The Macroeconomic Impact on Romanians' Quality of Life

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Abstract

A country's economy is the main mechanism that requires increased attention, as, based on this machinery, all processes within the respective country function, including trade, production, sales, consumption, technological and educational progress, and it determines whether the respective country is going through a growth period or is in decline. Moreover, the economy dictates the quality of citizens' life for entire generations, which is why we have to study and understand it per se, especially since we bear scars from events that also occurred for economic reasons, such as wars, financial crises, real estate crises, aggressive inflationary phenomena. In this paper we intend to explain the economic mechanism. The operating principles and its effects over time, respectively its impact on the quality of life and the methods of protection.

Key words: GDP, employment, trade, quality of life
J.E.L. classification: E24, E51, E62, E70, F10

1. Introduction

The economic system allows a country to establish relations with other countries regarding the imports and exports of goods, the exchange of ideas and educational programs, the possibility to collaborate and strive for a better future from all points of view. In other words, due to economic relations, the countries can go through periods of growth of all their industrial branches in order to satisfy as many needs as possible and for a better quality of life. It is very important to study these processes because when we are indifferent to and not interested in the effects of this system, at some point the side effects we already know can occur, such as: the great economic crisis of the capitalist world due to overproduction, between 1929 - 1933; the Swiss franc crisis; the financial crisis of 2008. These events caused the big financiers to begin to study the market and to understand the principles of the economic machinery's operation in order to predict the upcoming events and to be able to protect us from them.

The most important macroeconomics' indices will be studied, in this paperwork, in order to determine how the quality of life of Romanians could evolve and be affected in the future. Depending on the previous statistics we can determine if this index will change in the future, whether positive or negative, and if it is to be negative, how we can intervene, and on which factors we need to focus the attention. In this way, we can predict and annihilate certain events that may affect our daily lives in a timely manner. We need to understand how the mechanism is built, and when it breaks, we need to know how to repair it or to protect ourselves against it. From a nation's perspective, if this reparation is not done at the right time it can affect generations.

2. Theoretical background

Transactions. The economic machinery can be compared by analogy with a living organism that has its own life and growth (an economic organism). In the case of the economy, growth in this sense is strictly based on transactions and basically the economy is represented by the sum of all the transactions carried out by its participants. People, through all the market relations, set this mechanism in motion and if there is a market economy, there will also be an economic machinery working according to the same principles it is based on today (Dalio, 2013).

At the basis of this mechanism all the transactions carried out by the participants take place, where the transactions are basic operations of buying and selling. People always trade with each other, whether on the commodity market or the food market, the automobile market, the real estate market. The essence of the transactions is that the buyer will always give cash or credit in exchange for goods, services or financial assets. As for credit, it is spent in the same way as the cash, so the sum of all the expenses is the sum of the expenses consisting of cash + credit, and from this point of view if we divide the total expenses by the total quantity sold, we find out the price. The economic machinery is set in motion by transactions and by understanding the essence of the transactions we can understand the economic system.

Credit. Credit can generate high or low values for goods and services, and this phenomenon is very easy to explain. When there is a limited amount of money on the market, the value of the goods cannot grow infinitely, and basically has a value threshold, but in the case of an economy with credit we come to the conclusion that the value of the goods can increase and decrease without a value threshold. For example, when more money is printed on the market, individuals end up having more money and will be able to spend more, and when someone is ready to give more money for a commodity or service, the seller will invariably increase the price because the most primitive method of establishing a price is governing, namely the demand and supply relationship. When the demand exceeds the supply, the price will increase and, respectively, when the supply exceeds the demand the price will decrease. It will do so in case of the price increase until the buyers will no longer have enough money to buy that commodity or service or at least they will not be willing to spend that amount. Later, we will notice how this process will reverse.

Economy with and without credit. In figure no.1 it can be observed the economic growth represented by the GDP (Productivity or economic growth) and time. The lines a, b, c, d, e are supposed to be the individuals that move the economy of a country, and from the graphic we notice that not all individuals will be as productive. There will be those who produce more and those who produce less, because this is human nature. There are a lot of factors that make some companies produce more and, thus, have higher sales and some to produce less and have lower sales. Overall, we have line c which is the arithmetic mean of all the growth slopes. In this case, the advantage is that in this type of economy there are no financial crises as there are no loans and if the company intends to earn more it will have to produce more. Undoubtedly, this slope will always have a fixed direction, without much oscillation. This type of economy has an effect on a long-term cycle (Johnson, Kwak, 2011, p.86).

