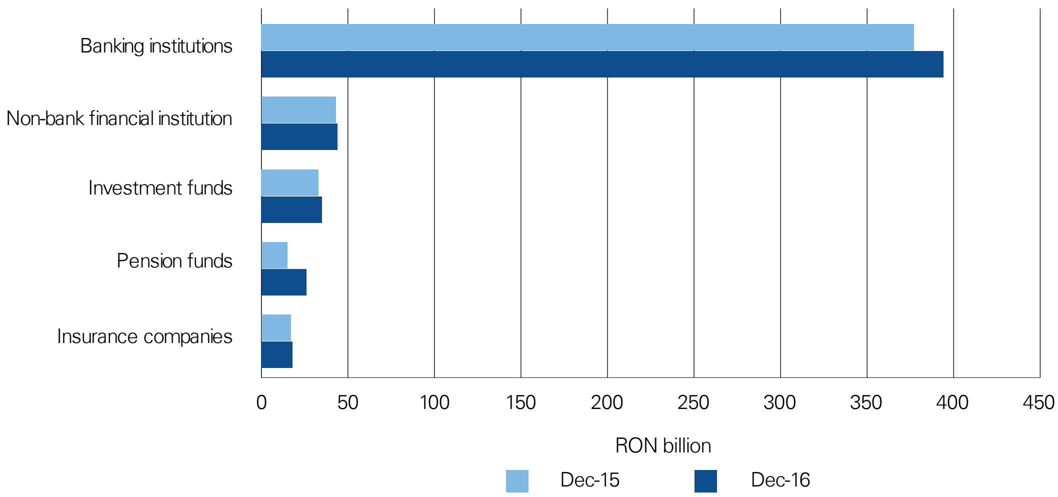
Banking assets as a percentage of GDP, 2016



Source: ECB, KPMG analysis

GRAPH 14

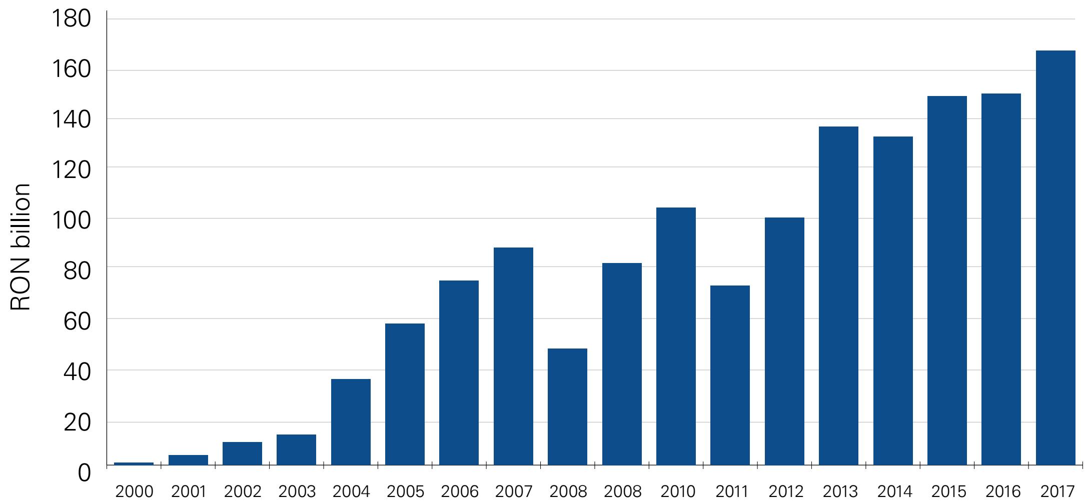
Romanian financial sector assets



Source: NBR, FSA, KPMG analysis

GRAPH 15

Market capitalization in Romania



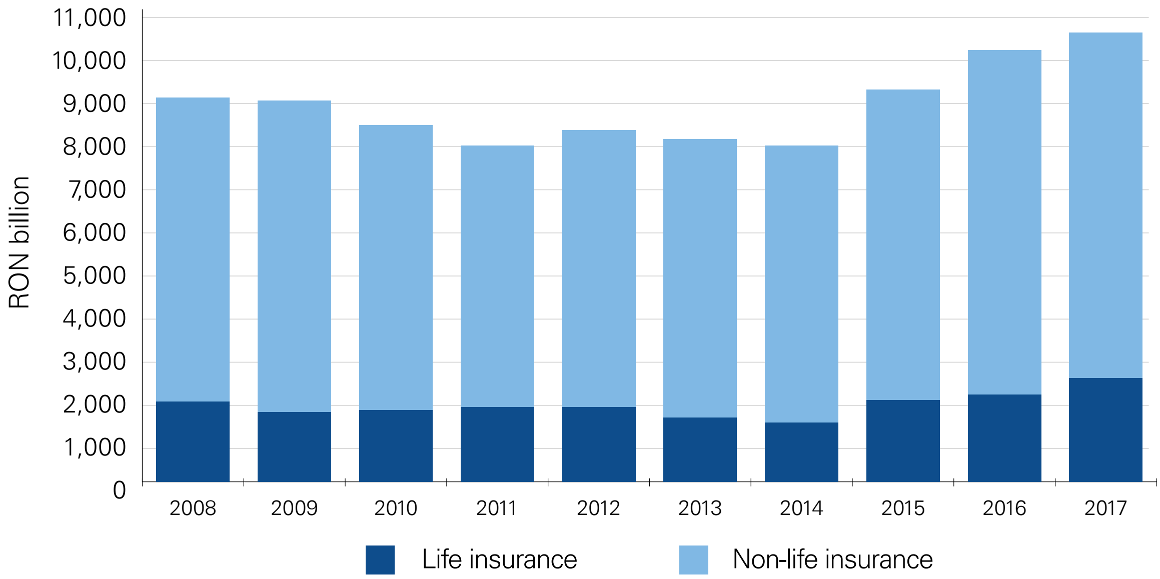
Source: Bucharest Stock Exchange; KPMG analysis

2.2 The life insurance sector

At the end of 2017, Romania had 42 insurance companies[2], of which 17 offering life insurance, with total revenues from insurance premiums of RON 10.5 billion, of which RON 8.1 billion from non-life insurance and RON 2.4 billion from life insurance. Although the market volumes dropped during the economic recession that followed the financial crisis, in the recent years the overall market growth has regained momentum, with life insurance growing faster than non-life insurance in 2015 – 2017, although from a much lower basis.

GRAPH 16

Evolution of insurance premiums in Romania



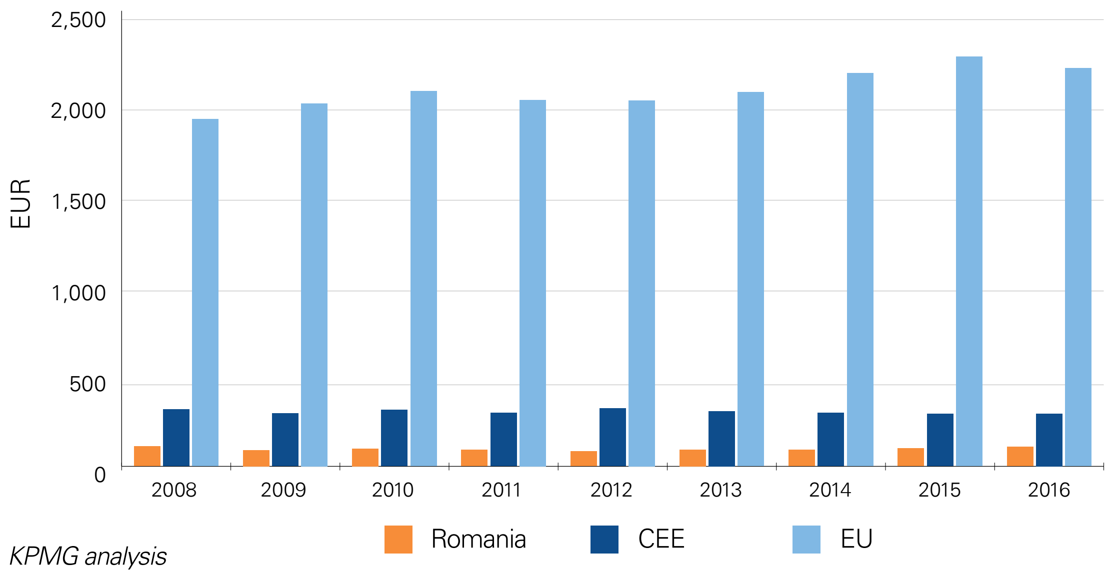
Source: FSA, KPMG analysis; for 2015-2017, data includes premiums written by branches of foreign insurers

Romanians are spending on average EUR 105 per year for insurance, just above one third of the average amount spent in the CEE countries, while the average EU citizen allocates around EUR 2,200 annually for insurance. The insurance sector in Romania is still underdeveloped compared to other EU economies, measured both in terms of insurance density (annual insurance expenditure per inhabitant) and insurance penetration (the ratio of insurance premiums to GDP).

2: Including 11 branches of insurance companies incorporated in foreign jurisdictions.

GRAPH 17

Insurance density (annual premium per capita) in Romania vs. CEE and EU

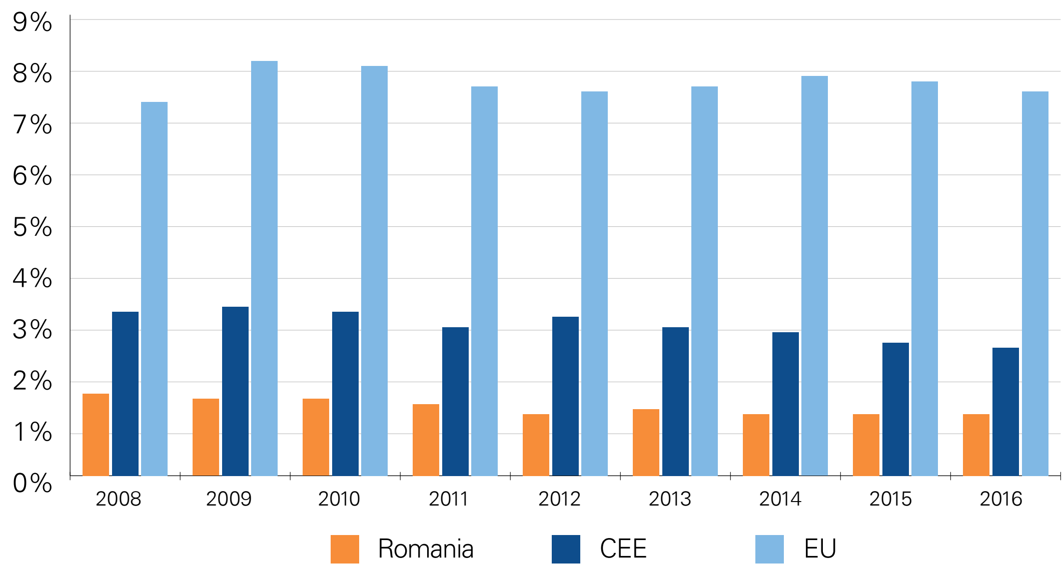


Source: Insurance Europe, KPMG analysis

In 2016, insurance penetration in Romania was 1.2% of GDP, significantly lower than the EU average of 7.5%, and also below the 2.5% average of the CEE group. The evolution shows that insurance volumes did not keep up with the GDP growth in recent years, which led to a lower share in GDP for the sector compared to 2009.

GRAPH 18

Insurance penetration (percentage of insurance premiums in GDP) in Romania vs. CEE and EU



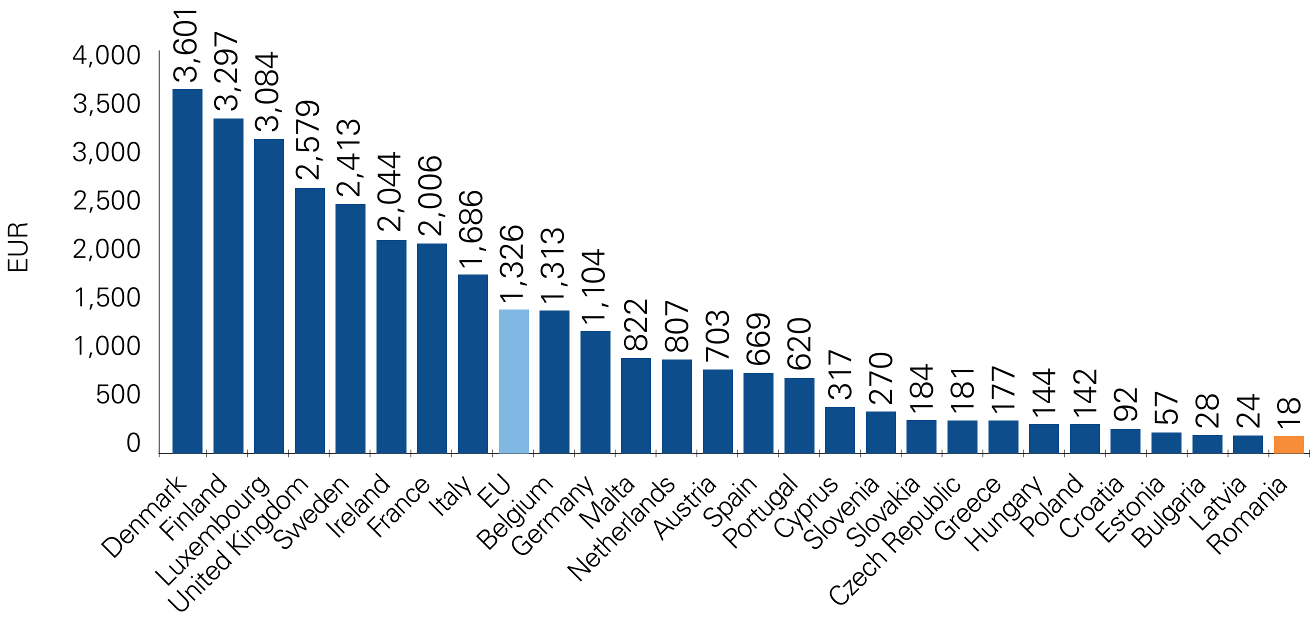
Source: Insurance Europe, KPMG analysis

The Romanian insurance market is dominated by the non-life insurance segment, while at EU level life insurance is prevalent. Thus, life insurance premiums account for only 20% of total insurance premiums collected by insurers in Romania, compared to 60% on average in the European Union. This makes Romania the country with the second lowest life insurance penetration and the lowest level of life insurance density in the EU.

Romanians are spending the least amount of money for life insurance policies in Europe, i.e. an average EUR 18 per year, 10 times less than Czechs and Slovaks and about 100 times less than French and Italians. Despite the strong economic growth in the recent years, life insurance penetration remained in the low range of 0.3% of GDP, significantly below the EU average of 4.4%. A less developed insurance sector dominated by non-life insurance is typical for transition economies, however Romania also lags behind all other CEE countries except for Latvia.

GRAPH 19

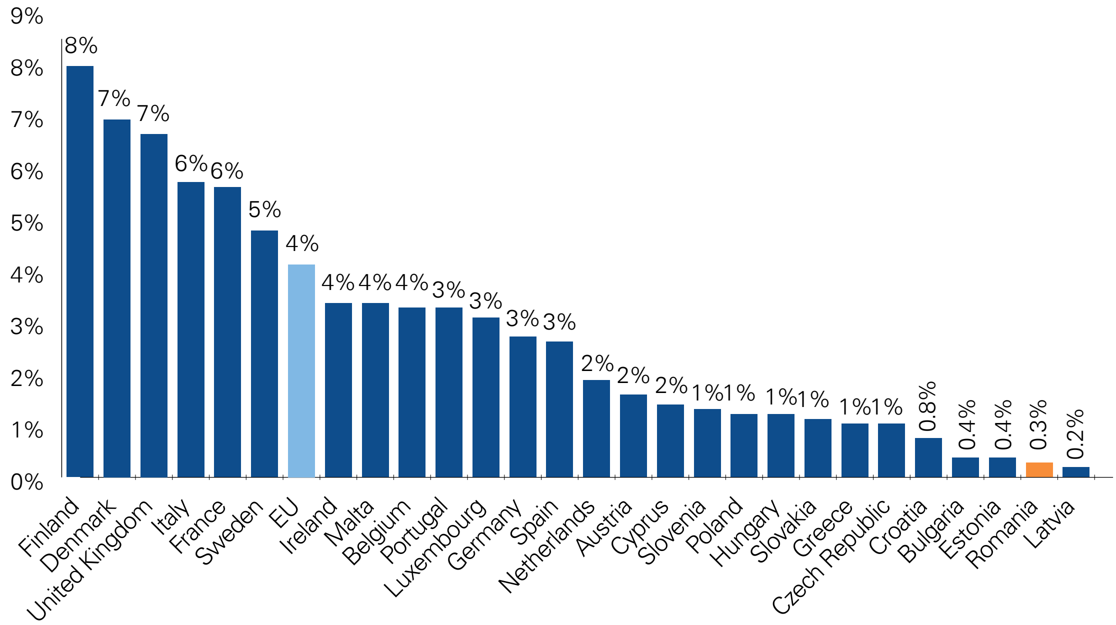
Life insurance density (annual premium per capita) in EU member states, 2016



Source: Insurance Europe, KPMG analysis

GRAPH 20

Life insurance penetration (percentage of life insurance premiums in GDP) in EU member states, 2016



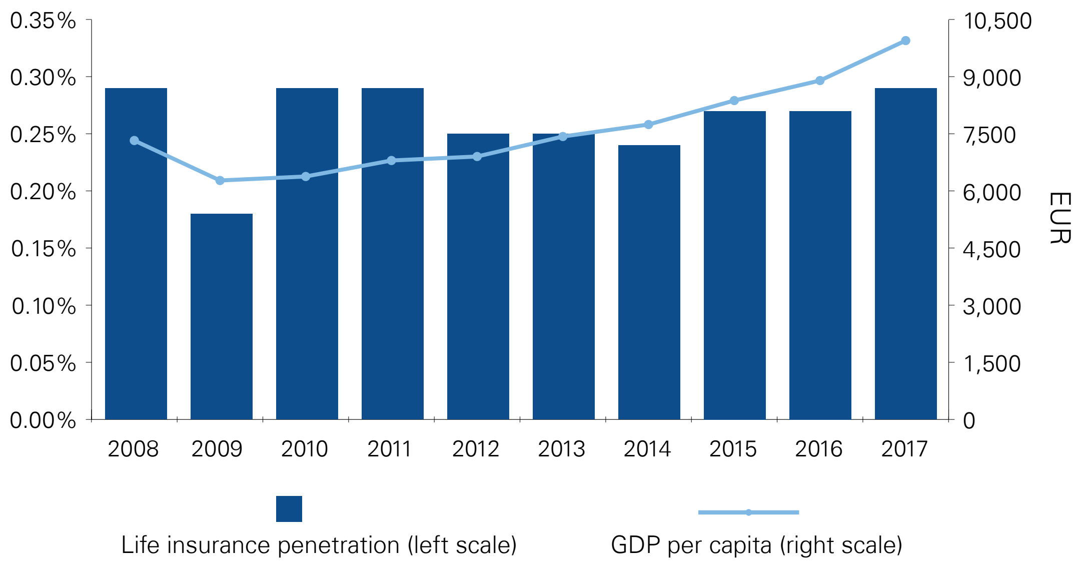
Source: Insurance Europe, FSA, KPMG analysis; for Romania, data includes premiums written by branches of foreign insurers

The development of life insurance is generally correlated to GDP growth and increase in disposable income. However, in Romania's case the recent positive evolutions in these factors have not translated to a similar extent into the life insurance penetration (with only marginal improvements in 2015 - 2017).

