THE IMPACT OF POPULATION FINANCIAL INDICATORS ON THE NATIONAL ECONOMY

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Abstract: Through this paper we aim to create an image both in terms of description and in terms of graphical representation, with multiannual coverage (2007-2019), the evolution of financial indicators of the population and their impact on the national economy. The main objective is to establish the basic pillars of the concentrated table of financial indicators of the population in terms of the values of absolute primary indicators, based on which were calculated the values of the three relevant relative indicators that characterize the financial situation of the population, and which indicators influence directly the potential and performance of the national economy. The results of the paper are given by the evolution of the primary indicators regarding the characterization of the financial status of the population in the period 2007-2019, especially for the active population, and are directly influenced by the quality of employment of eligible and employed adults, and also sustenability of the national economy.

Keywords: financial indicators, sustainability, national economy. *JEL Classification:* G17, Q01, O11.

1. Introduction

The work is carried out in parallel with the permanent development of its own database, with the intention of creating long series of data, as a basis for dynamic analysis, and for the further development of new applications. The consistency of the set of indicators was built on the basis of data from the National Institute of Statistics, the Ministry of Public Finance and the National Bank of Romania, regarding both the definition of the primary database and the calculation of dynamic series of proposed indicators. Moreover, the harmonization of data in 2019 was also given by the fact that some of the primary indicators are reported in 2020, but some of these primary indicators stop as compared to 2019. The evolution of the financial situation of population was surprised by building and calculating a set of 16 indicators. These indicators were proposed by the CCFM and are based on the main data sources at macroeconomic level (annual reports of the National Bank of Romania and the National Institute of Statistics, as well as data from the National Accounts). Based on these status indicators, a series of useful information was presented that can be correlated with macroeconomic statistics, national accounting, financial accounting and banking statistics, for the period 2007-2019.

Methodology of research

For the construction of the relevant indicators selected for the purpose of assessing the financial situation of the population, for the period 2007 - 2018, the following absolute indicators were used:

AFE = Total financial assets, receivables, of the residential sectors, including, cash, deposits, loans, securities, etc.

AFP = Gross financial assets: financial assets held by the population at a given time, regardless of nature, maturity, degree of risk and forms of holding; it is also called the financial wealth of the population; is both a flow and a stock indicator, representing the receivables of the population in the form of bank investments, IPB, or financial investments, IPF, ie, cash, demand deposits, term deposits, short-term securities, long-term securities , loans, etc .;

LAC = Liquid financial assets: cash (from income) + transferable deposits + securities with a term of less than 3 months, held by the population, in order to be able to repay the loans committed at maturity.

CHB = Total monetary expenditure of the population: expresses the expenditures related to the consumption of goods and services, for investments, taxes and financial expenses, including interest.

CHD = Interest expenditure: expresses the monetary expenditure made annually by the population for the payment of interest

NPP = Net financing capacity of the economy, all resident sectors, positive or negative (financing required): represents the net financing capacity of the economy, as the difference between all financial assets, financial receivables of resident sectors, and all their financial debts, the difference can be, as a rule, positive, but sometimes also negative, signifying a need to finance the economy.

CNP = Net financing capacity of the population, positive or negative (financing required): represents the net financing capacity of the population, as the difference between the financial assets, the financial receivables of the population, and its financial debts, the difference can be, as a rule, positive, but sometimes also negative, signifying a need for financing the population.

CRP = Bank loans received by the population: the total bank loans received by the population, but also loans on other banking instruments, regardless of maturity and risks.

CTP = Total financial receivables of the population: financial saving, total financial receivables of the population, regardless of nature, instrument and institution.

DEP = Bank deposits of the population: the total of bank deposits and other bank savings instruments of the population, regardless of maturity, risks or income generated.

DTP = Financial debts of the population: total financial debts of the population, regardless of nature (banking or non-banking), instrument and institution, recorded at the end of the year.

ECF = Financial savings: the total savings, through financial instruments of any kind, held by the population at the end of the year, in the form of their banking and financial assets, constituting the total financial receivables of the population (CTP).