Figure no. 1. An economy without credit

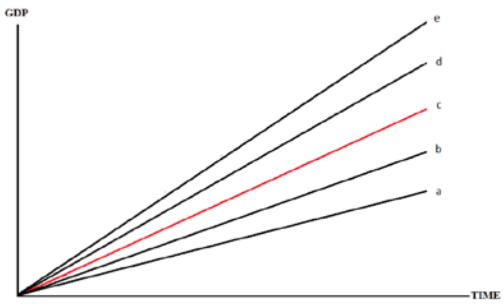
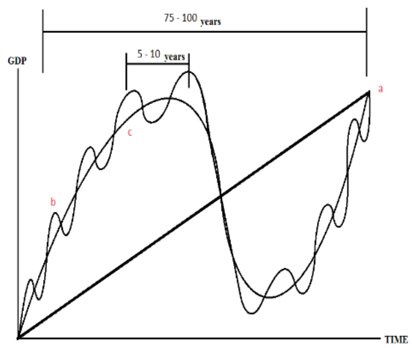


Figure no. 2. An economy with credit



Source: www.investopedia.com

In this model (figure no. 2) things are slightly different from an economy where there are no loans. They allow us to consume more than we produce, and when we must pay this loan, we start consuming less than we produce because our pocket does not allow us to spend more. Line a represents the case of the economy without loans. Line b represents the small cycles that have an interval of 5-10 years. Economically they do not make a big difference since they do not have very large fluctuations, although some of them have affected us a little, such as the last financial crisis of 2008. The big cycles (line c) are those that form in about 75- 100 years, and these are what make the economy decrease considerably, an example being the 1929 crisis (Galbraith, 2009, p.87).

The reference interest rate as a tool for economic equilibrium. Regarding the interest, we pay more attention to the reference interest rate, which is essentially different in that it is established by a country's national bank, in Romania's case by the National Bank of Romania, and according to it, the commercial banks set their interest for deposits and credits. For instance, investors pay a lot of attention to this fact since, if the reference interest rate is high, then the interest rate for the deposits, as well as the credits, will increase, and, similarly, if the reference interest rate decreases, the interest rate will also decrease for credits and deposits. If the National Bank of Romania decreases the reference interest rate, then the market participants will take loans in a much larger volume than they make bank deposits, because the interest rate is advantageous, and it is much more profitable to receive money than to block it. If the National Bank of Romania sets a high interest rate then the participants will make bank deposits, because they have an advantageous interest rate, and the number of loans will decrease because no one will intend to take a high interest rate loan. This instrument is one of the basic methods by which a national bank maintains the economic equilibrium of a country (Marshall, 1980, p.145).

Macroeconomic indicators. According to the specialized literature, the macroeconomic indicators are statistical data that indicate the current state of a state's economy according to certain sectors, such as the banking sector, industry, labor market, trade, etc. With the help of these data, the pulse of the economy, its permanent state, as well as its reaction to the impact of several external factors can be traced. The most important macroeconomic indicators that reflect most realistically the state of the economy are: *gross domestic product (GDP); consumer price index; employment indicator; balance of international payments; fiscal and monetary policy*.

Knowing these indicators is a basic activity in perceiving the overall picture of the economy, its current direction and the direction it will take in the future, so it is necessary to understand each one individually and also to correlate them in order to perform a complex analysis regarding what is happening in the current market and what is about to happen in the future market, in order to know the possible effects on the quality of citizens' life (Acemoglu, Robinson, 2013, p. 103).

Foreign exchange market. The foreign exchange market or FOREX (from English: Foreign Exchange) is a foreign exchange trading market. The foreign exchange market allows participants to exchange a certain currency for another one. Foreign exchange exists as a result of international trade and investments, so companies that import or export goods can buy these goods in one currency and sell them in another currency. That is why they need to convert some of the money they receive into the currency in which they pay for the respective goods. Also related to the foreign exchange market there is speculation, which practically constitutes most of the transactions on this market. As such, the respective market does not have a physical location or a central point, like the other financial markets, but it operates with banks, corporations and individuals throughout the world, 24 hours a day, except for the weekends (Hazlitt, 1988, p.204).