This shows that other factors are holding back the sector, such as a reduced level of financial literacy and the absence of fiscal facilities related to life insurance (please see Section 4 for a discussion on the key challenges and opportunities for the development of the life insurance sector).

GRAPH 21

Life insurance penetration vs GDP per capita in Romania

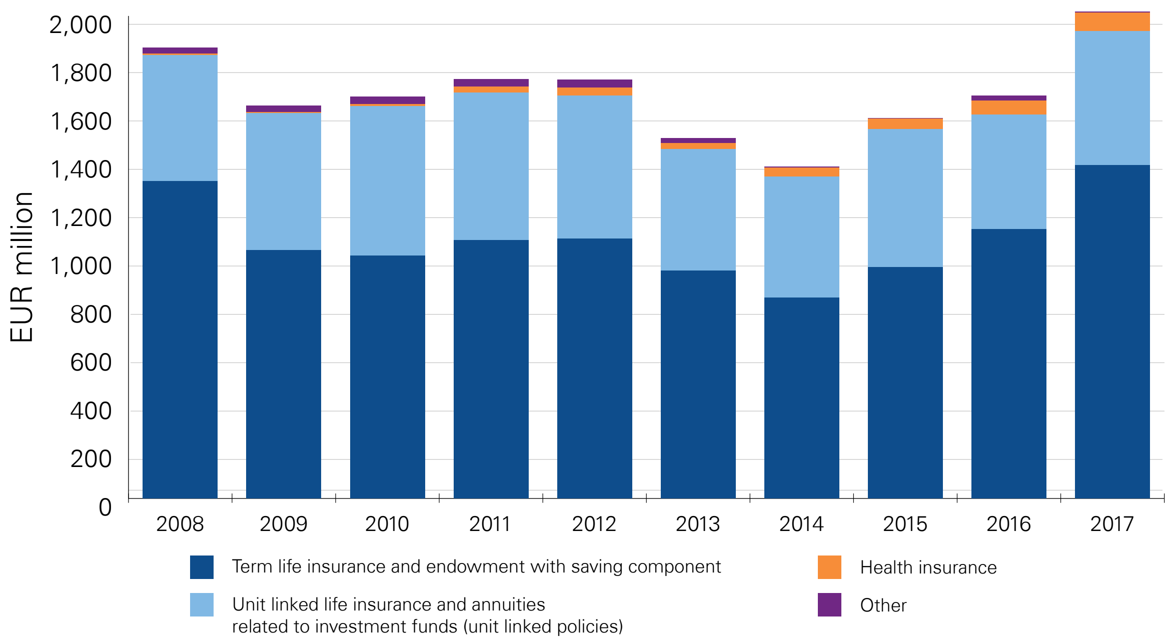


Source: Insurance Europe, Eurostat, FSA, KPMG analysis; for 2015-2017, data used to calculate life insurance penetration includes premiums written by branches of foreign insurers.

The sector shows a high degree of concentration, with more than 75% of premiums being sold by top 5 life insurers active on the Romanian market. There were no significant changes in the structure of life insurance premiums over the recent years, with two thirds of premiums going to term life insurance and endowment products with saving component and one third to unit-linked products, aalthough the latter saw a decrease in relative terms in the past few years (for a description of life insurance products offered on the Romanian insurance market please see Section 3.3).

GRAPH 22

Split of life insurance premiums by product on the Romanian market



Source: FSA; data does not include premiums written by branches of foreign insurers, as breakdown per product is not available for these entities

2.3 The pension system in Romania

In order to improve the sustainability of its pension system faced with the ageing population challenge, Romania launched a substantial reform of the system starting with the year 2000. The pension reform was based on the World Bank's multi-pillar model[3], used as a framework by many developing economies across the world, and consisted of:

- Restructuring of state pensions (Pillar I) mainly by increasing the standard retirement age and the minimum contribution period, passing further restrictions for early retirement and introducing a point-based calculation formula for pension benefits taking into account the actual earnings during the entire period of service;
- Introduction of mandatory privately managed pensions with defined, mandatory contributions (Pillar II); -
- Introduction of privately managed pensions with voluntary contributions (Pillar III)

Pillar I is organized as a mandatory pay-as-you-go scheme. This means that the Romanian state is collecting the social contributions for pensions on an ongoing basis and uses them in order to immediately pay the pensions to the current pensioners. The public pension system gives the right to receive the old-age pension to persons that have reached the standard retirement age and have contributed to the public pension system for a minimum period stipulated by law. In addition, the law allows for early retirement pensions or early retirement partial pensions up to 5 years before the standard retirement age, depending on the actual length of service compared to the full contribution period required by the law. As of March 2018, the current retirement age for men is 65 years, while for women is 60 years and 9 months and will gradually increase to 63 years by January 2030. Both for men and women, the minimum contribution period is 15 years, while the full contribution period for men is of 35 years and for women is of 30 years and 9 months, to gradually increase to 35 years by January 2030.

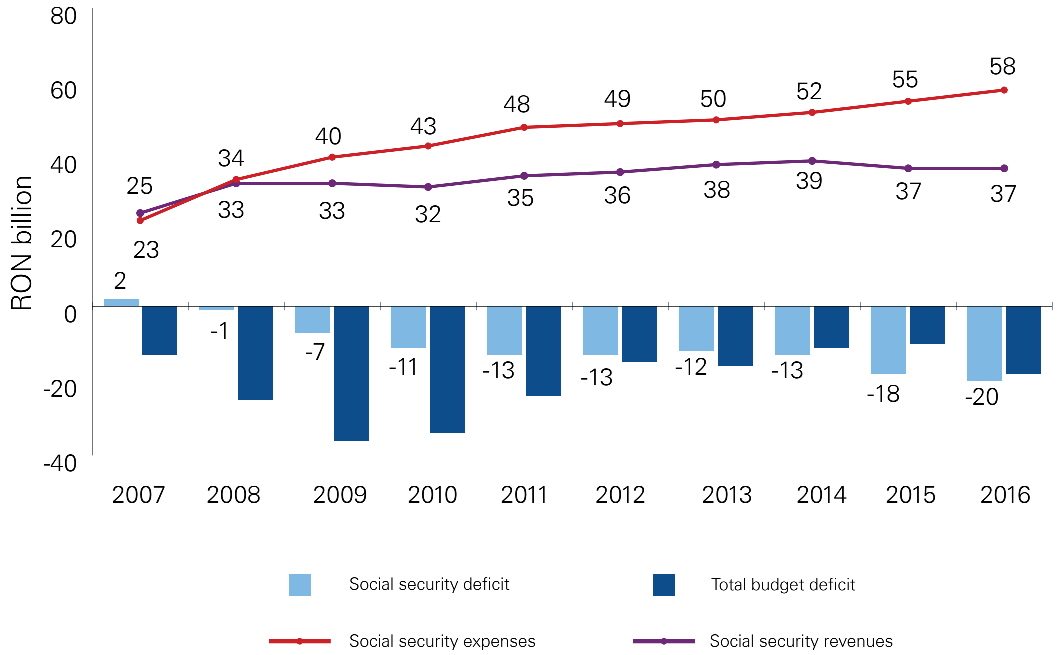
The Pillar I pension benefits paid after retirement are calculated on the basis of pension points accumulated by contributors, which are determined by the level of gross wages earned during their employment period relative to the average wage in the economy during the same period. The value of a pension point is set annually in the social security budget law. Starting January 2018, pension contributions for normal working conditions amount to 25% of gross salary and are fully payable by employees. The current value of the pension point is RON 1,000.

Given the negative demographic evolutions and the recent increases in pension benefits, the public pension system runs a significant deficit. For the year 2016, the deficit of the social security budget (consisting mostly of pension revenue and expense) was of RON 20 billion, i.e. approximately 2.7%. of GDP, and exceeded the general budget deficit. Pension revenues from ongoing contributions cover only about two thirds of public pension expenses, with the rest being funded from the general budget deficit, covered by the government with borrowed money.

3: The multi-pillar pension model was first introduced by the World Bank in 1994 in its publication "Averting the old age crisis: policies to protect and promote growth"

GRAPH 23

Social security deficit vs total budget deficit, Romania

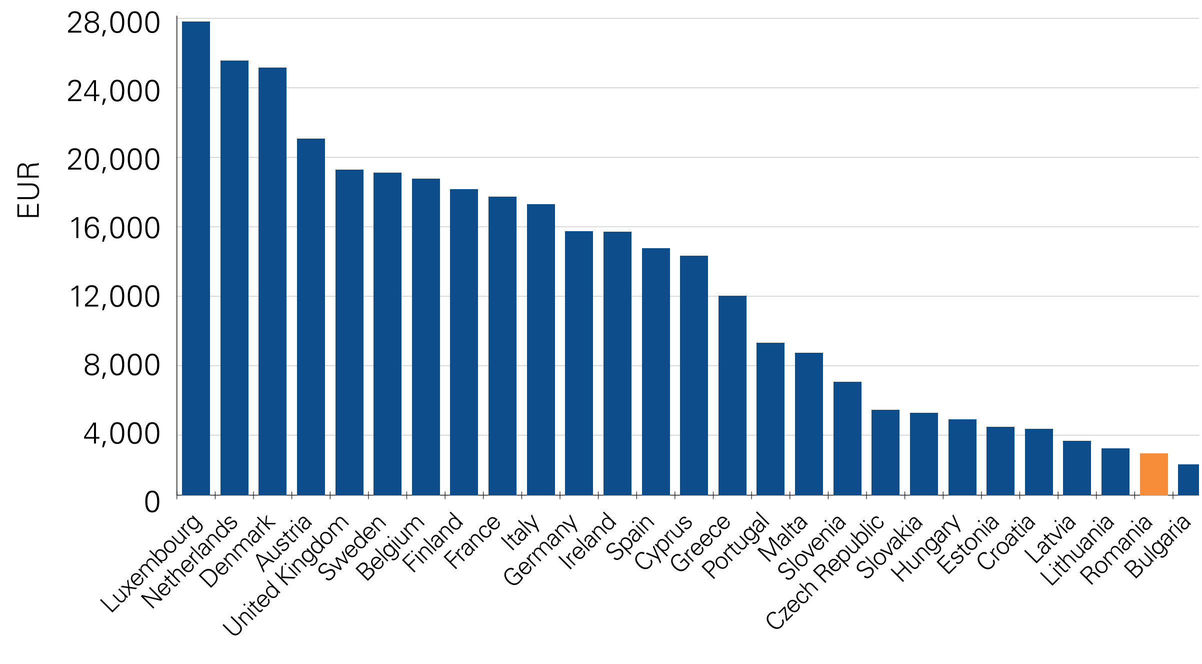


Source: FSA; data does not include premiums written by branches of foreign insurers, as breakdown per product is not available for these entities

The pension expenditure per beneficiary has one of the lowest levels in the European Union, even if the total pension expenditure already puts a significant strain on the national budget. The average monthly pension in Romania reached RON 1,132 (EUR 243) in the last quarter of 2017 as per INS data, which is less than half of the net national average salary of RON 2,629 (EUR 564). While the public pension is and will continue to be the main source of income after retirement, it does not provide for an adequate level of income post-retirement, and will do so even less in the future.

GRAPH 24

Pension expenditure per beneficiary in EU member states, 2015



Source: Eurostat Database, KPMG analysis

Pillar II was introduced in 2006 as a fully funded pension scheme based on mandatory contributions for all employees having the age below 35 years at that time (i.e. born after 1 July 1971). It could also be joined on an optional basis by employees between 35 and 45 years of age (i.e. born between 1 July 1961 and 1 July 1971). The scheme became operational in 2008; since then, a portion of the social security contributions of each participant is directed to a privately-managed pension fund. Contributions to the private funds are recorded in individual accounts, which give the participants the ownership over the net assets. The right to receive the private pension arises once the retirement conditions for Pillar I are fulfilled for the old-age pension. The total amount of Pillar II pension to be received cannot be smaller than the net contributions paid (before taking into consideration any possible future tax).

Pillar II gives thus to its participants the opportunity for an additional income on retirement on top of the public system pension, based on the contributions and investment earnings accumulated in the individual accounts. Participants can choose to receive Pillar II benefits as lump sum or annuities. Those who do not have sufficient assets to qualify for a pension will receive a lump sum or periodic payments for up to five years. In case of participant's death before fulfilling the Pillar I pension conditions, the inheritors have maximum 3 years to claim the Pillar II pension. Also, in certain cases of disability the participant is entitled to receive its Pillar II pension and not to wait until fulfilling the old-age conditions for Pillar I.

Pillar II contributions started at 2% of gross salaries and were planned to gradually reach 6% in 2016, however the increase was slower than planned (please see Table 1). Moreover, in the context of a fiscal reform in terms of social contributions, the Romanian Government decided to reduce the contribution to Pillar II from 5.1% in 2017 to 3.75% in 2018[4].

Table 1

Contribution to Pillar II in Romania for 2008 - 2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Planned contribution	2%	2.5%	3%	3.5%	4%	4.5%	5%	5.5%	6%	6%	6%
Actual contribution	2%	2%	2.5%	3%	3.5%	4%	4.5%	5%	5.1%	5.1%	3.75%

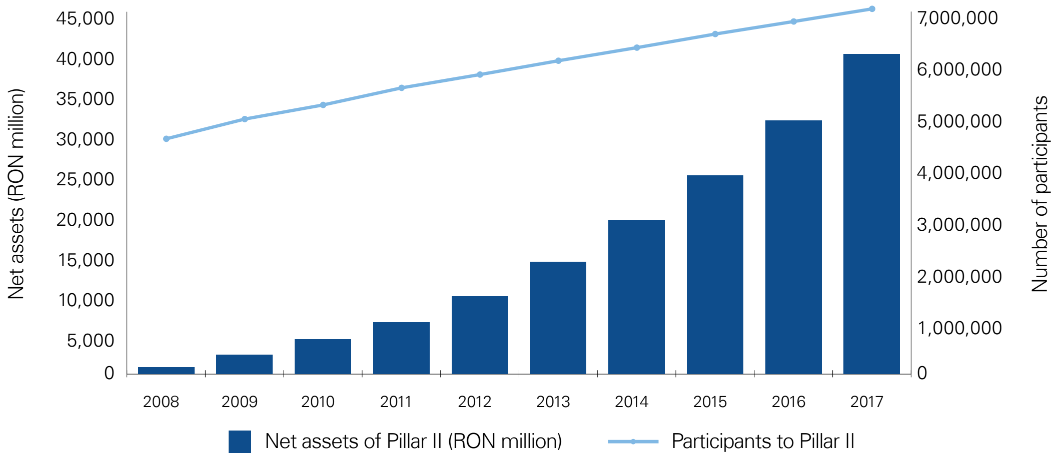
Source: National legislation, KPMG analysis

4: Starting January 2018, social contributions previously payable by employers were transferred to the employees. Assuming that the gross salaries of employees were raised in order to maintain the same net salaries as before the change (which may not be the case for all employees), the reduced contribution to Pillar II would also apply to a higher base. This would be the equivalent of a reduction in Pillar II contribution from 5.1% to 4.54%, as applied to gross salaries before the change. However, an acurate estimate of the impact of this change in the level of Pillar II contributions cannot be made at this point, given the lack of agreggated market data regarding changes in gross salaries of employees before and after the change.

A decade after its implementation, Pillar II accumulated RON 37 billion in assets and 7 million participants[5]. The evolution of the private pension system has been positive throughout its operation, the number of participants steadily increasing as new participants to Pillar II are added every year, mainly the 16-25 year olds entering their first job. The value of the participants' personal assets is constantly increasing each year as a result of new contributions paid on a monthly basis and also adding up the fund's return for the accumulated assets.

GRAPH 25

Pillar II – Net assets and number of participants

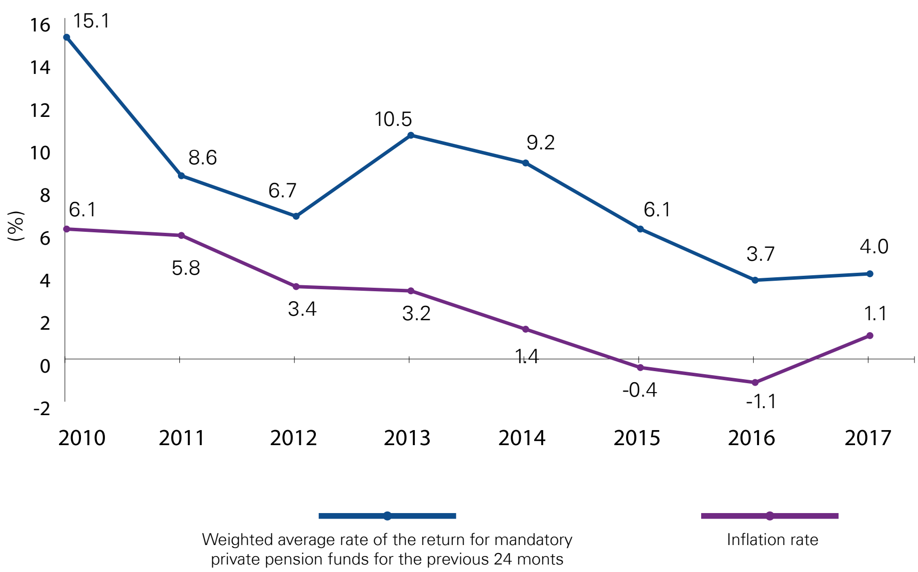


Source: Asociatia pentru Pensiile Administrate Privat din Romania (APAPR), KPMG analysis

Romanian private pension funds produced annualised returns of 5.3% after fees and inflation between 2008 and 2016, among the best of any retirement scheme in Europe, according to Better Finance, a Brussels-based investor rights group. The types and limits of investments made by pension funds are strictly regulated by law, with the purpose of avoiding concentrations of exposures towards high risk assets. Pension funds administrators must achieve a minimum rate of return which is set by the regulator based on the average market yield, and a reserve fund has to be maintained aiming at ensuring the minimum return. Seven privately-managed Pillar II pension funds were operating in Romania as at December 2017.

GRAPH 26

Pillar II pensions funds – nominal rate of return



Source: FSA, Eurostat, KPMG analysis

5: Of which, an average of 4 million active participants(i.e. participants with current contributions in a given month) during 2017.

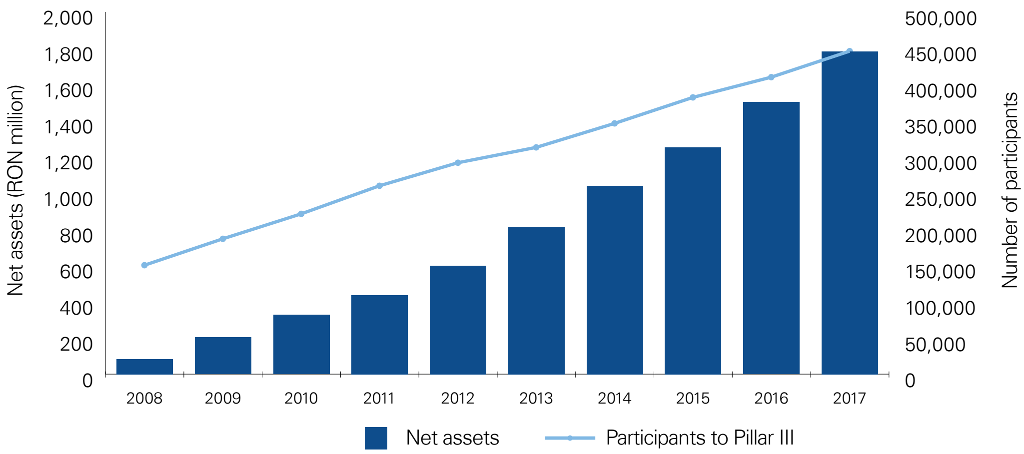
Pillar III is the voluntary defined contribution pension scheme that was put in place in Romania starting with 2007, when the first contributions were collected for this system. It is a funded system based on individual accounts and on voluntary membership. Similar with Pillar II mechanism, a participant to Pillar III has an individual account where on a monthly basis the contribution is converted in fund units. The value of the individual account is proportional with the fund's return and respectively with the fund unit's value.