FBP = Gross fixed capital formation of the population: represents the value of durable goods intended for purposes other than consumer, utilitarian, with a certain value, acquired by the population, usually through investments, to be used for a period longer than a year

IFV = Financial investments of the population, banking and non-banking: the monetary value of the financial investments of the population, banking and non-banking, made over a period of one year, meaning the acquisition of banking and financial saving instruments.

IPF = Investments in the financial market, in various financial securities, of the population, in shares and participations (ACP) and in debt securities, such as bonds (TLO)

IVF = Total physical investments of the population (IVT - IFV): the monetary value of the total physical investments of the population of the population, made during a period of one year, meaning payments for the acquisition of durable goods, with a lifespan over one year;

IVT = Total investments of the population: total investments of the population, made during a period of one year (IVF + IFV)

PFE = Total financial liabilities, commitments, debts of the institutional sectors of the economy, according to SNA, on the whole the difference between the receivables and financial debts of the sectors generating a negative or positive balance, the negative balance representing a need for external financing.

PFP = Financial liabilities of the population, commitments, at a given time, regardless of nature, maturity, degree of risk and forms of holding; it is also called the financial debt of the population; it is both an indicator of flow and stock, representing

commitments, debts of the population in the form of liquid debts, in the short, medium and long term, banking and non-banking.

GDP = Gross domestic product: the main macroeconomic aggregate of the national accounting system that expresses the gross value added of goods and services reached in the last stage of the economic circuit, which were produced within a country by domestic and foreign economic agents in a certain period time, usually a year.

POP = Population: a group of individuals gathered by citizenship ties and by establishing domicile on the territory of the state, in relation to which the latter exercises its sovereign power the entire set of data from which a sample is selected and in connection with which the auditor wishes to formulate its conclusions, statistically being evaluated at the end of the year, according to the data from the Statistical Yearbook.

Rdi = Interest rate collected (on deposits), which expresses the interest rate collected by the population on savings instruments, such as bank deposits, purchased financial securities, etc.

Rdp = Interest rate paid (on loans) which expresses the interest rate paid by the population on committed loans, such as bank loans.

VBP = Cash income of the population: the total cash income obtained by the population, for periods of one year, from any available source, such as cash income, but also other liquidity available during the year.

VDB = Gross disposable income of the population: the balance of the income account and measures the part of the created value that the population has for final consumption and gross economy (from which it achieves financial savings).

The relevant indicator sheets are presented below.

Indicator 1 (calculation procedure)

1. Section: I. Financial macroeconomics;

2. Chapter: 4. Assessing the financial condition of the population;

3. Paragraph: 4.3. Evaluation of the saving structure;

4. Name: The rate of financial saving of the population;

5. Symbol: Ref.

6. Degree of synthesis: derived indicator;

7. Data source: Financial Accounts - NBR and Statistical Yearbook;

8. Calculation formula:

$$\operatorname{Re} f = \frac{ECF}{PIB} \times 100$$

9. Explanations of the previous notation:

• ECF = total savings, through financial instruments of any kind, held by the population at the end of the year, in the form of their banking and financial assets, constituting the total financial receivables of the population (CTP).

• GDP = Gross domestic product: the main macroeconomic aggregate of the national accounting system that expresses the gross value added of goods and services reached in the last stage of the economic circuit, which were produced within a country by domestic and foreign economic agents in a certain period of time, usually one year.

10. Economic significance: it is an indicator of stock; the indicator highlights the financial saving per inhabitant, the saving potential of the population; the indicator can be determined by stock or flow (savings made during the year).

11. Utility in economic analysis: allows the analysis on the whole, but also on types of savings (through indicators derived from detail) of the saving potential of the population and comparative analysis in time or space.

12. How to use in the paper: the indicator can be correlated with other generic indicators of financial saving of the population, but also with indicators specific to the

financial status of the population; at the same time, the indicator can be integrated in the network of indicators for evaluating the financial status of the population, which highlights their interconnections and co-determinations in the perspective of a complex synthetic evaluation indicator.