Stock market indices. Stock market indices are synthetic instruments that show the general economic situation of a country. In other words, a stock market index is made up of various companies listed on the stock exchange, chosen according to liquidity or capitalization, usually being part of a sector. At the global level we also have other indices, such as: The United Kingdom – FTSE, Japan – NIKKEI, Germany – DAX, Europe - EURO 50, Hong Kong - HANG SENG, U.S. – DJI 30, SP 500, NQ 100 (Bernanke, 2013, p.45).

3. Romania`s macroeconomic situation

Gross domestic product (GDP). Romania's GDP from 1986 to 2017. In 2017, the GDP value was USD 211.8 billion, and, in terms of previous values, the highest value was in 2008, i.e. USD 213.6 billion. Thus, we can notice that Romania's GDP is constantly growing and tends to cross the 2008 threshold, when growth was forced by the economic boom before the financial crisis. Compared to the previous period, more precisely 1986 - 1998, Romania's GDP did not have wide fluctuations and the general direction was a lateral one, with oscillations between USD 25.1 billion in 1992 and USD 41.9 billion in 1998.

Reference interest rate. In 2002 the reference interest was 34.60%, the maximum of the specified period, in 2003 the reference interest was 17.40%, in 2005 there was the 8.45% threshold, in 2007 the interest was 6.10%, and in 2010 - 6.25%, which did not change until August 2011. With the decrease in the reference interest rate comes the increase in the demand for loans, and with the increase in the number of loans, the economy also increases as we are a society based on consumption and human psychology is based on consumption. For this reason, if the reference interest rate is low, the number of easily given loans is increasing and the economy is growing, which causes the rise in prices, which, in time, will lead to inflation.

Consumer Price Index. In 2005, when on July 1, 2005, after 15 years of high inflation, the leu was denominated, so that 10,000 old lei (bank symbol ROL) became 1 new leu (bank symbol RON), as a result, the CPI index fell slightly and its value in 2016 decreased to about -3%, as a result of the denomination of the leu.

Employment indicator. The unemployment rate had a massive increase in 2002, with the maximum threshold of 8.9% and, subsequently, in 2013 another maximum threshold of 7.7%. The unemployment rate in Romania is not very aggressive compared to other countries, which are in a worse position, such as Bulgaria and Hungary, where the unemployment rate in 2010 for Bulgaria was 11.4% and for Hungary 11.3%, compared to Romania 7.1%, which is healthy for an economy because essentially there is a labor force that produces, which leads to economic growth. Nevertheless, it is very important to draw attention to the unemployment rate, but also to Romania's population (Lewis, 2010, p.58).

Romania's population. Since 1920 Romania's population has increased to a maximum of 23.21 million in 1990, after which we notice a declining trend, and annually the population decreases progressively, until 19.6 million in 2017. Basically, we have a decrease of 3.61 million in 27 years or a decrease of 133.7 thousand per year. The population plays a very important role in an economy because even if the unemployment rate is not very aggressive, if the population decreases at a rapid pace, then the long-term economic situation will suffer, since more people will have to work for the same commodity, and at some point if more and more people emigrate from the country in search for a better quality of life, we will see an increase in the unemployment rate.

Balance of international payments. Romania's trade deficit increased to EUR 1.23 billion in March 2019, from EUR 1.06 billion in the same month of 2018. Annually, imports increased by 2.7%, reaching EUR 7.36 billion, as purchases increased mainly from the EU countries (4.2%). Meanwhile, exports increased by 0.4%, to EUR 6.13 billion, sales to EU countries increased by 2.5%, while non-EU sales decreased by 6.4%. Considering the first three months of 2019, the trade deficit increased to EUR 3.64 billion, from EUR 2.74 billion in the corresponding period of the previous year. The balance of trade in Romania averaged EUR -635.64 million from 1992 to 2019, reaching a maximum value of 137.60 million euros in February 1996 and a record of -2542.10 million in September 2008. In other words, Romania's trade balance is negative, which pulls our economic system down, and also growth and the quality of life.

Fiscal and monetary policy. The intermediate objectives of the macro-prudential policy targeted by the National Bank of Romania, fully harmonized with the European recommendations in the field, are: (1) reducing and preventing the excessive growth of loans and indebtedness; (2) reducing and preventing excessive non-correlation of maturities and lack of liquidity on the market; (3) limiting the concentration of direct and indirect exposures; (4) limitation of moral hazard, and (5) strengthening the resilience of financial infrastructures.