Contributions can amount to up to 15% of gross salary or other similar income and are additional to the mandatory contributions to Pillar I and Pillar II.

Contributions to Pillar III facultative pensions are deductible for income tax purposes, both for contributions paid by employees and for contributions paid by employers on behalf of their employees, up to a cumulative amount of EUR 400 per employee per year.

GRAPH 27

Pillar III – Net assets and number of participants



Source: FSA, KPMG analysis

In Romania, both insurance and pension funds sector are supervised by the Financial Supervisory Authority, which is responsible for the authorization, regulation, supervision, and control of entities operating in these sectors. The Financial Supervisory Authority is a full member of the European Insurance and Occupational Pensions Authority (EIOPA).

3. Importance and key benefits of life insurance and private pensions

Life insurance and private pensions are major sectors of the world economy. In 2016, total life insurance premiums amounted to USD 2.6 trillion[6], that is 3.5% of the global GDP. Private pension assets in OECD countries reached their highest level in history at over USD 38 trillion (126% of the OECD area GDP) in the same year, and are growing faster than the GDP in most countries[7]. The sizeable proportion of the industry reflects the crucial role of life insurers and pension funds in providing financial security to individuals and households across the world. By fulfilling their basic functions of pooling risks and mobilising savings from the population, the two sectors have the ability to channel significant volumes of long-term funds into a wide range of financial markets and various sectors of the economy. Thus, under the right conditions, they can have an important contribution to the financial stability and overall growth of the economy.

3.1 Importance and key benefits for the economy

The fundamental function of life insurance is to provide financial protection to individuals and families against three major risks: mortality (death), morbidity (disability due to accidents) and longevity (long life after retirement). Through risk pooling, the industry is providing vital support to the society by dampening the effects of adverse events that are severe for the individuals and helping stabilize their financial situation, without creating large immediate costs to others. By fulfilling its basic role of protecting individuals in the face of adversity, a well-functioning, mature life insurance sector that offers stable and affordable products generates benefits that extend beyond the individual, to the overall economy:

- It helps reduce poverty at the society level through effective quantification, aggregation and distribution of risks;
- As most products offered by life insurers have a saving component, they enable greater savings by the population;
- It enhances access to credit, as most credit providers require or provide better credit terms when the individual has life insurance coverage, especially for long-term credit such as housing loans;
- It can act as a complement or even a substitute for the social security and assistance programmes run by the government (for example the benefits paid by a life insurance to a family in case of death of the main income earner may keep the family above the poverty threshold), helping thus reduce the overall fiscal burden of such programmes.

Privately managed pension schemes are arrangements that aim at providing individuals with an income when they are no longer earning a regular income from employment. Such arrangements may be set up by the government, by employers or other institutions (employer associations, trade unions) or people may decide to contribute on an individual basis. They can also be viewed as insurance schemes in which group's members agree to pool their savings and each member obtains a pension based on the individual contribution and/or

6: Swiss Re Institute, World insurance in 2016

7: OECD, Pension Markets in Focus, 2017 edition

on the group's life expectancy, depending on the type of pension. While it is common in many countries for governments to provide a minimum level of old age insurance, generally based on pay-as-you-go models, the economic recession following the 2008 financial crisis and the continuous ageing of the population have weakened the ability of the public sector to provide such protection. To address these challenges, nowadays public pensions are almost everywhere complemented by privately managed schemes pre-funded by members' compulsory or voluntary contributions. Similar to life insurance, privately-managed pension systems contribute to the long-term financial security of individuals and benefit the economy in multiple ways:

- They reduce poverty by providing additional income in the event of old age, disability or premature death of the primary beneficiaries;
- Promote long-term savings;
- Improve the efficiency and security of mandatory pension systems and enable the development of efficient voluntary systems, enhancing thus the sustainability of the overall pension system.

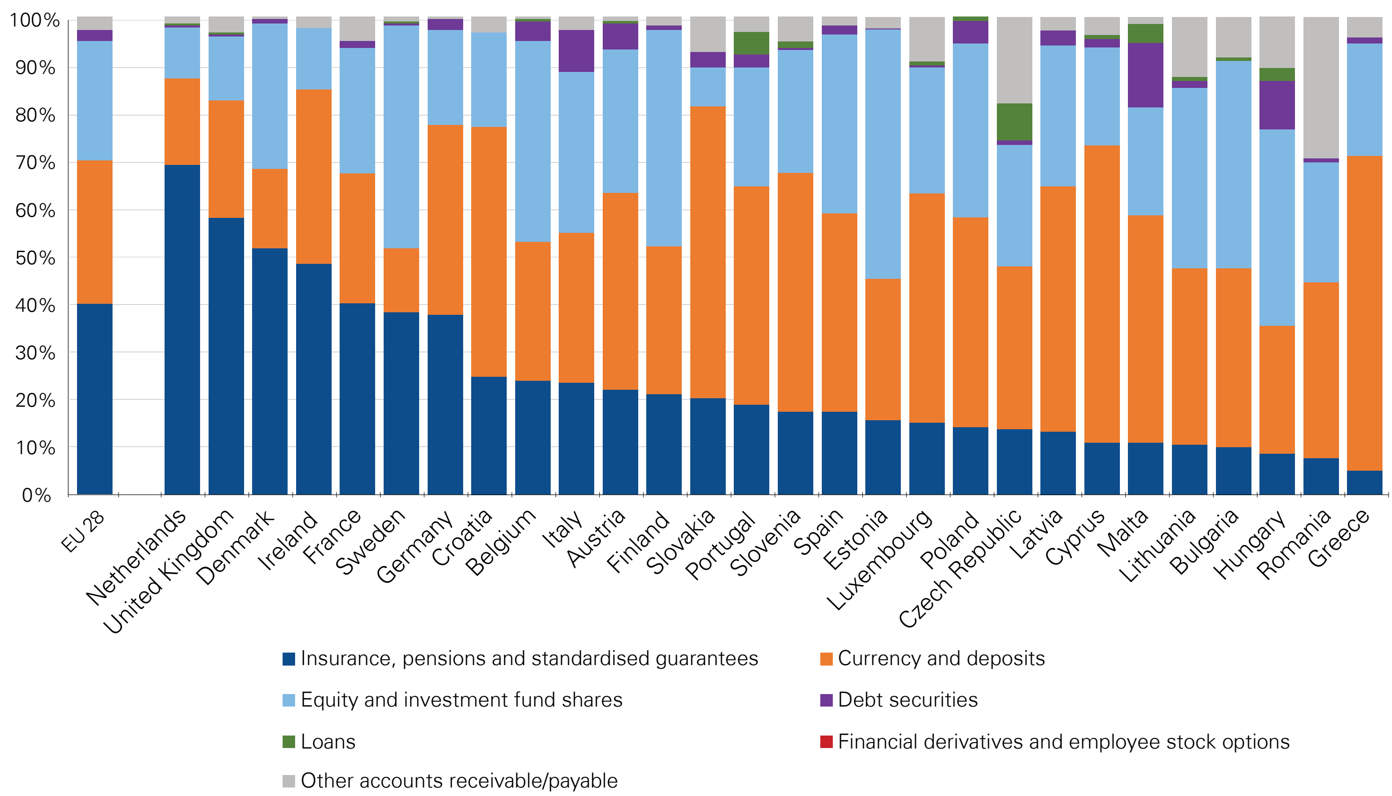
A further discussion on how life insurers and pension funds are complementing the national social security programmes by contributing to the financial security of households and individuals is included in Sections 3.2 and 3.3 below.

Life insurers and pension funds manage risks on the long term, which makes them important suppliers of saving products for the population The funds collected in the form of insurance premiums and pension contributions are invested for the long term, and together with the accumulated returns are used to pay out benefits at the old age or when the insured risks materialize. The long tenors of their investments and the large volumes involved provide insurers and pension funds with opportunities for cost efficiencies, diversification of risks and accumulation of expertise in wealth and asset management. They can act thus as main saving vehicles and providers of attractive long term savings instruments for the population. The availability of such instruments facilitates smoothing of consumption over time, stimulating individuals to save more in the good time and to draw down on their savings in the bad times, contributing to dampening of macroeconomic shocks and overall economic stability.

In 2016, 40% of household savings in the European Union totaling EUR 13 trillion were channeled through the insurance and pension funds sector, although with large differences across member states depending on historical, institutional and regulatory factors. In particular, the volume of savings accumulated through insurance and pension products is lower in Central and Eastern European economies, which had less time to build up such balances, and in less affluent countries.

GRAPH 28

Financial assets of households by financial instrument in EU member states, 2016 (% share of total financial assets of households)



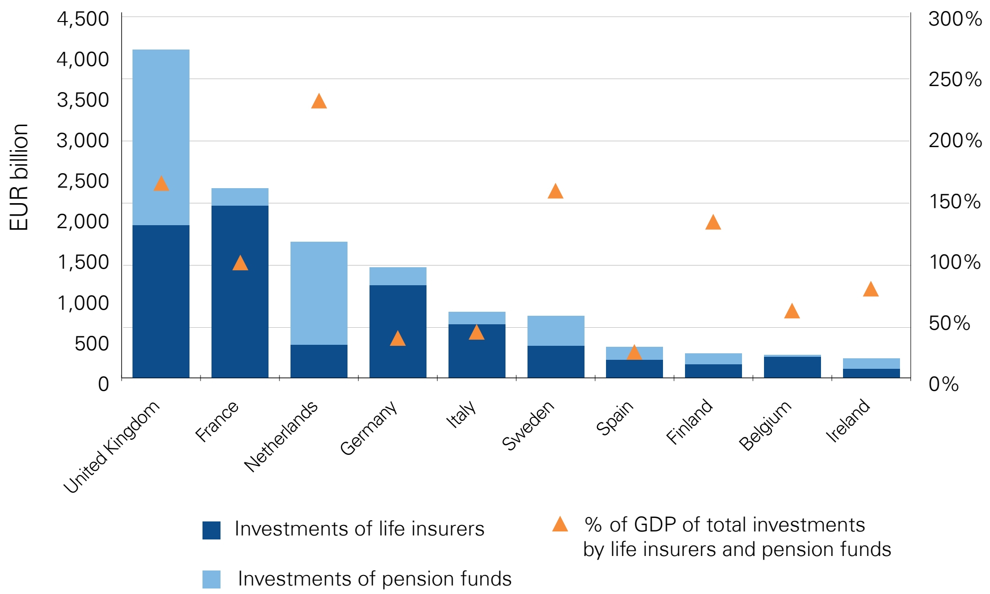
Source: Eurostat, KPMG analysis; Other accounts receivable/payable, which are particularly high in Romania's case, represent financial assets that are created as a counterpart of a financial or a non-financial transaction in cases where there is a timing difference between this transaction and the corresponding payment (for example, the direct extension of credit by suppliers, advances for work that is in progress or has yet to be undertaken, or prepayment for goods/services that have yet to be delivered).

Worldwide, the life insurance and pension funds industry is an important segment of the financial system. The industry channels the large volumes of household savings into a wide range of financial markets and acts as a direct and indirect provider of long-term, stable funding for various sectors of the economy. Longer term investments play a key role for the stability of financial markets and for the financing of large-scale projects supporting sustainable growth, such as investments in infrastructure and cleaner energy, therefore they are an important component of a healthy economy. In the more advanced economies, life insurers and pension funds are large institutional investors that contribute to the development of well-functioning capital markets, by careful screening of investments which facilitates efficient allocation of capital, diversification of holdings and exercise of market discipline on the management of the companies in which they are investing.

The extent to which life insurers and pension funds play these roles depends on the size of the sector relative to the economy, which is a function of the sector's maturity. At the European Union level, insurers and pension funds are the largest institutional investors. In the most developed economies of Europe, the life insurance and private pensions sector manages assets ranging from several hundreds to thousands of EUR billion, representing in general more than 50% of the GDP. The relative importance of life insurance vs. private pensions is driven by specific national policies regarding social security applied over the years in the Western European countries[8]. In Central and Eastern Europe countries, with a shorter history of market economy, the assets managed by life insurers and pension funds are generally below 20% of GDP. Pension fund assets are more prevalent in these countries due to the introduction of compulsory Pillar II pensions during the years 2000s, in response to demographic and economic strains on the public pension systems

GRAPH 29

Investments of life insurers and pension funds in old EU member states, 2016

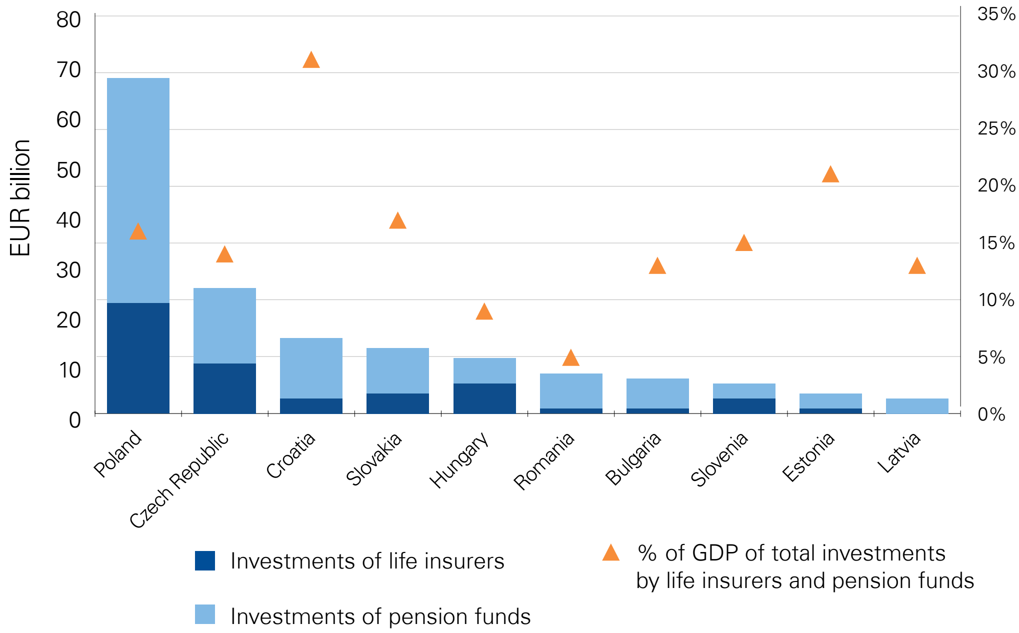


Source: Insurance Europe, EIOPA, FSA, OECD, KPMG analysis; old EU member states refer to countries that have joined the EU before the 2004 enlargement

8: In particular, private pensions are less prevalent in countries such as France, Germany, Italy and Spain, with social security systems based on the so-called Bismarck model, which links benefits received in retirement to contributions made during employment. In other Western European countries such as UK, Netherlands and Sweden, the public pension system is based on the Beveridge model, which provides for flat benefits and implies lower pension expenditure, incentivising participation to private pension schemes.

GRAPH 30

Investments of life insurers and pension funds in new EU member states, 2016

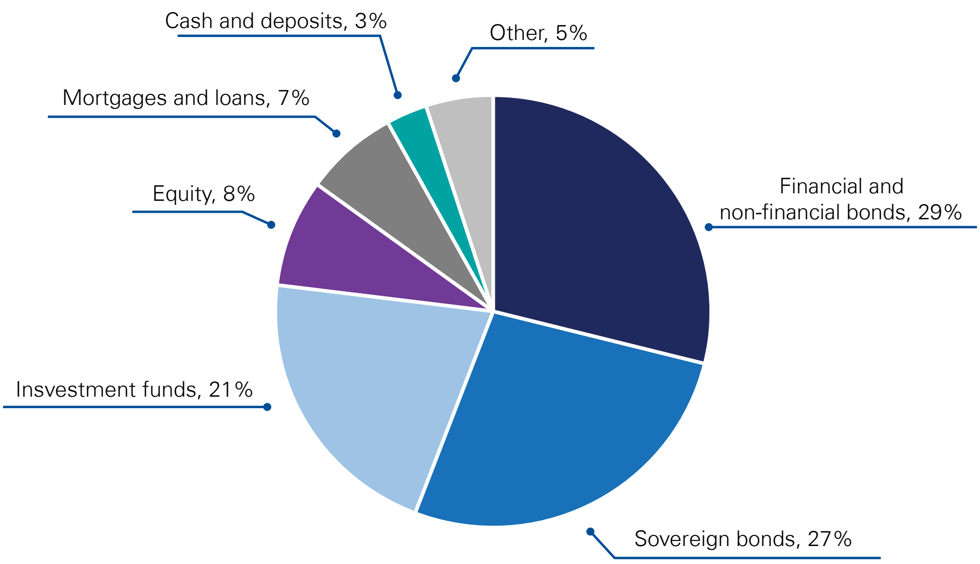


Source: Insurance Europe, EIOPA, FSA, OECD, KPMG analysis; new EU member states refer to countries that have joined the EU on or after the 2004 enlargement

European life insurers and pension funds are investing a large proportion of their assets in corporate bonds and equities, both directly and via investment funds. At a more disaggregated level, they play an important role in the European covered bond markets, indirectly providing funding for construction and local government projects. They also provide valuable long-term stable funding to the European banks, in the forms of deposits, bonds and equity investments. While in certain markets they may display a higher concentration of investments in government securities, their ability to invest more broadly is also limited by specific prudential and investment regulations and lack of investment alternatives in the local markets.

GRAPH 31

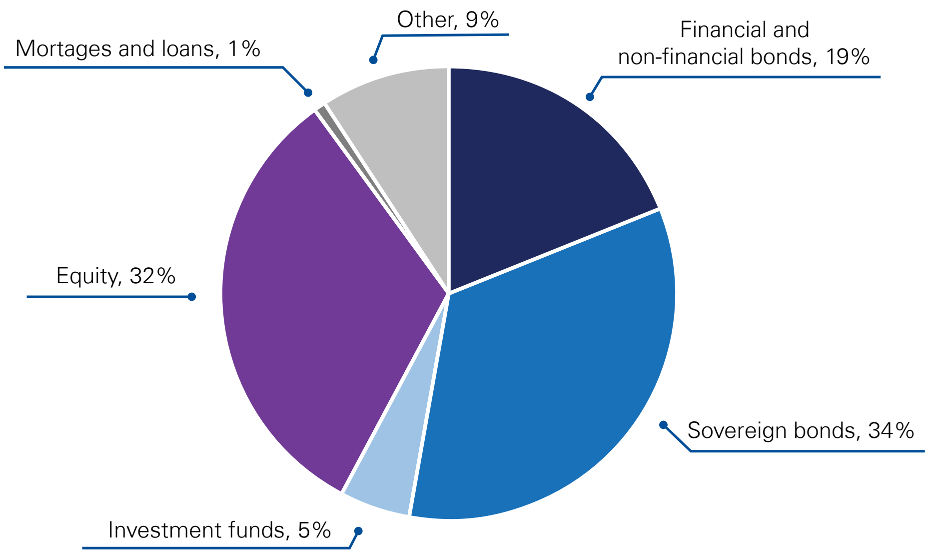
Investment allocation for life insurers in EEA, 2016



Source: EIOPA, KPMG analysis

GRAPH 32

Investment allocation for occupational pension funds in EEA, 2016



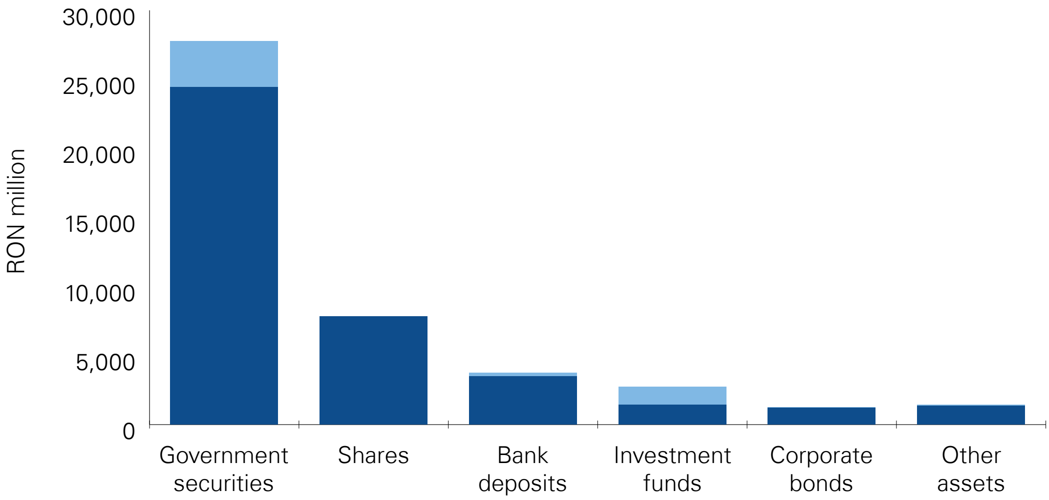
Source: EIOPA, KPMG analysis

Going forward, the European Commission recognizes the important role to be played by life insurers and pension funds in its project of building a Capital Markets Union and has provided in its related Action Plan for specific measures aimed at improving their capacity to invest more broadly in infrastructure and other strategic projects across Europe.