Indicator 2 (calculation procedure)

- 1. Section: I. Financial macroeconomics;
- 2. Chapter: 4. Assessing the financial condition of the population;
- 3. Paragraph: 4.3. Evaluation of the saving structure;
- 4. Name: Coefficient of inclination to save the population;
- 5. Symbol: Cie;
- 6. Degree of synthesis: derived indicator;
- 7. Data source: Financial Accounts NBR and Statistical Yearbook;
- 8. Calculation formula:

$$Cie = \frac{(\Delta ECF/ECF_b)}{(\Delta VBP/VBP_b)}$$
, where "b" means the basic period

9. Explanations of the previous notation:

• ECF = total savings, through financial instruments of any kind, made by the population during the year, in the form of their banking and financial assets, constituting the total financial receivables of the population (CTP).

• GNP = total monetary income obtained by the population, for periods of one year, from any available source, such as income of any monetary nature, but also other liquidity available during the year

10. Economic significance: it is an indicator of flow; the indicator highlights, through flows, the degree of saving of the monetary incomes of the population and, implicitly, the dynamics of its financial potential, being useful for the knowledge and design of the banking and financial policies.

11. Utility in economic analysis: allows the analysis of the willingness to save of the population, being useful for the correlative analysis with the indicators of income, consumption of the population, and with the banking indicators specific to the population, of the dynamics of saving and investment potential of the population.

12. How to use in the paper: the indicator can be correlated with other generic indicators of saving and financial indebtedness of the population, but also with indicators specific to the financial status of the population; at the same time, the indicator can be integrated in the network of indicators for assessing the financial status of the population, which highlights their interconnections and co-determinations in the perspective of a complex synthetic evaluation indicator.

Indicator 3 (calculation procedure)

Section: I. Financial macroeconomics;

1. Chapter: 4. Assessing the financial status of the population;

2. Paragraph: 4.3. Evaluation of the saving structure;

3. Name: The coefficient of financial indebtedness of the population;

4. Symbol: Chip;

5. Degree of synthesis: derived indicator;

6. Data source: Financial Accounts - NBR and Statistical Yearbook;

7. Calculation formula:

$$Cip = \frac{DTP}{POP}$$

8. Explanations of the previous notation:

• DTP = total financial debts of the population, regardless of nature (banking or non-banking), instrument and institution, recorded at the end of the year.

• POP = total population: a group of individuals gathered through citizenship ties and by establishing domicile on the territory of the state, in relation to which the latter exercises its sovereign power the entire data set from which a sample is selected and in connection with which the auditor wants to formulate his conclusions, statistically being evaluated at the end of the year, according to the data from the Statistical Yearbook

9. Economic significance: the indicator highlights the financial debt per inhabitant, the indebtedness of the population, which depends, first of all, on the quality of the financial system and the level of income and the purchasing power of the population; the indicator can be determined on stock or on flow (debts incurred during the year).

10. Utility in economic analysis: allows the analysis on the whole, but also on types of indebtedness (through indicators derived from detail) of the indebtedness capacity of the population and the comparative analysis in time or space.

11. How to use in the paper: the indicator can be correlated with other generic indicators of saving and financial indebtedness of the population, but also with indicators specific to the financial status of the population; at the same time, the indicator can be integrated in the network of indicators for evaluating the financial status of the population, which highlights their interconnections and co-determinations in the perspective of a complex synthetic evaluation indicator.

Research results

The calculation of the absolute primary indicators in the period 2007 - 2019 was performed based on the existing data in the Financial Accounts of the National Bank of Romania and the National Accounts of the National Institute of Statistics.

Calculation of the values of the absolute primary indicators

The realized values of the absolute primary indicators, based on which the values of the 16 relevant relative indicators that characterize the financial status of the population, for the years of the analyzed period, were presented in the table below.

According to the Table below, in 2019, the primary indicators registered mainly higher values compared to the previous year. There are also indicators with values lower than 2018, respectively Bank deposits of the population, Financial saving, Gross formation of fixed capital of the population, Interest rate received by the population on savings instruments, Financial investments of the population, Population¹.