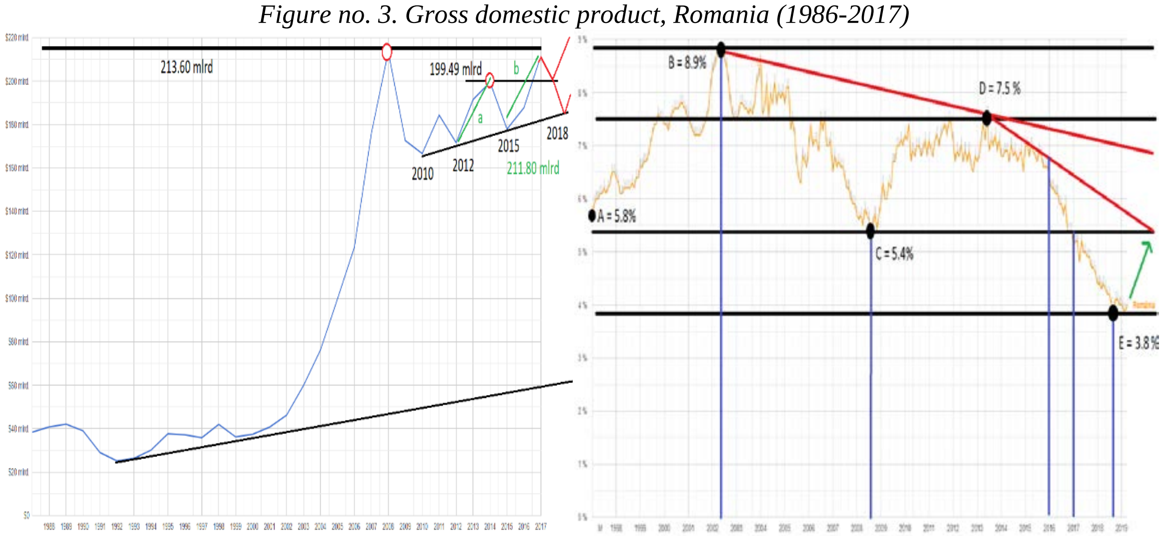
4. Impact on the quality of life

The analysis and correlation of the macroeconomic indicators aims to establish their interdependence and their evolution in order to draw a conclusion regarding the initially established purpose, namely the impact of these indicators on the quality of life of Romanians.

4.1. Analysis of macroeconomic indicators in Romania

Regarding the unemployment rate, in Romania we do not encounter an extremely serious phenomenon. On the contrary, Romania is at the average level of the European Union countries, with a 3.8% unemployment rate in 2019. For the next 5 years, the unemployment rate is projected to increase graphically, where the estimated value would be the resistance area of 5.4% and this would be the lowest value because, on average per cycle, the unemployment rate increases between 2- 3% for 5 years. If the cyclical movements are respected, in 2024 we will have a threshold of 6.9%, or in 2025 a threshold of 5.9%. In order to support the technical analysis, help comes from the fundamental analysis. The unemployment rate is directly dependent on Romanian companies’ situation (Barro, 1997, p.254)

Figure no. 3. Gross domestic product, Romania (1986-2017)