In Romania, total assets of life insurance companies and pension funds were close to 6% of GDP at the end of 2017 and are increasing, with Pillar II assets contributing the most to this trend. Approximately 70% of total assets of life insurers and Pillar II pension funds are invested in bond issued by the Government and other institutions. However, they may become important investors in other types of instruments, including equities, as the local capital market develops.

GRAPH 33

Investment allocation for life insurers and Pillar II pension funds – Romania, 2017



	Government securities	Shares	Bank deposits	Investment funds	Corporate bonds	Other assets
Life insurance	3,363	-	251	1,293	65	80
Pillar II	24,430	7,840	3,498	1,443	1,206	1,350
Total	**27,793**	**7,840**	**3,749**	**2,736**	**1,271**	**1,430**

Source: FSA - Mandatory Private Pension Funds - Statistical Data, SA report - Non Banking financial markets, Eurostat Database; for life insurers only investments in liquid assets are presented, as aggregated market information by type of investment is not available

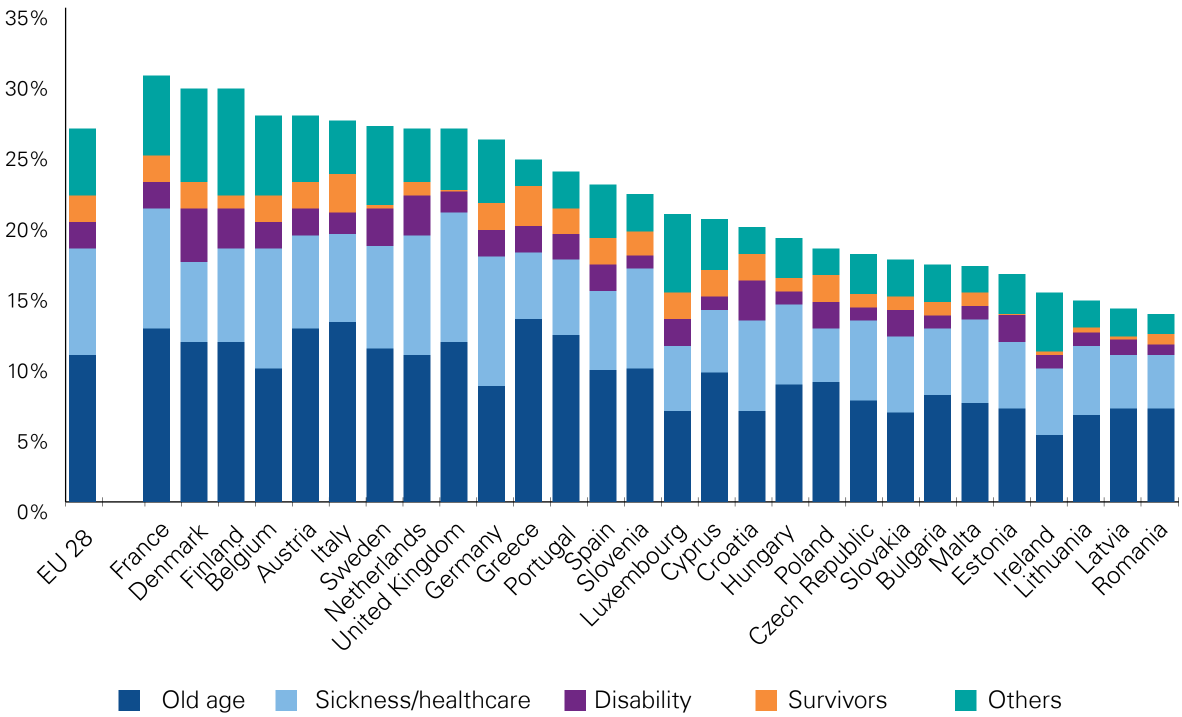
3.2 Importance and key benefits for the national social security system

Many governments across the world, and especially European governments, have assumed a major role in insuring the individual. Social protection systems in EU member states are designed to protect individuals, to a certain extent, against the risks and needs associated with old age, sickness/ healthcare and invalidity, parental responsibilities, the loss of a spouse or parent, unemployment, housing and social exclusion.

A large part of total protection expenditure in the European Union goes to old age pensions, ranging from 14% of GDP in Greece to 5% of GDP in Ireland. CEE countries generally allocate between 7% and 9% of their GDP to old age benefits. However, despite the major share of public expenditure already allocated to old age benefits, ensuring pension adequacy for the EU citizens is a major concern for the European policymakers.

GRAPH 34

Social protection benefits as a percentage of GDP in EU member states, 2015



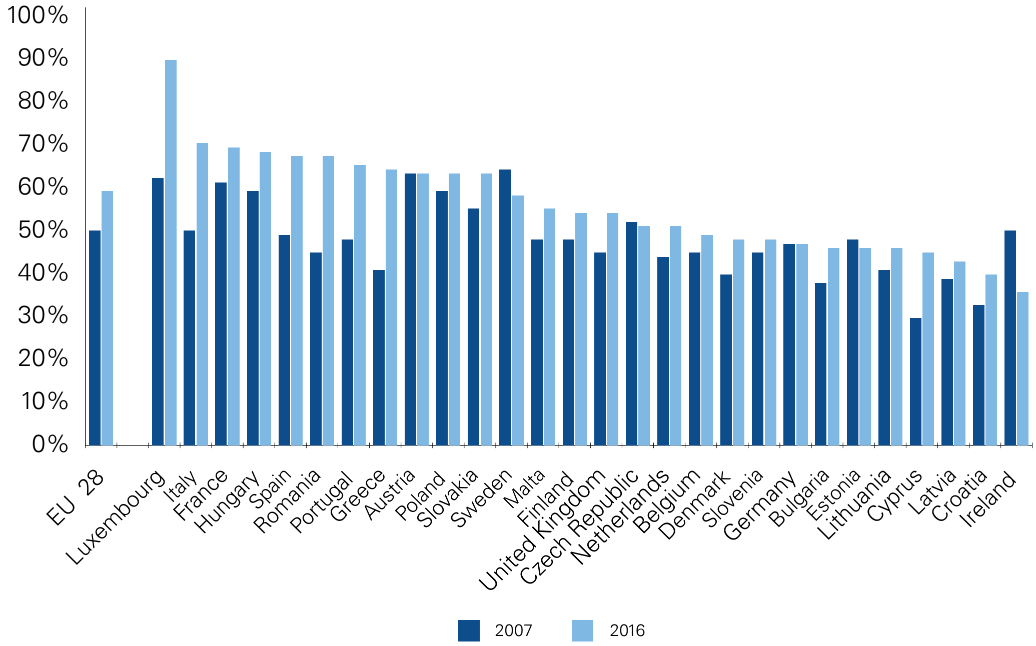
Source: Eurostat Database, KPMG analysis; 2014 data was used where 2015 data was not available; for the purposes of this analysis, old age benefits include old age pensions and the provision of goods and services (other than medical care) to the elderly

EU governments are faced with the double challenge of maintaining pension adequacy and fiscal sustainability of their pension budgets on the long term. Pension adequacy is usually assessed by reference to the income replacement rate, i.e. the ratio between benefits paid by the pension system and the income earned before retirement. In general, an income replacement rate of 70% is considered necessary to maintain a standard of living similar to that before retirement. However, this is just a generic guideline as for higher-income workers a replacement rate anywhere between 50% and 70% can still provide for a reasonable income for the post-retirement period, while for low-income workers an income replacement rate closer to 100% may be required.

The capacity of the public pension systems to provide for adequate income replacement rates has been eroded in the past few decades by the continuous ageing of the population. More recently, public pension budgets came under strain as a result of the financial crisis and the prolonged economic recession that followed. In response, many EU governments have reformed their pension systems by raising retirement ages (in certain cases by directly linking them directly to the increasing life expectancy), increasing the length of the required contributory periods, restricting access to early retirement, tightening the link between earnings-related contributions and pension benefits. The measures taken have increased the average pension replacement rate (as a percentage from gross income) across EU from 49% in 2007 to 58% in 2016. However, the demographic pressure continues to increase and is expected to further erode the capacity of pay-as-you-go pension systems to ensure adequate income replacement rates while maintaining pension budget sustainability.

GRAPH 35

Gross income replacement rates in EU member states, 2016 vs. 2007

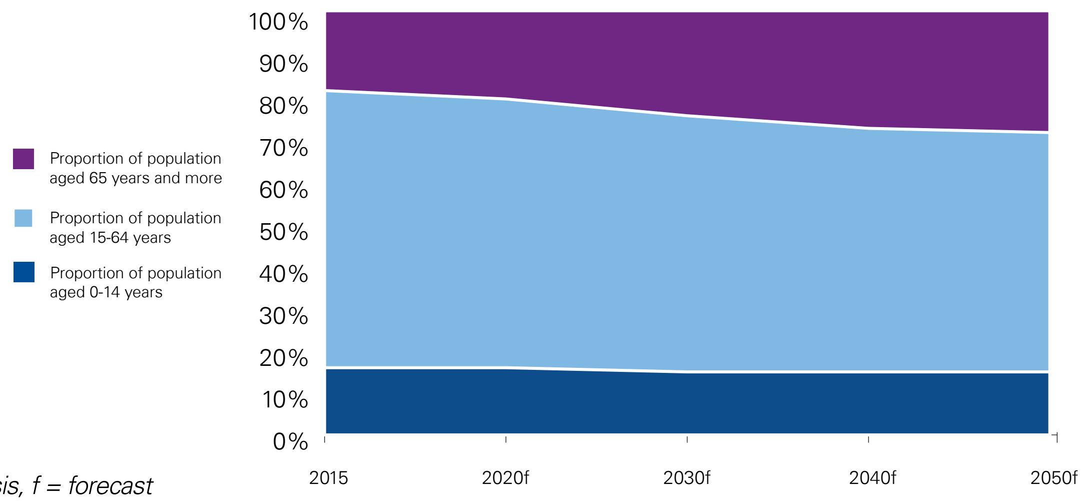


Source: Eurostat, KPMG analysis; the indicator is defined as the ratio of the median individual gross pensions of 65-74 age category relative to median individual gross earnings of 50-59 age category, including old age benefits, survivor benefits and individual private plans and excluding other forms of income.

In 2050, the European Union will have 150 million people aged 65 years and more, that is almost 28.5% of its population, from currently around 20%. This means that in the future there will be less workers to contribute for the retirement benefits of more pensioners. Current projections show that by 2050 the old-age dependency ratio at EU level will increase to 50% (one elderly person to two persons of working age) compared to about 30% (one elderly person to three persons of working age) in 2015. In a number of countries, including Romania, the old-age dependency ratio will more than double, according to current assumptions of future trends in fertility, mortality, life expectancy and net migration. In this context, in order to achieve replacement rates similar to those of the present, people will have to work longer and/ or save more for retirement.

GRAPH 36

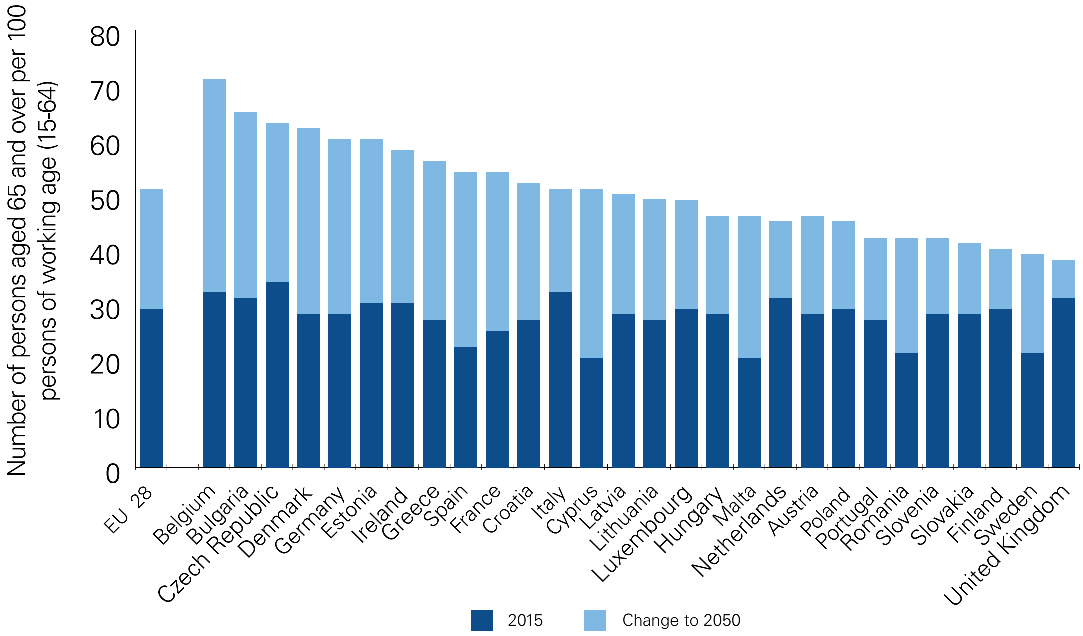
Population distribution by age, EU 28



Source: Eurostat, KPMG analysis, f = forecast

GRAPH 37

Old age dependency ratio in EU member states, 2050 vs. 2015



Source: Eurostat, KPMG analysis; the indicator is defined the ratio between the number of persons aged 65 and over (age when they are generally economically inactive) and the number of persons aged between 15 and 64. The value is expressed per 100 persons of working age (15-64)

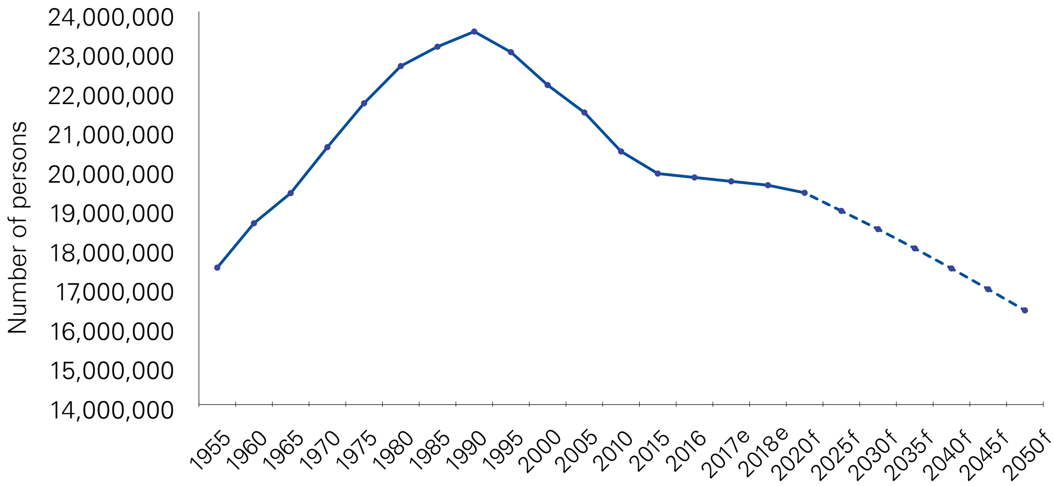
In line with the EU tendency, Romania's population is ageing rapidly. The median age of the population has risen from 32.6 years in 1990 to 40.4 years in 2016 and is expected to reach approximately 47 years by 2050[9]. This is the combined result of low natality rates, high emigration and increased longevity, as detailed below.

By 2050, the population is expected to decrease by 30% compared to 1990, reaching approximately 16.4 million people - a minimum in a period of 100 years. Romania's population peaked in 1990, reaching the highest level in history of almost 23.5 million inhabitants. However, after 1990 the number of inhabitants has steadily decreased, dropping by 16% by 2016, to 19.8 million. This evolution reflects the steep decline in the birth rate (from 13.6 live births per thousand of population in 1990 to 9.1 in 2016), as well as the net outflow of population (according to United Nations estimates, Romania counted 3.4 million migrants in 2015 and had the second highest annual growth in the world in the number of citizens living abroad between 2000 and 2015, of 7.3% per annum).

9: Vlad, Ionel-Valentin (2015), "Strategia de dezvoltare a Romaniei in urmatorii 20 de ani" Vol. I, Editura Academiei Romane

GRAPH 38

Evolution of total population in Romania, 1955-2050



Source: United Nations, Department of Economic and Social Affairs, Population Division[10]; KPMG analysis , f=forecast, e=estimate

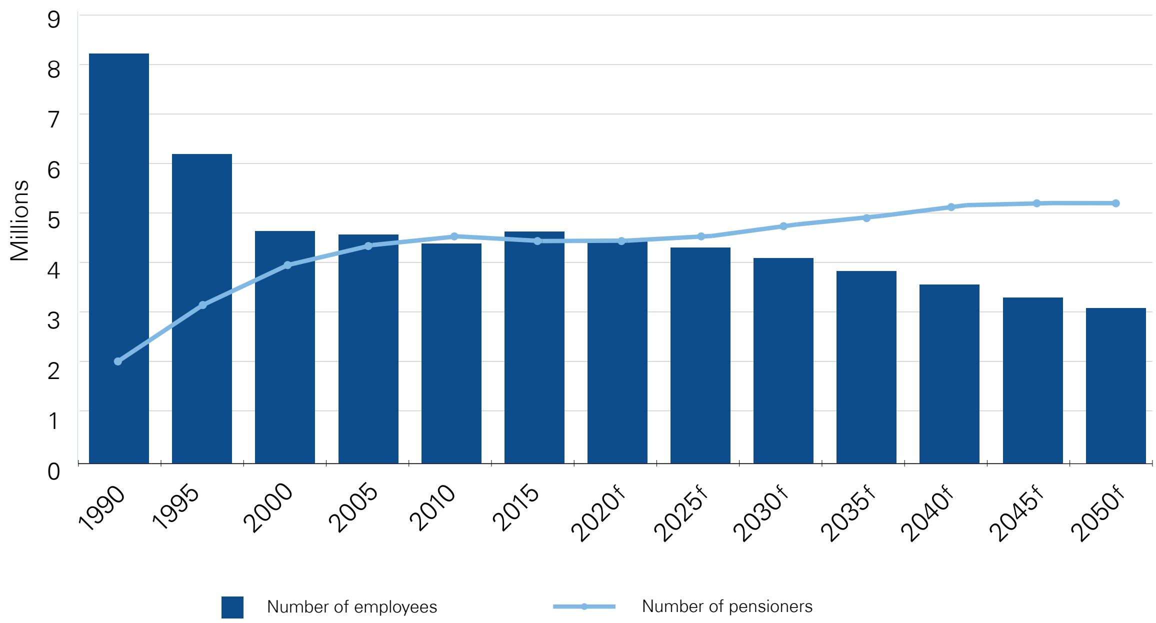
At the same time, life expectancy increases, leading to a longer life after retirement. According to Eurostat, the average life expectancy in Romania increased from 70 years in 1990 to 75 years in 2015, and is expected to reach 80 years for men and 85 years for women in 2050. The life expectancy for the over 65 year old category is also rising. Thus, a Romanian reaching the age of 65 in 2015 was expected to live for another 16 years on average. In 2050, men aged 65 will live for another 19.5 years, while women aged 65 will live for another 22.8 years.