Source: www.countryeconomy.com/gdp/romania

** mlrd=b./bn./bil.*

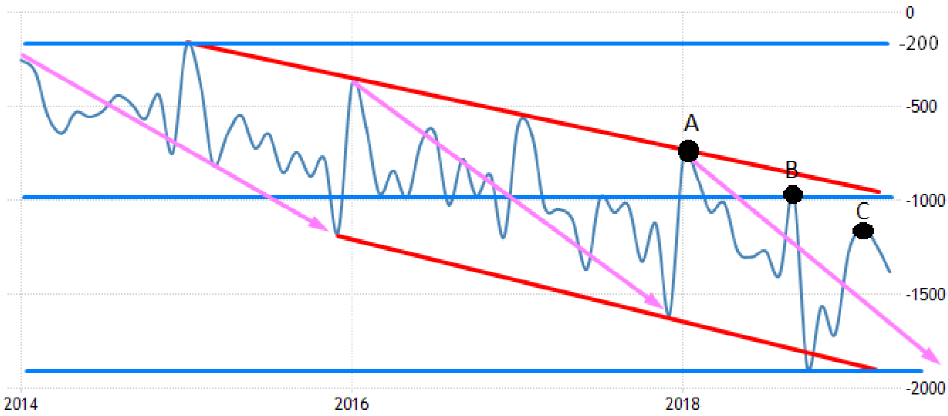
Lines a and b are the cyclical movements of the last 5 years, where line a represents the increase from 2012-2015, when for 2 years we have an increase from USD 170 billion to USD 200 billion. Line b represents the increase in 2015 from USD 180 billion to USD 211 billion in 2017. The conclusion is the following: the last 2 cycles of GDP represent 2 increases of 2 years each with approximately 30 billion USD per cycle. After each increase, there was a correction (decrease) that was progressive after each impulse (increase). This shows that in the next period we expect a correction of GDP. Thus, the graphical analysis reflects that Romania’s GDP for 2018 has the possibility to decrease to the value “1”, of USD 200 billion or value “2”, of USD 185 billion. Then, we expect a new impulse that will be the movement that cancels the last historical maximum of 2008, the threshold of 213.6 billion USD. If Romania’s GDP will fluctuate with the same impulses, for 2021 GDP could reach the threshold of USD 213 billion, which is the value "1" or the value “2”, of 215 billion. USD. As a calculation formula we have the previous speculated value on the correction + the preceding value of the impulse created, according to the cyclic movements. In other words, for the year 2021, Romania’s GDP, following the graphical analysis, will have to take an upward direction and practically form new historical highs, which means an economic growth for Romania in terms of productivity (Roubini, Mihm, 2010, p. 99).

By assessing the National Bank of Romania's fiscal and monetary policy to keep the country's economy stable, we noticed an increase in the reference interest rate, which means that the National Bank of Romania slows down excessive lending and keeps inflation under control.

From the data taken from the National Bank of Romania's website we find that: in the meeting of May 15th 2019, the Board of Directors of the National Bank of Romania decided the following:

1. Maintaining the monetary policy interest rate at 2.50% per year;
2. Maintaining the reference interest rate for deposits at 1.50% per year and the reference interest rate for credits at 3.50% per year;
3. Keeping the current levels of minimum, mandatory reserve rates applicable to liabilities in lei and foreign currency of the financial institutions.

Figure no.4. Balance of trade, Romania (2014-2019)



Source: www.ceicdata.com/en/indicator/romania/trade-balance

The National Bank of Romania tends to keep the interest rate at 2.50% per year. In fact, inflation increased to 4.03% in March 2019 and 4.11% in April, from 3.83% in February, above the range of variation of the target and above the predicted level. If the market follows its negative forecast character and the economic decrease will be more and more aggressive, then the National Bank of Romania will have to lower the reference interest rate in order to increase the economic activity, which will cause an inflation increase, and changes in the monetary policy (Socol, Angelescu, Socol, 2009, p.89)

Regarding the Consumer Price Index, we have mentioned in the previous chapter an expectation of a decrease in this value which today is 4.0%, and by 2021 inflation is expected to be 3.0% (according to National Bank of Romania's analysis). We should also mention that the National Bank of Romania increased the reference interest rate from 1.75% to 2.50% for the first time since 2008, which confirms the possibility that inflation will reach the forecasted value in the coming years. If inflation decreases, the prices will also decrease, which tells us that people have less money to meet their personal needs and are less willing to spend, and if people do not spend the process opposite to inflation begins, namely deflation. In this case, we expect individuals to make bank deposits instead of spending on goods and services, which confirms the possibility of a decrease in GDP by 2020 (Sowell, 2003, p. 184).

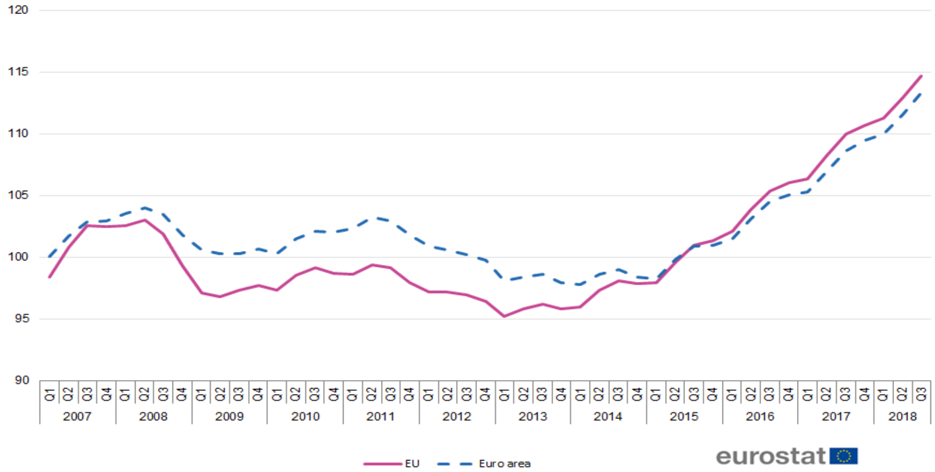
4.2. The lending system, the real estate market and the financial crisis