By 2050, one worker will have to support almost two pensioners via salary contributions. Currently, Romania counts approximately one pensioner for each employee contributing to the social security budget, compared to 1990 when the ratio was one pensioner to three employees. It is forecasted that by 2050, due to the declining demographics, the number of employees will decrease by about 1.6 million compared to 2016. At the same time, as Romania's baby boomer generation comes into retirement, the number of pensioners will increase by 0.6 million. In the absence of correcting factors, this will result into an even higher gap between the number of pensioners and the number of employees, with a pensioner-per-employee ratio of approximately 1.74.

10: https://esa.un.org/unpd/wpp/Download/Standard/Population/

GRAPH 39

Number of pensioners vs number of employees in Romania, 1990-2050

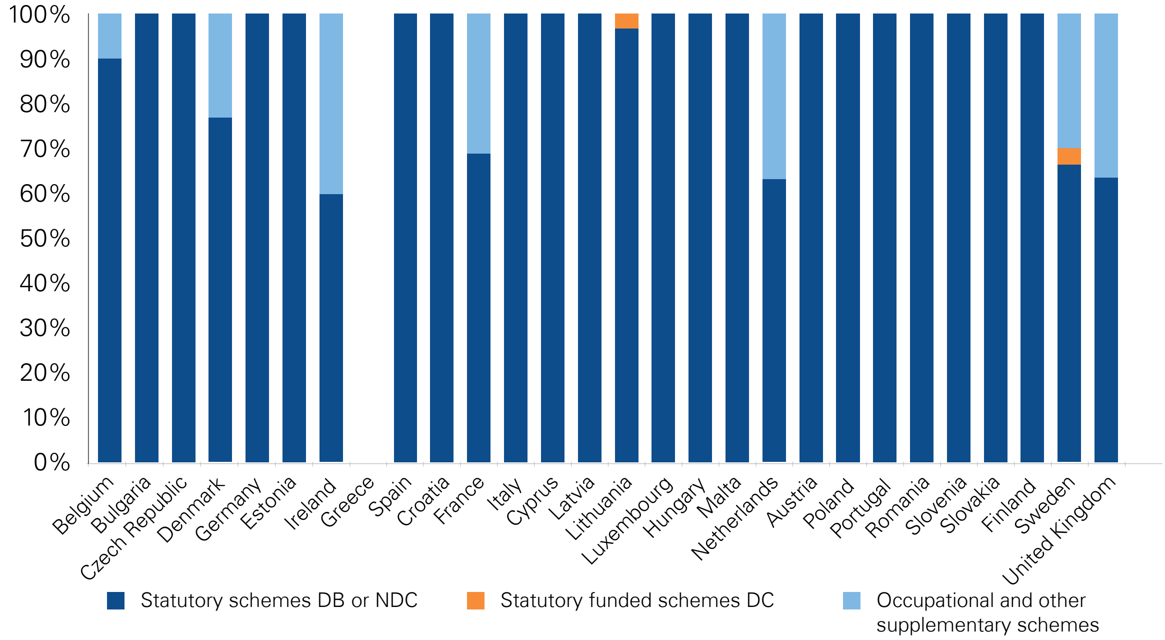


Source: UNICEF, National Institute of Statistics, National House of Public Pensions, European Commission (2020-2050); KPMG analysis, f=forecast

To alleviate the demographic pressures, most pay-as-you-go public schemes nowadays are complemented by pre-funded, privately managed mandatory or voluntary pillars. In general, in Western European countries, occupational and voluntary private individual schemes play an important role. In five member states (Netherlands, Ireland, Sweden, United Kingdom and France) occupational pensions contribute more than 30% to the income replacement rate mix for average earners. On top of that, during the 2000s a number of member states (especially the transition economies of CEE, which did not have the benefit of a history of occupational pensions) introduced privately managed mandatory and voluntary schemes on the second and third pillars of their pension system, although Poland, Hungary and Slovakia reversed earlier reforms after the financial crisis. These private pillars are making very small contributions for the time being due to the limited time of their establishment, but their importance will increase in the future.

GRAPH 40

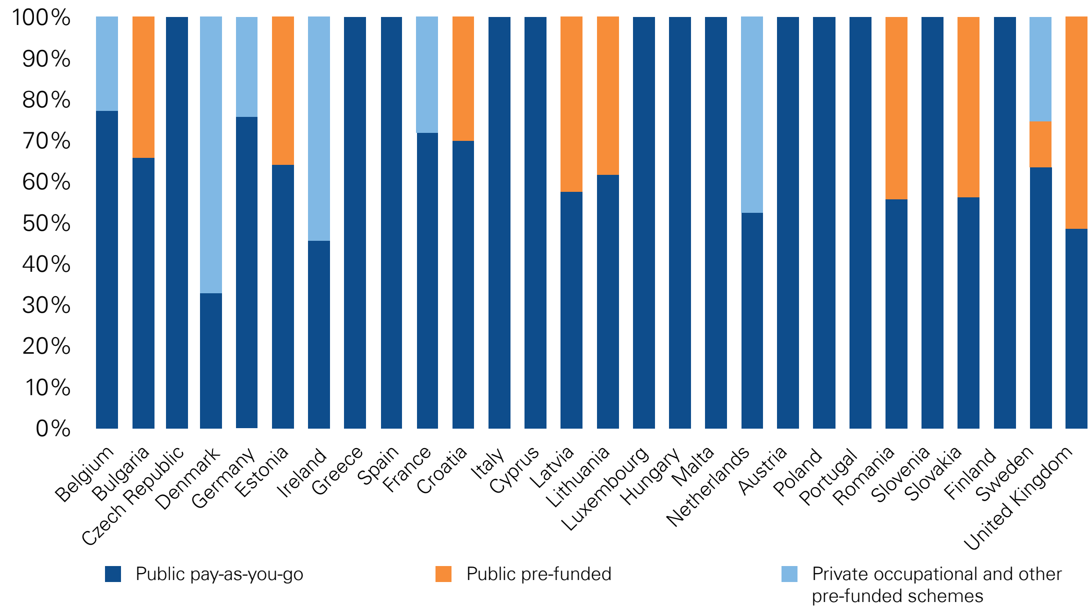
Shares of different pension schemes in gross theoretical replacement rates, 2013



Source: European Commission, The 2015 Pension Adequacy Report: current and future income adequacy in the old age in the EU

GRAPH 41

Shares of different pension schemes in gross theoretical replacement rates, 2053

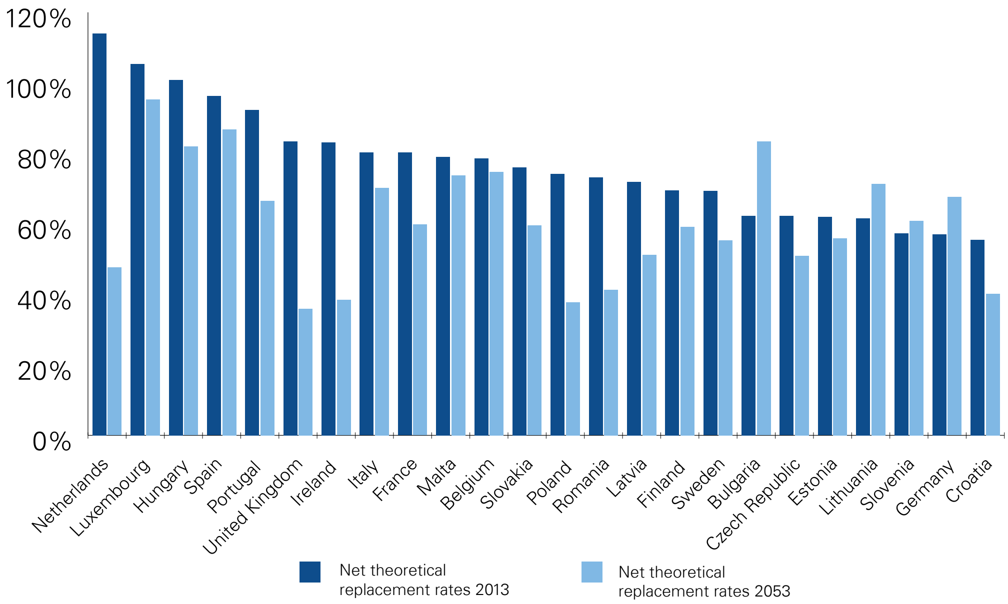


Source: European Commission, The 2015 Pension Adequacy Report: current and future income adequacy in the old age in the EU

To reduce the risk of poverty, multiple sources of post-retirement income are needed. While public and private pensions can provide part of the required income after retirement, data demonstrates that this will not be sufficient. The 2015 Pension Adequacy Report Published by the European Commission shows that theoretical replacement rates from current pension schemes are projected to decrease in the majority of member states over a timeframe of 40 years (2013 to 2053), with a decline to about 40% or less in four member states, including Romania. The experience of the most advanced economies shows that retirement systems are more stable when retirees are not over-dependent on a single source of income, whether social insurance, private pension, or private savings, but instead depend on income in retirement from a diverse set of sources.

GRAPH 42

Net theoretical replacement rates for average earners in EU member states, 2053 vs. 2013

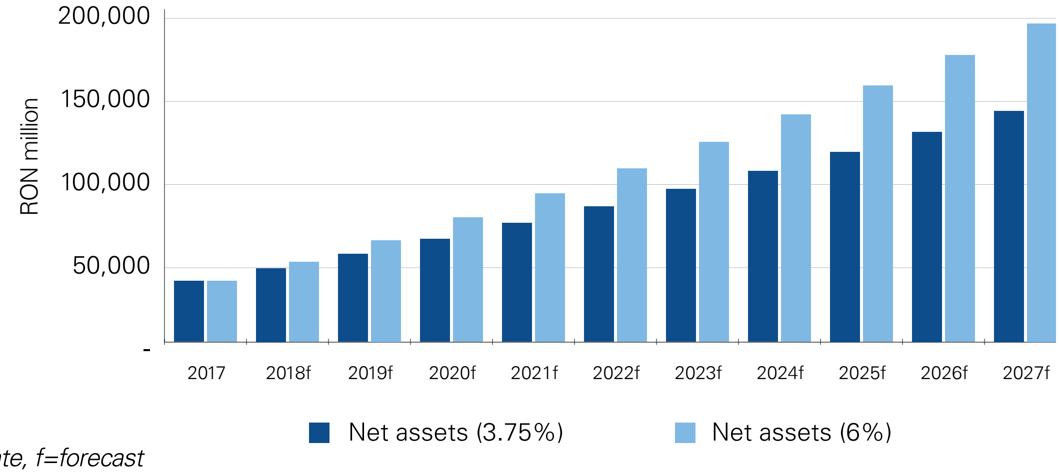


Source: European Commission, The 2015 Pension Adequacy Report: current and future income adequacy in the old age in the EU; prospective theoretical replacement rates are based on 2013 pension legislation and country-specific assumptions of economic, labour market and wage developments, and the underlying projections of population structures and life expectancy

As shown in the European Commission projections, in Romania Pillar II pensions would account for more than 40% of the replacement rate for an average earner in 2053. These projections were based on 2013 assumptions regarding Pillar II contributions, which were expected to go up to 6% by 2016. The reduction in contribution rates has a significant impact in our estimate on the value of the total assets accumulated in Pillar II pension accounts. Thus, assuming a net annual real return of 4% p.a. during 10 years to 2027, Pillar II assets would reach RON 204 billion for 6% contribution starting 2018, compared to RON 148 billion for 3.75% contribution until the end of the period. For an estimated number of approximately 4.05 million active participants in 2027 used in our projection, this implies an accumulated net asset value per participant of approximately RON 50 thousand for 6% contribution, compared to 36thousand for 3.75% contribution.

GRAPH 43

Forecast of net assets in Pillar II pension funds, 2018-2027

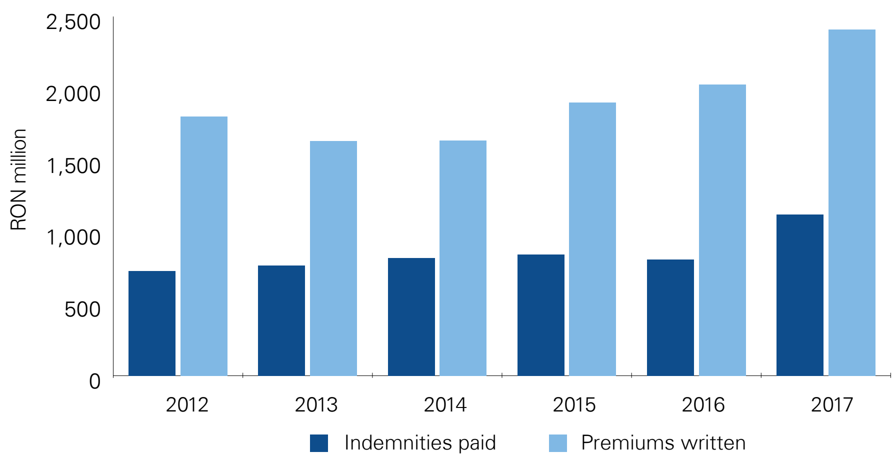


Source: APAPR, KPMG estimate, f=forecast

Through the indemnities paid, life insurance can supplement the national social security programmes and may reduce the pressure on the social security budget as a significant component of government spending. The total protection offered by life insurers is measured by the aggregate payments made to insurance beneficiaries (i.e. total indemnities paid, consisting of claims paid for insured events and of benefits paid on the maturity or early redemption of policies with saving or investment components). During 2012 to 2017, average annual indemnities paid by insurers were RON 848 million, i.e. 45% of average gross premiums written. Assuming the same ratio between premiums collected and indemnities paid, at a penetration equal to the CEE average of 1% of the GDP, the life insurance sector could have supplemented the social security payments made by the state in 2017 by approximately 5%, i.e. RON 2.9 billion.

GRAPH 44

Evolution of premiums written and indemnities paid for Romanian life insurers



Source: FSA - 2016 report, KPMG analysis; for 2015-2017, data includes indemnities paid and premiums written by branches of foreign insurers

3.3 Importance and key benefits for individuals

In the context of an aging population and a history of budgetary deficits, the Pillar I pension paid by the public system in the future may not be enough to ensure a reasonable standard of living after retirement. The income received from the mandatory public system will have to be topped up by individual savings. A recent World Economic Forum white paper ("We'll Live to 100 – How Can We Afford It?") discusses the challenges raised by the rapid increase in life expectancy since the middle of the 20th century, showing that individuals will need to save 10-15% of their annual average salary to support an adequate level of retirement income. To this end, various forms of savings such as Pillar II and Pillar III pensions and life insurance products with saving component will have to be considered by individuals from the first years of their active lives.

Pillar II has the role of supplementing the state pensions for individuals in order to achieve a higher income replacement rate post-retirement and alleviate the risk of poverty at old age. For those with low income, who do not have enough resources to save regularly, Pillar II will be the only source of additional retirement income besides Pillar I. Regardless of market developments, a guaranteed minimum benefit will be paid to each contributor, consisting of contribution paid minus legal fees. This will be supplemented by the positive returns accumulated in the individual account.

In addition their longevity protection role, life insurance products can also alleviate the severe impact that certain events such as death and disability may have on an individual and his/ her dependent family, reducing the risk of poverty and helping them achieve financial security and peace of mind. Life insurance allows individuals to substitute a small certain cost (the premium) for a large uncertain cost (the event insured, such as death or disability due to accidents or illness) and thus helps protect individuals from the financial consequences of the risk they face. Thus, by signing a contract and paying the insurance premium, the risk is transferred from the insured to the insurance company. Should the defined insured event be realized, the insurance company has to meet its contractual obligation to compensate the policyholder for an agreed part of losses incurred.

To illustrate how life insurance fulfils its role to protect the individual, we have included below a description of the main life insurance products available on the Romanian market*.

Death coverage insurance (term life)

Term life insurance provides life insurance coverage for a specified term, typically ranging from 10 to 30 years. This type of policy does not accumulate value during its term. If the insured person dies during the insured period then the policy beneficiary will receive the insured amount.

* Numerical examples are based on actual offers available in the market at the date of this report.

However, if the insured person outlives the policy maturity then the policy beneficiaries will receive nothing. As a result, term life insurance is significantly less expensive than an equivalent endowment policy having the same insured amount, but the policy premium may become higher with age.

This type of insurance is intended to act as a safety net for the family members of the insured individual, helping them cover for the loss of income, pay off a mortgage or pay for children's education. For example, if an individual of 30 years of age with a net monthly salary of RON 3,500 starts paying RON 182 i.e. 5.2% of his income monthly towards a term life insurance policy, this could provide for an insurance coverage of approximately RON 233,000. In case the individual dies during the term of the policy from any cause, the family would receive this amount, which would compensate for approximately 67 monthly salaries of the individual or could cover the remaining payments under a mortgage loan, relieving the family from the monthly instalment payments.

Endowment (saving policy)

Endowment is that type of insurance in which the policyholder pays premiums for a certain period of time and the policy is accumulating value during this period. If the insured person dies during the insured period then the policy beneficiary will receive the insured amount. If the individual survives until the policy maturity, then the beneficiary (which can be the insured person) will receive the maturity benefit. Therefore, in both cases, the beneficiary will receive a previously defined benefit.

This type of policy functions as a regular saving plan which also provides insurance life coverage. Thus, besides the safety net provided to the family in case of death, the benefit paid in case of survival is also available to cover various financial needs and/or may be a source of additional income post retirement. For example, an individual contributing RON 190 monthly towards an endowment policy for 35 years could provide for a RON 290,000 benefit for his/ her family in case of death from accident, or can receive a lump amount of approximately RON 97,000 in case of survival, which may pay out an annuity of approximately RON 800 for 10 years as a supplement to the pension income during the period after retirement.

Disability coverage insurance

Disability coverage insurance is similar to the term life insurance, the difference consisting in the type of risk covered. In this case, the policy beneficiary receives a compensation if the insured person is affected by a disability or a disease.

The coverage may be provided for various types of disability:

- Temporary (a disability from which the person is expected to recover) or permanent (the disability is expected to be for the whole life of the person);
- Total (a disability which is sufficient to prevent the person from performing any of the duties of their occupation) or partial (a disabled person can perform a material part of their occupation);
- Caused by accident or by disease.

For example, if an accident or a disease of the insured person causes temporary incapacity to work, the insurer will pay the corresponding insured amount that will help the policy beneficiary to overrun the financial distress during the recovery period.