Due to an excess regarding the lending system, the economy is in a stage of aggressive growth, when both an increase in prices and easily obtained bank loans, also called ID card loans are seen. A serious problem is the use of the loans and how they are used, as most people who received loans at least once in their life were buying a house or did it because the real estate market is an investment tool. From that moment, the demand for real estate increases. If banks offer loans too easily, this means a low reference interest rate and people have a greater spending ability. One should bear in mind that in Romania, at present, the reference interest rate is down to a historical minimum, hence we also observe a tendency of real estate market growth (Krugman, 2009, p.78).

As we can see in figure no 5., for the EURO area the 2008 price was 100-105 points, then it increased to about 115 points until 2018. This fact demonstrates the easiness in obtaining a loan in accordance with the low reference interest rate and the investments in the real estate market. Hence, for the last 4 years, most of the Romanian cities have been subjected to real estate constructions, such as Bucharest, Constanta, Cluj.

When prices rise aggressively and inflation appears, the national / central bank aims to keep the country's economy stable, respectively it has no interest in inflation being very high, thus it increases the reference interest rate, or as it is also known in English the "Interest Rate". When the central bank raises the reference interest rate, fewer people can get a bank loan since they understand that a high interest rate is not advantageous for them and they decide not to get a bank loan for what they set out to buy, rather they make bank deposits, so less and less will take loans when the reference interest is high. Then comes the time when fewer people take loans and for this reason the incomes decrease. When an individual spends less, another individual will have a lower income, and if incomes fall and interest rates of bank loans remain the same or even increase, this is a sign that the economy tends to decrease. In terms of interest, there are 2 types, namely fixed and variable, and in addition we have the reference interest rate, established by the national bank. Variable interest is made up of fixed interest (established by the national bank) and the ROBOR/Romanian Interbank Offer Rate. ROBOR is defined as the average interest rate at which banks lend each other. A fixed interest loan has a higher interest rate than a variable interest loan, which is why most people tend to get a variable interest loan. The problem is that if you want to get a mortgage, in most cases only the variable interest loan will be available on the market.

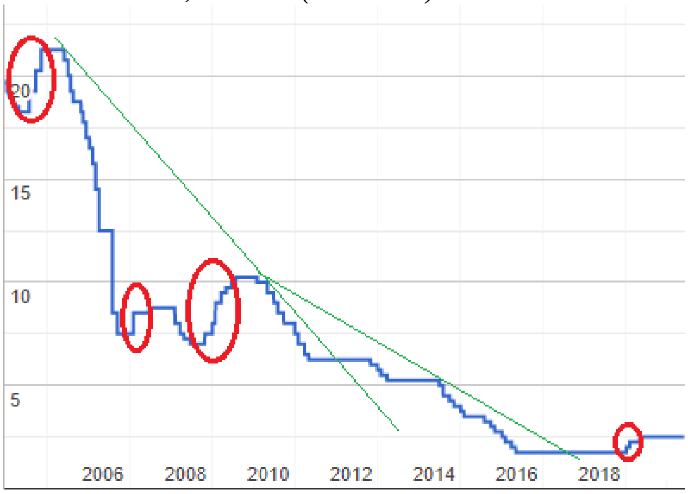
Figure no.5. Real estate price index, Europe (2007-2018)



Source: www.eurostat.eu

The biggest problem is that individuals do not understand this mechanism and take variable interest mortgages and do not study the long-term side effects. An example was the case of 2008 when many people suffered because of loans. When you get a fixed interest loan over a long period of time, the risks are very low, but when you get a variable interest loan, then that is a problem because the interest rate set by the national bank may remain the same, but the ROBOR may vary enormously. If we look at the statistics, before 2008 loans were given very easily, especially mortgage loans, respectively many people who, even if they were unable to cover those loans in the future, would still get them. There was a case in the United States in which a person got a real estate loan using a dog as forfeit. This phenomenon was also found in Romania (Tooze, 2018, p.47).

Figure no. 6. Reference interest rate, Romania (2006-2018)



Source: www.bnr.ro

In figure above we see the periods of reference interest increase, namely the years 2005, 2006, 2008 and 2018, and between 2009 and 2018 there was no increase in the reference interest, which can be noticed in the decreasing maximums, according to the graphical analysis. In 2018 we can observe the increase in the reference interest rate from 1.75% to 2.50%.

Figure no. 7. The evolution of the S&P 500 index

Source: Trading View

In the graphic above, figure no.7, we can notice that the U.S. is currently at an all-time high, which means that growth and the economy prosper better than ever. The purple areas are the prices of support and resistance. The red arrows represent the distance from the fall of the crisis of 2008 and the speculation of the next crisis. If the economy turns out to be at a saturation threshold, the S&P500 index has the possibility to fall to 2100.0 USD from 2900.0 USD (its current value), which would mean the fall like in the crisis of 2008. However, if the crisis turns out to be more aggressive, the next fall is at the price 1600.0 USD from where it should recover and start an upward trend. (Sowell, 2011, p.133).

5. Conclusions

Romania suffered a significant decrease in economic output during the crisis. The recession started in the third quarter of 2008 and sharply increased in 2009. As the effects of the crisis on Romanians' quality of life we can mention the following. The number of employees has steadily decreased since the fourth quarter of 2008, from a maximum value of 4.83 million in September 2008 to 4.1 million in December 2010. Their number has decreased considerably in the private sector, with more than half a million, especially in manufacturing, construction, retail and transportation. In the public sector, the number of employees had a different path: it increased until January 2009 and began to decrease only since February 2009. Therefore, the job crisis is perceived as a generalized one.

If in the summer of 2009 the economic crisis was perceived as being "only on television", in the autumn it became very "real" and by the spring of 2010 it "kneeled" a large part of the population, being accompanied by the decrease in income and increase in the cost of living.

As the crisis deepened, more and more people began to think that the economic crisis dramatically deteriorated the country's economic situation and their family's living conditions. In August 2010, over 92% of the population considered that the economic crisis seriously affected the Romanian economy and 84% stated that their households were "a lot" or "very" affected. Families with children, especially those with parents / relatives at work abroad, seem to be confronted with greater negative effects than families without children. During 2009 and 2010, the political crisis and government's dysfunctions aggravated the negative effects of the economic crisis because successive governments did not provide effective support to the population. Therefore, an increasing share of the population associated the crisis with "sadness", "confusion" and "chaos". The middle-income population perceived the strongest impact of the economic crisis. Most of the destroyed jobs were theirs, their salaries were cut and / or their remittances were reduced. Therefore, the perceived impact on households of formal sector employees and remittance beneficiaries evolved from "low" / "medium" (in June 2009) to "significant" (in December 2010). And this "significant" impact refers to the worsening of the households' standard of living.

Financial protection strategies in case of a new financial crisis can be of several types and are vital since the last crisis affected the Romanians' quality of life, some were left without homes, wages were halved, many of the companies went bankrupt, which led to an increase in the unemployment rate, the population had to migrate abroad so as to find a job in order to support their family, etc. However, not all the countries were affected by the financial crisis in 2008, i.e. the Nordic countries (Norway, Finland, Sweden). In order to overcome such a phenomenon, we must learn from those who have already dealt with it at least once. Among the strategies used by the inhabitants of these countries are the following: (1) Debt should never exceed productivity; (2) Construction of at least 3 sources of income; (3) Diversification of investments in several industries; (4) Bank deposits in diversified currencies; (5) Investing in financial education; (6) A security fund, where we have: Monthly expenses x 6 = Expenses for 6 months.

People need a financial education in order to be able to understand at least at a basic level the economic cycles and to understand when it is profitable to get a loan or when it does not make sense to decide on this aspect. They need to understand the importance of loans, but also what impact they can have on their quality of life, and if people take a loan in foreign currency, they must know what events are to be expected in the future and make an assessment on the possible effects. Unfortunately, we are deficient in the field of financial education, therefore, the best solution is for the population to get educated, to apply financial strategies and, therefore, enjoy a prosperous future.

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