The disability coverage insurance usually covers disabilities which have a lower probability of happening, but which if they were to occur they would have a significant impact over the insured person's life and resources.

In most cases, for this type of policy the insured person is the same person as the beneficiary. The insurance policy does not accumulate value, thus if the insured risk does not occur no benefit will be granted to the insured person.

Unit-linked insurance

A unit-linked policy provides the policyholder with both insurance coverage in case of death and the option to invest in instruments such as shares, bonds and mutual funds. The investment part and the protection part are managed according to the specific needs and choices of the policyholder, under a single integrated plan. The policyholder has an individual account where the investment portion is converted into fund units. If the insured person dies during the insured period then the policy beneficiary is entitled to receive the maximum between the insured amount and the account value.

The return of unit-linked policies depends directly on the fair value of units that are determined based on the financial market evolution. Thus no guaranteed amount (except for the insured amount in case of death of the insured person) is to be provided to the policy beneficiary and the investment risk is assigned to the client, as opposed to the endowment (saving policy) where the maturity benefit is defined and guaranteed by the insurer.

Health insurance[11]

Health insurance covers the risk that a person would have to incur medical expenses. It is similar with term life insurance and disability coverage insurance, as the policy does not accumulate value, meaning that if the risk does not arise for the insured person then no benefit is paid. However, if sickness or injury occurs and medical expenses arise during the insured period, then the insurer will pay an amount of money under certain conditions.

Riders

Besides the standard insured risks, additional clauses (called riders) can be attached in order to cover various risks, to fit the needs of each individual. Terms, conditions and costs of riders may differ from one insurer to another.

For example, an additional clause covering the risk of disability (either from accident or caused by a disease, temporary or permanent disability) or providing for a waiver of premium in case of temporary disability can be added to a term life policy which covers the risk of death of the insured person.

In addition to the extra coverage offered, riders are more affordable than making a separate insurance policy and can be added to any type of insurance policy depending on the insurer's range of products.

Illustrative examples – benefits of life insurance and private pensions for the individual

To illustrate how Pillar II pensions and life insurance products contribute to the post-retirement income, we have taken the example of an individual that starts working at 25 years of age and earns salary income for the full period until retirement, making the contributions to Pillar I and Pillar II pensions as required by law. Additionally, starting at the age of 30 the individual makes monthly contributions towards a life insurance product with savings component for a period of 35 years until retirement.

Thus, under various earning scenarios throughout the employment period (minimum national salary, average national salary and twice the average national salary), the post-retirement income will be approximately 59% of the income earned before retirement, out of which 37% paid by Pillar I[12], 15% paid by Pillar II and 7% paid by the life insurance product. This is still 11% short of a target replacement rate of 70% considered to provide for an adequate level of post-retirement income, however it can ensure a better standard of living than the pension provided by Pillar I alone.

11: Health insurance in Romania is provided by both life and non-life insurers and its importance and key benefits are not the object of the current study, whose findings are relevant for the other types of life insurance products offered by life insurers.

12: According to the fiscal legislation in effect at the date of this report (April 2018), pension income in excess of RON 2,000 for each pillar is subject to an income tax of 10%. Assuming that a similar level of taxation would apply for the time horison of our estimate, the income replacement rate provided by Pillar I pension for employment earnings at twice the average national salary would decrease from 37% to 36%. However, as the impact is marginal we have not considered the effects of the pension income tax for the purposes of this illustrative example.

Table 2

Illustrative examples – assumptions and calculations

Assumptions	
Start of working life	25 years (2008)
Contribution period	40 years
End of working life	65 years (current statutory retirement age for men)
Remaining life time on retirement	19 years (current life expectancy at age 65 for men)
Ratio of contributions to total salary cost throughout the employment period	
Contributions to Pillar I - according to current legislation in force	21%
Contributions to Pillar II - at actual levels during 2008 to 2017 and assumed at 3.75% starting 2018 until retirement	4%
Payments towards a life insurance policy with saving component	2%

Source: KPMG calculation

Table 3

Illustrative examples - Post-retirement income under various earnings scenarios

	Income replacement rate	Twice the average national salary (RON)	Average national salary (RON)	Minimum national salary (RON)
Net salary before retirement		8,896	4,448	2,224
Total income post retirement	59%	5,214	2,607	1,304
Pillar I pension	37%	3,294	1,647	823
Pillar II pension	15%	1,335	667	334
Life insurance	7%	586	293	147

Source: KPMG calculation; all amounts expressed in 2017 purchasing power equivalent; the income replacement rate is determined as the ratio of monthly income after retirement to monthly salary income before retirement

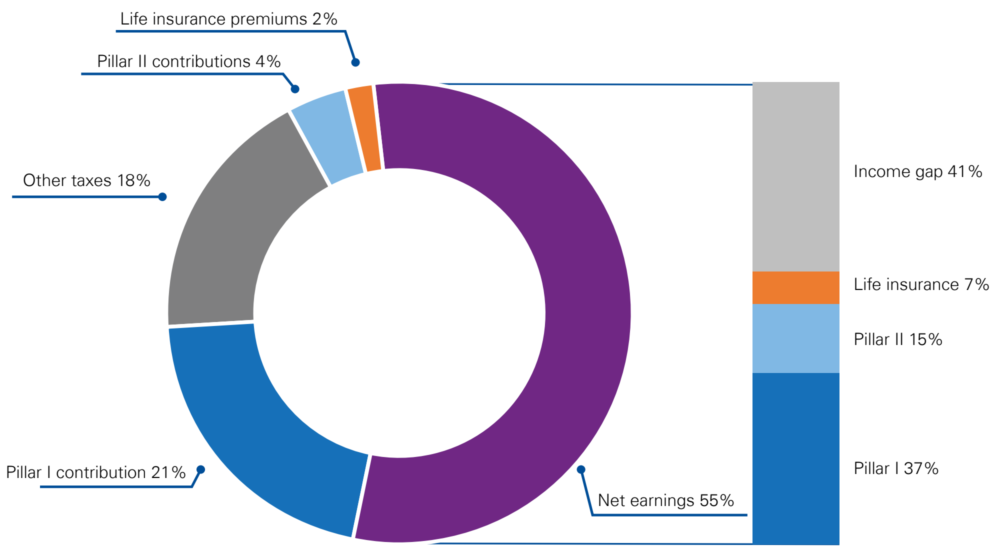
Illustrative example 1 - employment earnings at twice the average national salary

An individual earning in 2048 a net salary of approximately RON 8,900 (two times the average national salary) would benefit for a pension of approximately RON 3,300 from the public system. Additionally, by the date of his retirement, his Pillar II account would have accumulated almost RON 310,000, while the insurance policy would have accumulated a maturity benefit of RON 134,000. The individual would benefit thus from a pool of funds of nearly half a million RON, from which he would be able to draw an additional monthly income of RON 1,900 for his full remaining life time, without considering additional reinvestment income. Adding up all the benefits, his total income post retirement would be of approximately RON 5,200 per month (all amounts expressed in 2017 purchasing power equivalent).

GRAPH 45

Contributions made during employment vs. income replacement after retirement

(assuming 3.75% Pillar II contribution starting 2018 for the full period until retirement)



Source: KPMG calculation

Assumptions used in the calculation

Historical data: For the period 2008 – 2017 we used the available data series[13] in terms of monthly average salary, salary tax, Pillar I & II contributions, pension point value, inflation rate and rate of return for Pillar II funds.

Projection for future periods: For the timeframe 2018-2048 we considered that the legal provisions in force as of January 2018 for salary tax, Pillar I & Pillar II contributions and computation of pension point value would apply for the entire period and no changes in labour and fiscal legislation that might influence the projection would occur. In practice, all these variables may be subject to significant changes driven by the economic and political factors, which may lead to significantly different results than those showed in the example.

All data were converted into the equivalent purchasing power for the year 2017.

Specific assumptions regarding the future period projections:

- *The gross average salary* was forecasted starting from the gross average salary in January 2018 and applying a 2% annual increase in real terms until 2048. Under this assumption, the average net salary in Romania would be of approximately RON 4,450 in 2048 (in 2017 prices).
- *The Pillar I pension point value* for 2048 was forecasted applying the current legislation in force and the estimated increase of the gross average salary in real terms as detailed above. As the current legislation in force stipulates the pension point calculation formula only for the period up to 2030, for the remaining period to 2048 the pension point value was estimated to increase based on a linear trend. Under these assumptions, the pension point value in 2048 would be of RON 1,675 (in 2017 prices).
- *Pillar II monthly contribution* was assumed to be maintained at 3.75% applied to gross salary for the entire period 2018-2048.
- *The rate of return for Pillar II funds* was assumed at 4% per annum in real terms for the period 2017-2048 (compared to the actual rate of return for 2008-2016 of 5.3% per annum). Pillar II costs were assumed constant, i.e. a monthly fee of 2.5% applied to each amount directed to Pillar II and an annual management fee of 0.6% applied to the account value.
- *The life expectancy of the individual after retirement* was estimated at 19.1 years, according to projections included in The 2015 Ageing Report issued by the European Commission. In our scenario, we considered that the amount accumulated in the Pillar 2 account and the maturity benefit paid by the insurance policy will be paid in equal monthly instalments over the remaining life and that no additional returns are provided by reinvestment of these amounts.

13: National Institute of Statistics, National Bank of Romania, National House of Public Pensions

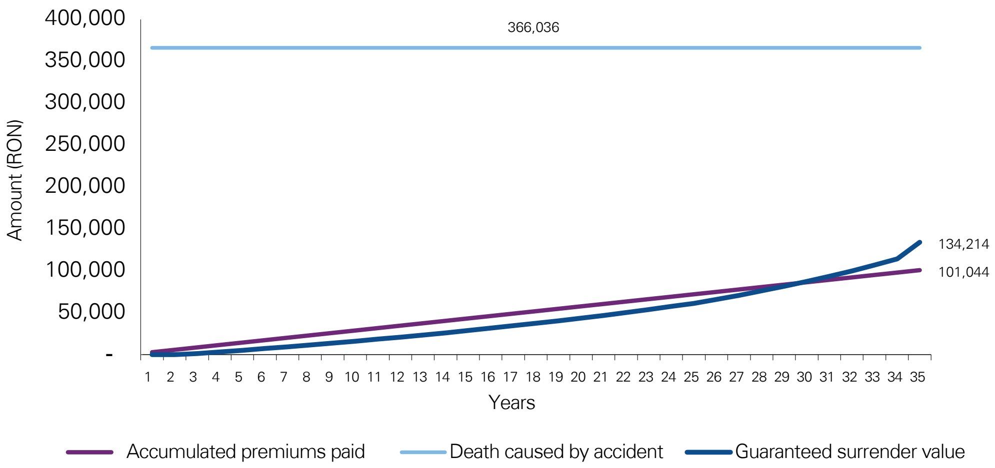
Assumptions regarding the insurance product

Note: In real life, information of insured amounts for various types of events (death, survival, disability) is available to the policyholder before his/ her acceptance of the life insurance policy. Particularities of life insurance policies might arise depending on the specific offer of each insurance company.

- For the life insurance policy, we have chosen a product with both protection and savings component for which the insurance premium to be paid is constant for the entire duration of the product i.e. RON 240 per month or RON 2,880 annually for 35 years. The benefits provided for this level of premium are described below.
- *Protection component:* In case of death by accident of the individual at any time during the insured period, the policy beneficiaries (generally, the children and/ or the spouse of the individual) will receive an amount of approximately RON 366,000. In case of death by other causes, the beneficiaries will receive the accumulated premium paid by the individual until that moment (for example, in case of death by other causes at 20 years after the start of the policy, the beneficiaries will receive an amount of RON 57,739.
- *Saving component:* In case the individual survives until the maturity of the policy, the benefit paid will be of RON 134,214 (including a bonus of RON 12,202 for timely payment of monthly premiums), i.e. approximately 15 net salaries earned by the individual in 2048 as per our scenario.

GRAPH 46

Life insurance policy pay-out (protection and saving components)



Source: KPMG analysis; the guaranteed surrender value is the minimum amount paid to the policyholder in case of voluntary termination of the policy by the policyholder before maturity or the maturity benefit in case the policy is not terminated before maturity

Comparison with an investment in a bank deposit

If the individual directs an amount of RON 240 monthly into a bank deposit instead of an insurance policy, the pay-out from the bank deposit in 2048 will be of RON 115,387, assuming an interest rate of 0.75% p.a. in real terms and net of tax for the entire period.

Thus, the maturity benefit of the insurance policy of RON 134,214 would outperform the bank deposit by 16%. Additionally, the life insurance product provides the protection coverage in case of death by accident, which is not available for the deposit product. For example, if the individual dies in 2020 as a result of an accident, the family would have benefited from only RON 23,700 from the bank deposit, as compared to RON 366,000 from the insurance policy.

Additional scenario – Pillar II contribution increases to 6% as of 2019

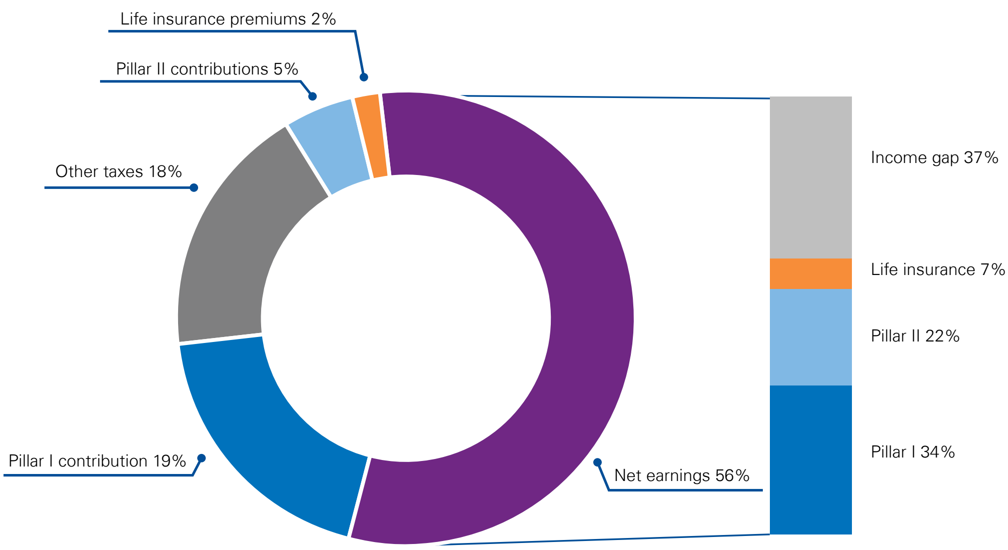
If Pillar II contribution increased to the initial target level of 6% as of 2019, the income replacement rate would increase to 63%, out of which 34% from Pillar I, 22% from Pillar II and 7% from the endowment policy. Thus, the individual would benefit from a total monthly income of RON 5,600 after retirement.

For the purposes of this example, we have assumed that Pillar II contribution is 6% starting with 2019 for the entire period until 2048.

GRAPH 47

Contributions made during employment vs. income replacement after retirement

(assuming 6% Pillar II contribution starting 2019 for the full period until retirement)



Source: KPMG calculation

Additional scenario – No Pillar II contribution

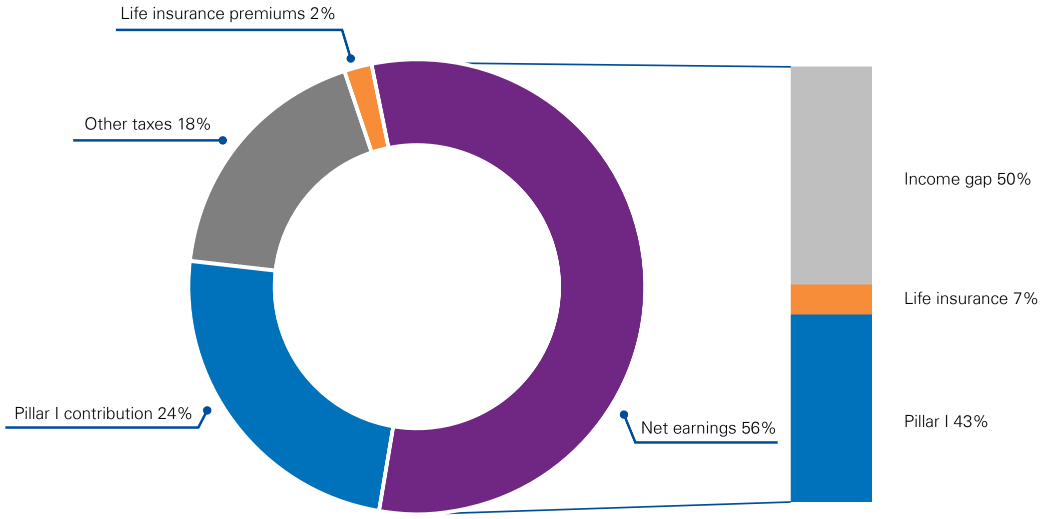
In the absence of Pillar II, the income replacement rate drops to 50%, out of which 43% from Pillar I and 7% from the endowment policy.

The total monthly income of the individual after retirement under this scenario would be of RON 4,414.

GRAPH 48

Contributions made during employment vs. income replacement after retirement

(assuming no Pillar II contribution)



Source: KPMG calculation

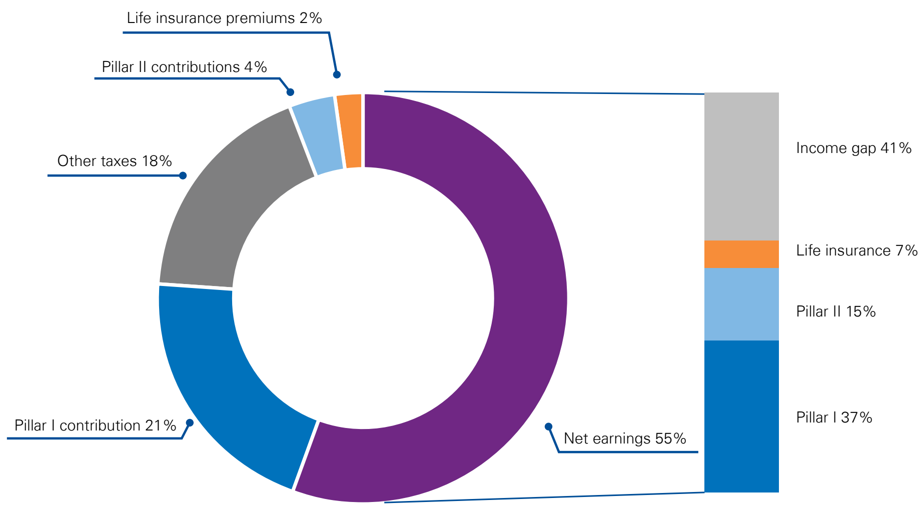
Illustrative example 2 - Employment earnings at the level of the average national salary

An individual earning in 2048 a net salary of approximately RON 4,450 (the average national salary) would benefit for a pension of approximately RON 1,650 from the public system. Additionally, by the date of his retirement, his Pillar II account would have accumulated about RON 153,000, while the insurance policy would have accumulated a maturity benefit of RON 67,000. The individual would benefit thus from a pool of funds of RON 220,000, from which he would be able to draw an additional monthly income of RON 950 for his full remaining life time, without considering additional reinvestment income. Adding up all the benefits, his total income post retirement would be of RON 2,600 per month (all amounts expressed in 2017 purchasing power equivalent).

GRAPH 49

Contributions made during employment vs. income replacement after retirement

(assuming 3.75% Pillar II contribution starting 2018 for the full period until retirement)



Source: KPMG calculation

Assumptions used in the calculation

Historical data: For the period 2008 – 2017 we used the available data series[14] in terms of monthly average salary, salary tax, Pillar I & II contributions, pension point value, inflation rate and rate of return for Pillar II funds.

Projection for future periods: For the timeframe 2018-2048 we considered that the legal provisions in force as of January 2018 for salary tax, Pillar I & Pillar II contributions and computation of pension point value would apply for the entire period and no changes in labour and fiscal legislation that might influence the projection would occur. In practice, all these variables may be subject to significant changes driven by the economic and political factors, which may lead to significantly different results than those showed in the example.

All data were converted into the equivalent purchasing power for the year 2017.

14: National Institute of Statistics, National Bank of Romania, National House of Public Pensions

Specific assumptions regarding the future period projections:

- *The gross average salary* was forecasted starting from the gross average salary in January 2018 and applying a 2% annual increase in real terms until 2048. Under this assumption, the average net salary in Romania would be of approximately RON 4,450 in 2048 (in 2017 prices).
- *The Pillar I pension point value* for 2048 was forecasted applying the current legislation in force and the estimated increase of the gross average salary in real terms as detailed above. As the current legislation in force stipulates the pension point calculation formula only for the period up to 2030, for the remaining period to 2048 the pension point value was estimated to increase based on a linear trend. Under these assumptions, the pension point value in 2048 would be of RON 1,675 (in 2017 prices).
- *Pillar II monthly contribution* was assumed to be maintained at 3.75% applied to gross salary for the entire period 2018-2048.
- *The rate of return for Pillar II funds* was assumed at 4% per annum in real terms for the period 2017-2048 (compared to the actual rate of return for 2008-2016 of 5.3% per annum). Pillar II costs were assumed constant, i.e. a monthly fee of 2.5% applied to each amount directed to Pillar II and an annual management fee of 0.6% applied to the account value.
- *The life expectancy of the individual after retirement* was estimated at 19.1 years, according to projections included in The 2015 Ageing Report issued by the European Commission. In our scenario, we considered that the amount accumulated in the Pillar 2 account and the maturity benefit paid by the insurance policy will be paid in equal monthly instalments over the remaining life and that no additional returns are provided by reinvestment of these amounts.

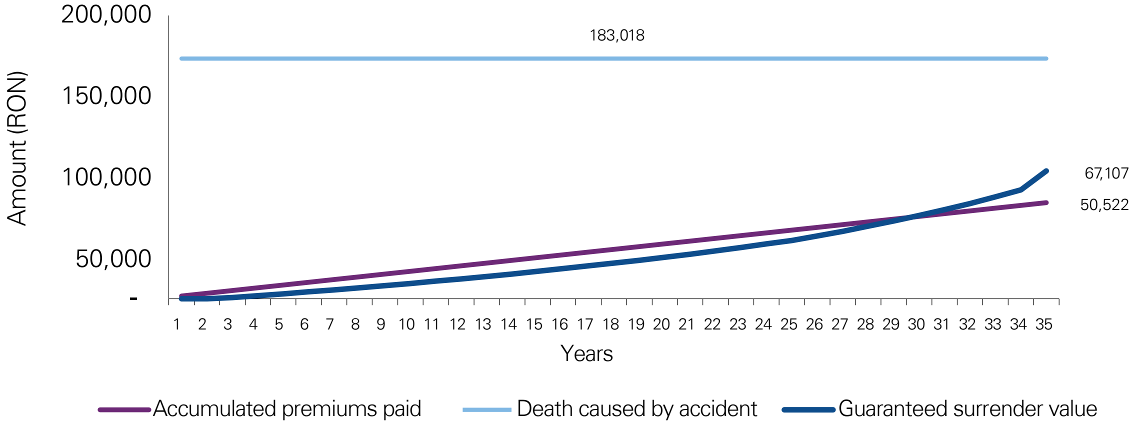
Assumptions regarding the insurance product

Note: In real life, information of insured amounts for various types of events (death, survival, disability) is available to the policyholder before his/ her acceptance of the life insurance policy. Particularities of life insurance policies might arise depending on the specific offer of each insurance company.

- For the life insurance policy, we have chosen a product with both protection and savings component for which the insurance premium to be paid is constant for the entire duration of the product i.e. RON 120 per month or RON 1,440 annually for 35 years. The benefits provided for this level of premium are described below.
- *Protection component:* In case of death by accident of the individual at any time during the insured period, the policy beneficiaries (generally, the children and/ or the spouse of the individual) will receive an amount of approximately RON 183,000. In case of death by other causes, the beneficiaries will receive the accumulated premium paid by the individual until that moment (for example, in case of death by other causes at 20 years after the start of the policy, the beneficiaries will receive an amount of RON 28,870.
- *Saving component:* In case the individual survives until the maturity of the policy, the benefit paid will be of RON 67,107 (including a bonus of RON 6,100 for timely payment of monthly premiums), i.e. approximately 15 net salaries earned by the individual in 2048 as per our scenario.

GRAPH 50

Life insurance policy pay-out (protection and saving components)



Source: KPMG analysis; the guaranteed surrender value is the minimum amount paid to the policyholder in case of voluntary termination of the policy by the policyholder before maturity or the maturity benefit in case the policy is not terminated before maturity

Comparison with an investment in a bank deposit

If the individual directs an amount of RON 120 monthly into a bank deposit instead of an insurance policy, the pay-out from the bank deposit in 2048 will be of RON 57,700, assuming an interest rate of 0.75% p.a. in real terms and net of tax for the entire period.

Thus, the maturity benefit of the insurance policy of RON 67,107 would outperform the bank deposit by 16%.

Additionally, the life insurance product provides the protection coverage in case of death by accident, which is not available for the deposit product. For example, if the individual dies in 2020 as a result of an accident, the family would have benefited from only RON 11,900 from the bank deposit, as compared to RON 183,000 from the insurance policy.

Additional scenario – Pillar II contribution increases to 6% as of 2019

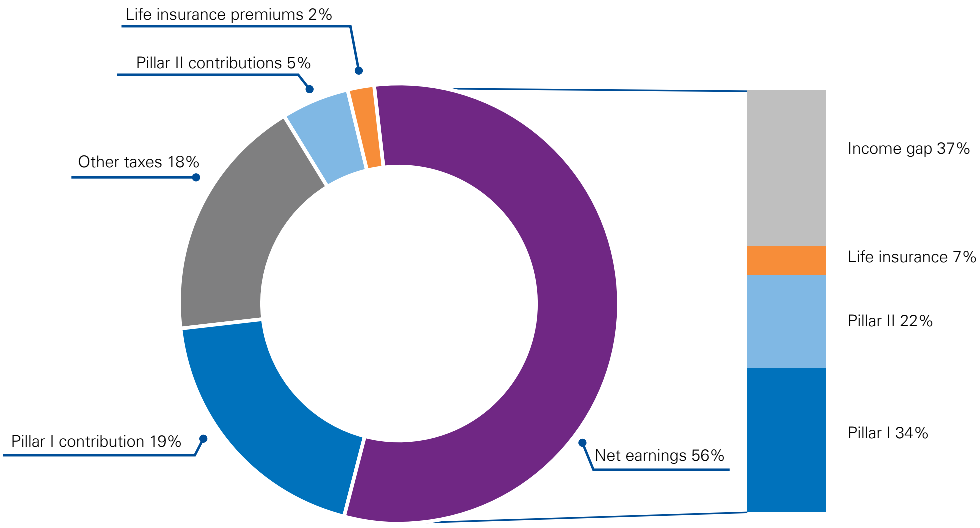
If Pillar II contribution increased to the initial target level of 6%, the income replacement rate would increase to 63%, out of which 34% from Pillar I, 22% from Pillar II and 7% from the endowment policy. Thus, the individual would benefit from a total monthly income of RON 2,800 after retirement.

For the purposes of this example, we have assumed that Pillar II contribution is 6% starting with 2019 for the entire period until 2048.

GRAPH 51

Contributions made during employment vs. income replacement after retirement

(assuming 6% Pillar II contribution starting 2019 for the full period until retirement)



Source: KPMG calculation

Additional scenario – No Pillar II contribution

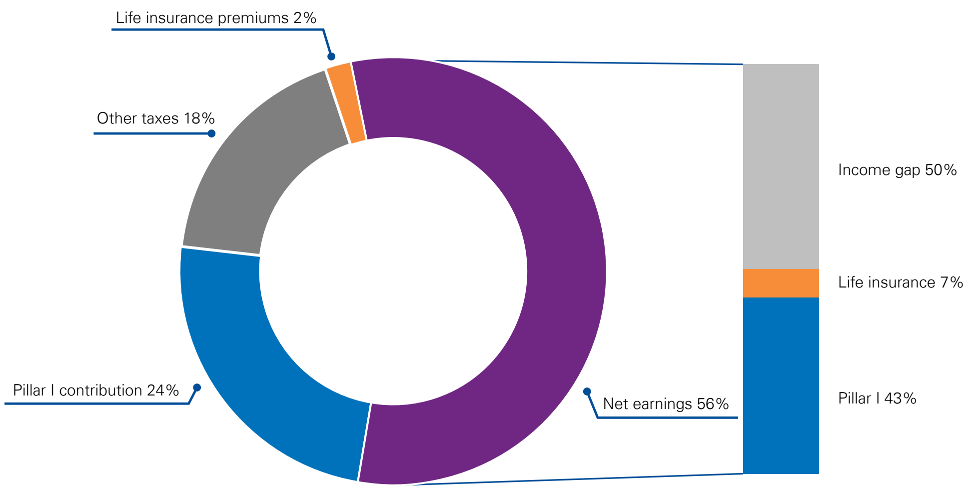
In the absence of Pillar II, the income replacement rate drops to 50%, out of which 43% from Pillar I and 7% from the endowment policy.

The total monthly income of the individual after retirement under this scenario would be of RON 2,200.

GRAPH 52

Contributions made during employment vs. income replacement after retirement

(assuming no Pillar II contribution)



Source: KPMG calculation

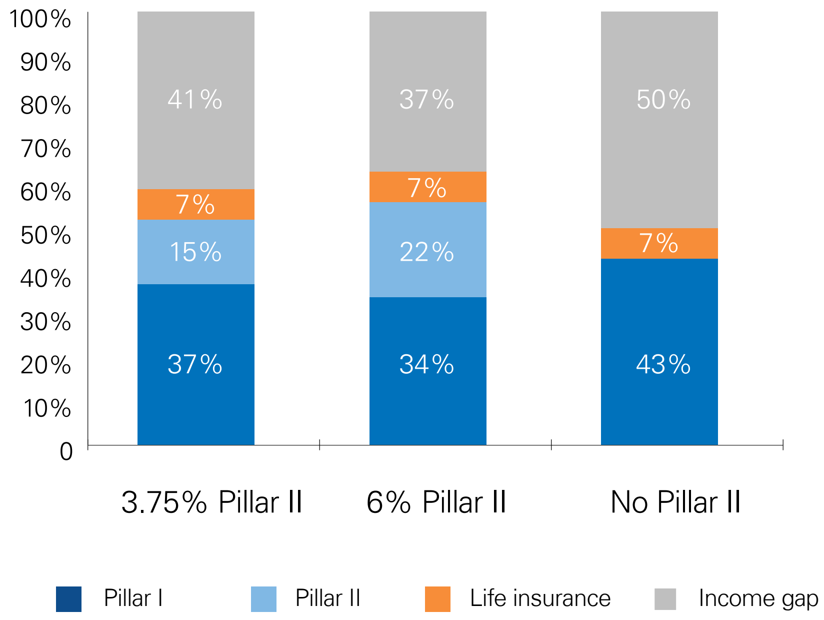
Conclusion

Under conservative assumptions regarding future rate of returns, Pillar II assets accumulated during the working life can provide for a substantial additional income during retirement. This income is directly linked to the contributions made by the individual and is not exposed to risks arising from negative demographic or economic evolutions, except to the low yield risk.

Additionally, the post-retirement income can be supplemented by a life insurance policy with a savings component, which also provides protection in case of death by accident. The example demonstrates the importance of diversifying the sources of income for the period after retirement, especially as Pillar I pensions come under pressure and cannot provide an adequate income replacement rate and standard of living post retirement.

GRAPH 53

Post-retirement income as a percentage of net earnings before retirement under various scenarios regarding Pillar II contributions



Source: KPMG calculation

4. Key opportunities and challenges

4.1 The role of financial education

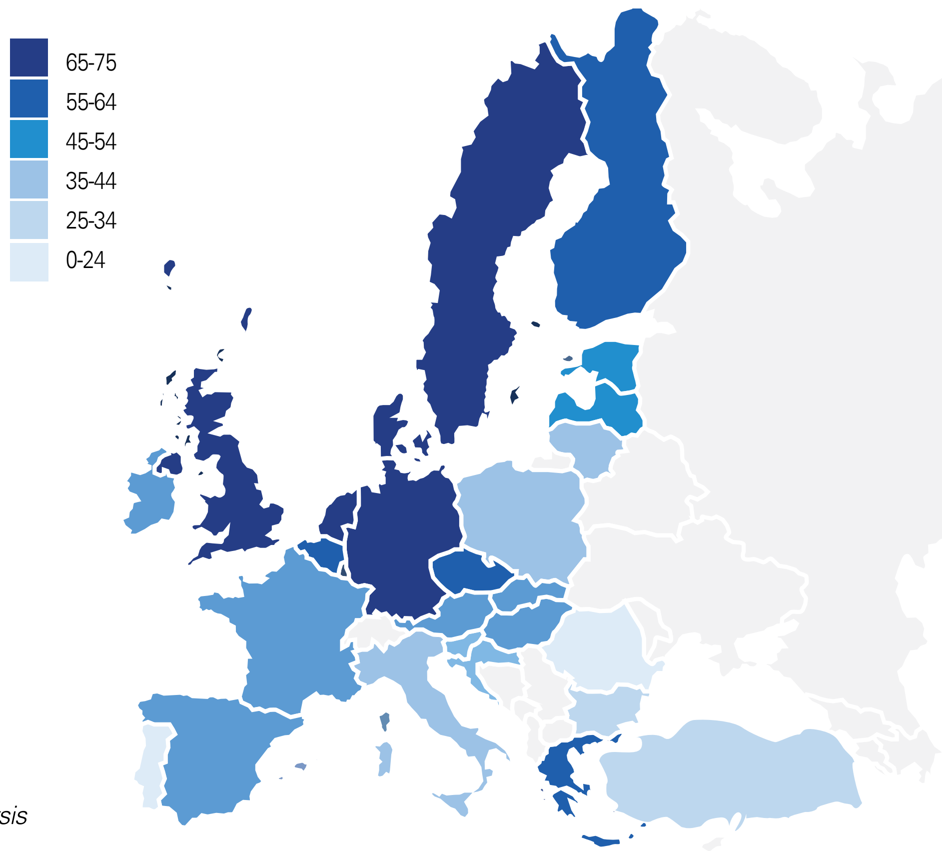
Financial literacy is one of the key factors influencing people's attitude towards life insurance and long term savings. Individuals are more likely to invest in their financial security and to save for retirement as they become more aware of the risks they are exposed to and they gain a better understanding of the characteristics of available insurance products and pension schemes. Demographic changes and related pressures on the social security budgets are shifting part of the responsibility for long term saving and financial planning to individuals who previously relied on governments for their financial security, especially for old age pensions. In this context, many governments around the world are developing and implementing national strategies aimed at promoting financial education and improving the financial literacy of their citizens.

While poor financial literacy result in low holding of financial products in general, life insurance and pensions present their own particular challenges. Often, the risks traditionally covered by life insurance are underestimated or ignored by individuals, and therefore buying life insurance is not considered relevant or important. Insurance is one of the very few products that people purchase with the hope of never having to use it, especially when it comes to risks such as death or disability risk. Insuring for old age requires long term financial planning, which implies a good grasp of concepts such as compounding interest. If we add to this the complexity and sometimes lack of transparency of life insurance and pension products, it becomes evident that increasing financial literacy should be at the forefront of all initiatives aimed at improving penetration of these products.

Romania has a large gap to fill as regards the financial literacy of its population. A survey conducted by S&P during 2014 found that only 1 in 5 adults in Romania have an understanding of basic financial products, compared to 1 in 3 worldwide. Thus, Romania ranks last on the European Union with a financial literacy rate of only 21%, compared 52% on average at EU level and more than 65% in a number of Northern European countries. Financial literacy rates are also significantly higher in most surrounding CEE states (Czech Republic: 58%, Hungary: 54%, Slovakia: 48%, Poland: 42%, Bulgaria: 35%). The S&P report shows that, while high economic development is tied to high financial literacy in the richer economies of the world, national-level policies related to financial education and consumer protection are more likely to make the difference in the less affluent economies, with a GDP per capita of USD 12,000 or less.

GRAPH 54

Financial literacy rates in the EU, percentage of adults



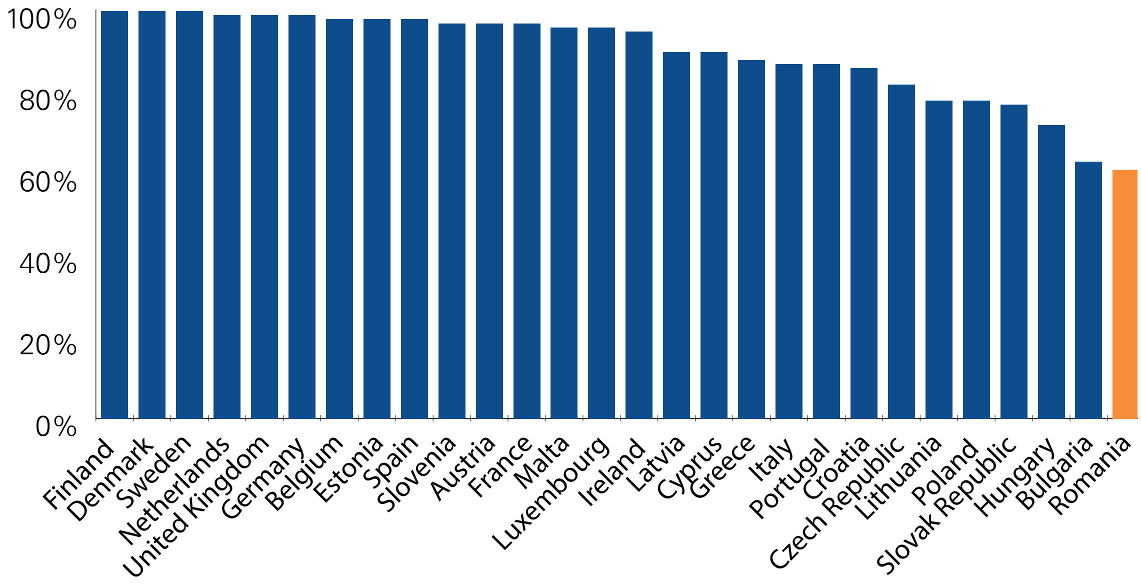
Source: S&P Global FinLit Survey 2014, KPMG analysis

Financial inclusion, measured as access to financial products (bank and saving accounts, loans and payments) is also the lowest in the European Union. As per data financial measured by the World Bank in 2017, four out of ten Romanians did not have a current account, while only 19% of Romanians were saving for old age.

As discussed in the S&P Survey, the relationship between financial literacy and financial inclusion may work in two directions: while higher financial literacy might lead to broader financial inclusion, operating an account or using other financial products may also deepen consumers' financial skills.

GRAPH 55

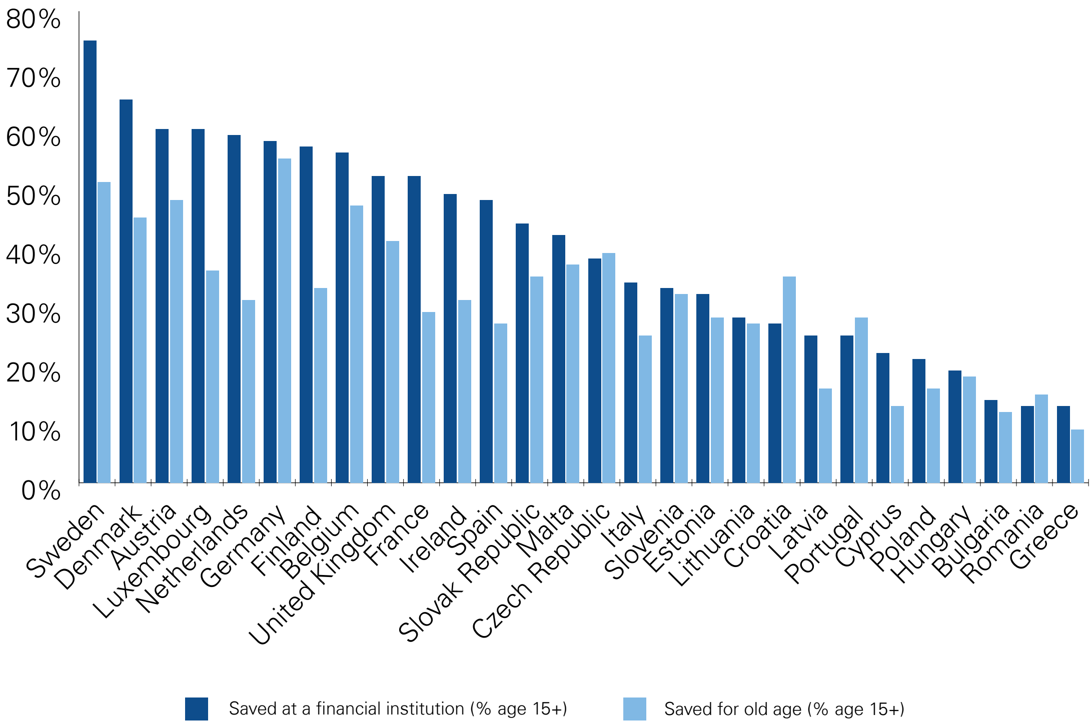
People holding an account at a financial institution (percentage of people aged 15 or more) in EU member states, 2017



Source: World Bank Global Financial Inclusion Database, KPMG analysis

GRAPH 56

Saving behaviour in EU member states, 2017



Source: World Bank Global Financial Inclusion Database, KPMG analysis

At European level, the European Commission has taken a number of initiatives in the financial education area, including the creation of an Expert Group on Financial Education (EGFE), as well as of a European database of financial education initiatives, development of online tools for teachers and organization of events and expert meetings on financial education matters. However, as education remains a national responsibility, the Commission has emphasized that the best way to increase financial education of consumers in the EU is by developing coordinated strategies in individual member states.

Significant work is already underway in various member states to develop and implement national strategies for financial education. An OECD survey indicates that in 2016 19 out of the 28 EU member states were planning, developing, implementing or revising a national strategy. In most European countries that have a national strategy, the development of such a framework was typically carried out through mapping of already existing financial education providers and initiatives, and consultations with stakeholders, and through assessing population needs in terms of financial education by means of qualitative and quantitative surveys.

Table 4

National strategies for financial education in the EU

Status of the national strategy for finantcial education	Number	Countries
A national strategy is being revised or a second national strategy is being implemented	5	The Czech Republic, the Netherlands, the Slovak Republic, Spain, the United Kingdom
A (first) national strategy is being implemented	9	Belgium, Croatia, Denmark, Estonia, Ireland, Latvia, Portugal, Slovenia, Sweden
A national strategy is being actively designed	3	France, Poland, Romania
A national strategy is being planned	2	Austria, Italy

Source: OECD report "Financial education in Europe – trends and recent developments" 2016, KPMG analysis

Selected examples of financial education programmes undertaken in the European Union include[15]:

- **Programmes targeting a broad audience**
  - **Websites and other online tools** - Public authorities in most European countries have developed one (or more) websites with financial education and/or financial consumer protection content. They are often managed by a financial authority, but in the case of France the main financial education website is managed by a non-for-profit organisation. All of them contain information about financial products and services existing in the country and most of them provide information and directions about financial decisions and potential problems at key life stages. A few websites complement basic information with interactive tools, like comparative tables, games, quiz and applications for mobile phones. Some authorities are also using social media to reach young people and the general public.
  - **Awareness campaigns and events-** Several authorities organise public events addressing a more or less wide target audience to increase the awareness of financial issues and provide information. In Portugal, the National Council of Financial Supervisors and other stakeholders organise an annual Financial Literacy Day every year on October 31 targeting the overall population and students. The event includes initiatives undertaken by stakeholders and the financial supervisors, such as conferences, workshops, debates, plays, games and other entertainment activities interacting with the public. Similar initiatives are also conducted by the private sector. For instance, the Danish Bankers Association conducted the first national 'Money Week' 2014 targeting children from 13-15 year old and developed teaching material. The European Banking Federation organised the first European Money Week in March 2015.
- **Programmes for adults**
  - **Financial education for workers and for retirement planning -** Given the relevance of pension reforms in European countries, several financial education initiatives for adults have a retirement focus. For example, the MoneyWise platform in the Netherlands organises every year a Pension3Day event, involving over 250 partner organizations to raise awareness on pension issues.
  - **Financial education and advice against over-indebtedness**
  - **Financial education for vulnerable groups -** Other financial education initiatives for adults target more specific groups of vulnerable people, such as the financially excluded, migrants, unemployed and other low income people
- **Programmes for young people** - Most European countries that have a national strategy for financial education indicated that young people and/or students are among the main target groups of their strategy.

[15] Source: OECD report "Financial education in Europe – trends and recent developments" 2016

- This is mirrored by a wide range of initiatives targeting young people, within and outside schools, including:

- **The introduction of financial education in the formal school curriculum** and the provision of financial education in school on a mandatory or voluntary basis. For example in the Czech Republic, the introduction of financial education in schools started in 2007 with the definition of the Financial Literacy Standards, developed by the Working Group on Financial Education led by the Ministry of Finance. Subsequently, financial education has been made mandatory at upper secondary school level since 2009 and at primary and lower secondary school level since 2013. In Denmark, financial education is part of the mathematics and social science's curriculum in lower secondary education ("Common Objectives") and its provision is compulsory.

- **The development of pilot projects teaching financial education in schools** – For example, the Bank of Italy and the Italian Ministry of Education implemented an experimental programme to incorporate financial education into the school curricula starting in the school year 2008/2009. The programme was piloted in selected primary and secondary schools and has been extended to a larger number of schools and students in the following school years. Participation in the programme is voluntary, and financial education is introduced through a cross-curricular approach. Teachers who decide to participate receive training and pedagogical resources from Bank of Italy's officials, focusing in particular on money and transactions, and tailored to the needs of the different age groups.

- **The development of teaching resources for school teachers and their professional development in financial education** - Various countries developed financial education resources for school teachers, whether or not financial education is part of the national school curriculum, and whether or not financial education provision is mandatory. These resources are usually developed and tested by (or in collaboration with) educational authorities. They are ready to be used but, at the same time, quite flexible, so that teachers can decide how to integrate them in their classes. Such resources are often made available to teachers through online platforms.

- The creation of other programmes and tools – not necessarily school-based – to address young people, such as social media, educational games and videos.

The experience in other EU member states has demonstrated that multiple stakeholders can play various roles in promoting financial education and the best results are derived from their coordinated efforts. In particular, governments can stimulate the growth of the life insurance sector by encouraging better understanding of personal saving and financial planning through education. This can be done by widening the teaching curricula in schools and universities. In a number of countries, increasing public awareness can be effectively carried with the local industry sponsoring educational material, under guidelines set by the Ministry of Education. Furthermore, involvement of regulatory and supervisory authorities, consumer organisations and NGOs in financial education programmes can step up efforts to improve financial education and literacy and financial inclusion of citizens of all age.

While a national strategy for financial education in Romania is still to be designed, a number of institutions and organizations have recently taken initiative in this area. Such initiatives were undertaken by the financial services regulators in partnerships with the Ministry of Education and the National Authority for Consumer Protection, by private sector companies and associations and by NGOs.

Examples of such initiatives include:

- Since 2009, the National Bank of Romania in collaboration with the Ministry of National Education and universities is running a series of projects to support financial education for students and teachers ("Let's talk about money and banks", "NBR – Open days for economics students" and "Academica");
- Also based on a collaboration between the Ministry of National Education and the National Bank of Romania, financial education was introduced in schools as an optional subject starting 2013; according to the Association for Promotion of Performance in Education, which manages the programme since 2014, around 250,000 primary school students attended financial education classes in the first five years since the programme was launched;
- In 2015, the Bucharest Stock Exchange initiated "Fluent in Finance" programme focused on investments and capital markets, featuring educational workshops for students and the general public, as well as an online financial education platform;

- Since 2016, the FSA in collaboration with the Ministry of National Education is running a number of financial education programmes seeking to improve the understanding of financial concepts by students in secondary school and high school. For 2017-2018, the programme includes approximately 22,000 students from 159 schools in 28 counties and Bucharest;
- In March 2018, a Practical Handbook for Financial Services Users aimed at increasing the financial literacy of consumers was launched under the umbrella of the Financial Education Platform, a public – private initiative assembling multiple stakeholders, including industry associations, the Ministry of National Education and the National Agency for Consumer Protection as well as other private and public institutions;
- Numerous financial education initiatives are undertaken as part of the annual awareness campaigns taking place in March each year – the Global Money Week and the European Money Week; the campaigns are aimed primarily and children and young people and activities range from classroom sessions to seminars and conferences seeking to improve financial literacy through financial education.

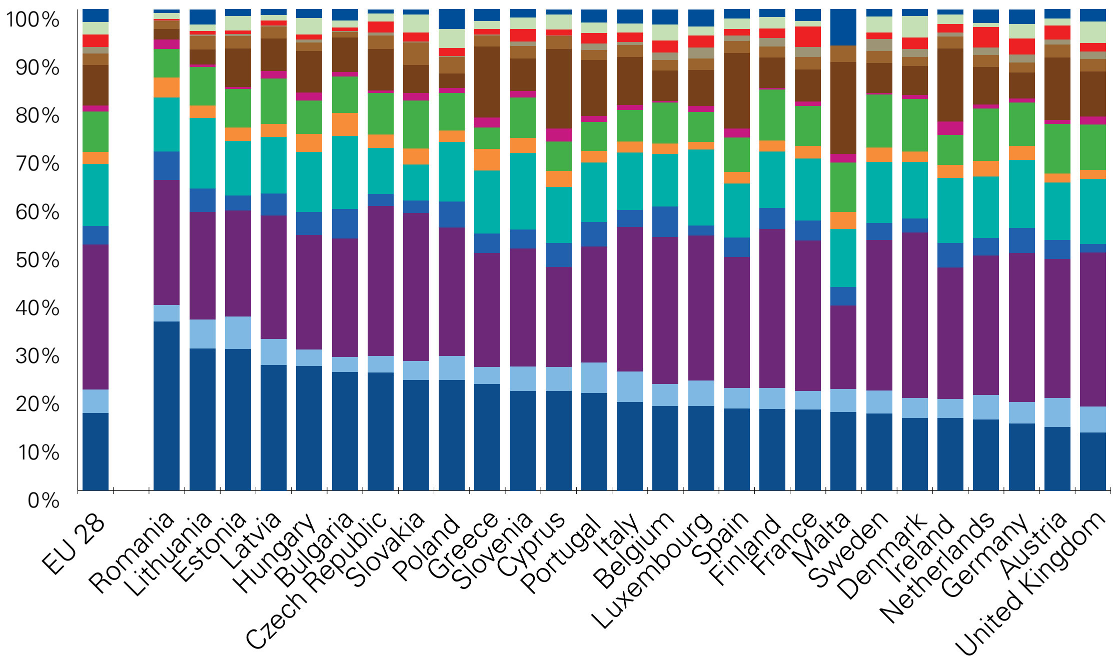
Inequality of opportunity remains a challenge for Romania. Schools in rural areas are less likely to provide quality education compared to urban schools. The gap in underperformance between advantaged and disadvantaged students in Romania is one of the highest in the EU (40% in science compared to 26% in EU-28 for science). In its 2015 Financial Literacy Report, OECD underlines that having a solid foundation in mathematics and reading is crucial for navigating the financial environment. As people in risk of social exclusion have a poor general education, they will be even more vulnerable in terms of financial education. Digital technologies can make financial services accessible to previously excluded segments of the population and young people, but can also give rise to new types of fraud, and can facilitate access to financial products that are disadvantageous to them. Regulators' role is to mitigate such risks and protect the consumers. In their turn, financially educated consumers can help ensure that the financial sector makes an effective contribution to real economic growth and poverty reduction.

4.2 Other key opportunities and challenges

At low levels of income per capita, basic needs take priority over insurance expenditure and old age savings. With the highest share in the EU of the total consumption expenditure, i.e. 70% going to items such as food, clothing, housing and health, Romanians are left with little additional income to invest in financial services and products that might ensure their future financial security. However, as the standard of living improves and the GDP per capita grows, life insurance penetration is expected to rise. As demonstrated by the experience of Western economies, the extent to which the additional available income will be allocated towards life insurance or private pensions will depend to a large degree on the public policies regarding social security, taxation of life insurance and pension products and redistribution of income between generations.

GRAPH 57

Final consumption expenditure of household by consumption purpose in EU member states, 2015



Recreation and culture
Communications
Transport
Health
Housing, household maintenance, water, electricity, gas and other fuels
Clothing and footwear
Food and beverages
Other
Financial services
Insurance
Social protection
Personal care
Restaurants and hotels
Education

Source: Eurostat, KPMG analysis

The capacity of life insurers and pension funds to protect and multiply the value of their assets in an environment of protracted low interest rates is a matter of concern for both customers and regulators. The recently passed Solvency II rules have strengthened the financial resilience of European insurers, and investment regulations are in place to diversify and limit exposure to risks. However, the low yields offered by the financial markets in which life insurers and pension funds are typically investing are eroding the long term value of savings. An illustration by Better Finance in its latest Pension Report demonstrates the impact of low rates of return on the adequacy of pensions. While European Commission's Action Plan for a Capital Market Union includes measures aimed at improving opportunities for European life insurers and pension funds to better invest their long-term assets, the low interest rate environment remains a challenge for the industry.

Table 5

Replacement income in relation to annual return on pension assets

Annual net return	Replacement income
Negative 1%	10%
Zero	12%
2%	17%
8%	49%

Source: Better Finance "Pension Savings: The Real Return" 2017 edition; the illustration assumes no inflation, saving 10% of income for 30 years, 25 year life expectancy at retirement and impact of fees, commissions and tax excluded.

A number of recent consumer protection regulations are expected to improve market conduct and transparency and thus increase consumers' confidence in insurance and pension products. The new regulations coming into effect in 2018, as well as the Solvency II framework implemented starting 1 January 2016, come as a response to previous shortcomings and failures within the industry and are aimed at strengthening consumer protection via improved conduct of business rules and disclosure requirements. However, there are concerns that the combined effects of such regulations might lead to an overload and duplication of information that is provided to customers. In this context, both market players and regulators are faced with the challenge of ensuring that communication with customers achieves its purpose of helping them access financial products and services suitable for their needs. An overview of recently passed regulations of relevance for insurers and pension funds is included below.

- **Packaged Retail and Insurance-based Investment Products (PRIIPs) Regulation** became effective on 1 January 2018 and aims to increase the transparency and comparability of investment products through the issue of a Key Information Document (KID). The KID is a standardised disclosure document, no longer than three pages, which has to be provided to all retail investors when purchasing PRIIPs, including investment funds, life insurance policies with an investment element, structured products and structured deposits. The aim of the KID is to provide retail investors with consumer-friendly information about the key features of investment products, including on what they might gain if they invest, the risks they are taking, and all the costs they will have to incur. This will enable consumers to better understand and compare investment products in terms of risks, costs and performance and thus to make more informed investment decisions.

- **Insurance Distribution Directive (IDD)** becomes effective on 1 October 2018 and regulates the design and distribution of insurance products by both insurance companies and insurance intermediaries. The main purposes of the Directive are to:
  - Prescribe the information that should be given to consumers before signing an insurance contract;
  - Impose conduct of business and transparency rules on distributors;
  - Clarify procedures and rules for cross-border distribution of insurance products;
  - Prescribe rules for the supervision and sanctioning of insurance distributors in case of breach of IDD requirements.

The rules apply to the sale of all insurance products. However, more prescriptive rules apply to those distributors that sell insurance products that have an investment element such as unit-linked life insurance contracts.

- **General Data Protection Regulation (GDPR)** effective as of 25 May 2018, is intended to strengthen data protection and data privacy rules for the benefit of all EU consumers. GDPR imposes new obligations and stricter requirements on all organisations involved in the processing of personal data, emphasising transparency, security and accountability.

- **Solvency II Directive** was implemented starting 1 January 2016 and introduced a new and harmonised regulatory framework for EU insurers. Solvency II provides greater protection for policyholders through an enhanced prudential regime, strengthening the quality and quantity of capital held by insurers in order to reduce the probability of failure. The new framework also aims to improve public transparency and market discipline via improved disclosure requirements.

Shifting customer expectations and technology require more innovation in product development and distribution. Traditional life insurance and annuity products are perceived as complex, difficult to understand and costly. Moreover, given their inherent orientation towards the longer term, they fail to provide the engaging, personalised experience that the younger generations of consumers are expecting. The industry has to reinvent itself in order to respond to renewed customer expectations for transparency, speed, convenience and customisation. To a great extent, this response is shaped by new technological trends such as:

- Data analytics – helps insurers better profile their customers and offer tailored products and services;
- Mobile technology and digital platforms – provide new methods for insurers to interact with their customers, allowing for an enhanced user experience and an increased penetration of their products and services;
- Biometric sensors incorporated in smartphones, wearables and medical devices – provide insurers with real time health and lifestyle data that can be used to define and adjust the insurance plans offered; they also allow insurers to actively engage with policyholders by setting and monitoring personalised health goals and rewarding achievements;
- Cognitive computing – improves data analysis and decision-making capabilities and boosts innovation in the sector, enabling also the introduction of intelligent chatbots or virtual agents;
- InsurTech – are technology startups that focus on insurance, bringing disruptive solutions and approaches to the industry and providing opportunities for partnerships to traditional insurers.

Technology and innovation may help thus providers of life insurance and annuities reach a wider base of customers with a lower cost and more personalised offer, contributing to an increased accessibility and affordability of their products.

Appendix 1 - References

For the purposes of our analysis, we have referred to a wide range of publicly available statistical information, studies and reports, which are listed below. For the information processed in the form of charts or tables we have also indicated the sources below the respective figures throughout the report.

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All statistical information that was extracted from the websites listed above and used for the purposes of this report, as indicated below each chart or table or in footnotes throughout the report, can be accessed on the respective websites free of charge.

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Appendix 3 - Glossary

CEE	Central and Eastern Europe
ECB	European Central Bank
EEA	European Economic Area
EGFE	Expert Group on Financial Education
EIOPA	European Insurance and Occupational Pensions Authority
EU	European Union
FSA	Financial Supervisory Authority
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
IDD	Insurance Distribution Directive
INS	National Institute of Statistics
IPO	Initial Public Offering
NBR	National Bank of Romania
NGO	Non-governmental organization
OECD	The Organisation for Economic Co-operation and Development
PRIIPs	Packaged Retail and Insurance based Investment Products

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