The population's financial assets increased in 2019, influenced mainly by cash and deposits (the main financial receivable of the population) and the increase of the stock of the "other receivables" component (due to the increase in the flow of operations such as participation interests, equity transactions, as well as shareholder transactions).

Financial assets in the category of loans granted by households have increased, mainly due to the acquisition of government securities under the "Treasury" program, issued by the Ministry of Public Finance in 2019.

Regarding the financial commitments of the population, they increased in 2019, compared to the previous year, the main financial commitments being loans and other amounts to be paid. The share of loans contracted by households in GDP decreased in 2019, compared to 2018, a cause being the NBR Regulation no. 6/2018 for the amendment and completion of the Regulation of the National Bank of Romania no. 17/2012 on some credit conditions, with subsequent amendments and completions, which establishes a debt

¹ For the indicator "Population" we recalculated the value for the years 2017 and 2018, according to the Press Release no. 77/19 March 2020, INS. By default, the values of the dependent indicators, the Income and Money Expenditures of the population (VBP and CHB) registered small changes for the mentioned years.

ceiling for loans granted to individuals (measure applied since the beginning of 2019). The share of loans in the total financial commitments of the sector had a similar trend.

| | mancial status of the population in | | | | | | | in the | ic periou 2007 - 2017 | | | | | | |
|-----------|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|--------|--------|-------------|--|
| Indicator | UM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| AFP s | mil.lei | 410503 | 413696 | 334346 | 337052 | 349705 | 416456 | 538323 | 641026 | 675641 | 720233 | 770649 | 738759 | 919817 | |
| AFP f | mil.lei | 32457 | 144882 | -8349 | 25885 | 70943 | 83271 | 103083 | 20327 | 137318 | 44592 | 50416 | -31890 | 181058 | |
| AFE f | mil.lei | 291730 | 331335 | 148074 | 126276 | 197748 | 159740 | 89456 | 16902 | 46308 | 110372 | 82474 | 64146 | 320653 | |
| ALC s | mil.lei | 78920 | 97462 | 109002 | 117502 | 129722 | 137460 | 149317 | 161737 | 176782 | 202739 | 222592 | 239304 | 272803 | |
| CHB | mil.lei | 136480 | 143443 | 153427 | 154003 | 158928 | 165379 | 173291 | 183398 | 209825 | 254450 | 263114 | 347072 | 392497 | |
| CHD | mil.lei | 8766 | 12890 | 12078 | 10544 | 10367 | 8665 | 8068 | 6660 | 6147 | 6379 | 7241 | 7531 | 9767 | |
| CNE f | mil.lei | -49277 | -55186 | -23108 | -18155 | -28041 | -8334 | 7471 | 13488 | 14683 | -4096 | -17518 | -14515 | -10492 | |
| CNP f | mil.lei | 8701 | 13650 | 21321 | 32435 | 26139 | 46223 | 90559 | 16106 | 11800 | 64151 | -22287 | 25056 | 26135 | |
| CRP s | mil.lei | 80460 | 113589 | 116452 | 120195 | 121578 | 122628 | 122130 | 120513 | 107953 | 113037 | 114283 | 119436 | 160000 | |
| CTP s | mil.lei | 410503 | 413698 | 334345 | 290620 | 313666 | 370742 | 461740 | 493591 | 516051 | 563012 | 584969 | 624747 | 680974 | |
| DTP s | mil.lei | 101479 | 137544 | 137835 | 151112 | 158433 | 163460 | 165072 | 161484 | 151870 | 189838 | 205594 | 219986 | 233185 | |
| DEP s | mil.lei | 64990 | 80518 | 94930 | 105388 | 113068 | 123595 | 132287 | 139559 | 146780 | 163462 | 178660 | 241686 | 222399 | |
| ECF s | mil.lei | 281719 | 268151 | 267400 | 258937 | 275787 | 329856 | 412876 | 436677 | 456547 | 499919 | 530414 | 534176 | 532039 | |
| FBP | mil.lei | 8284 | 9284 | 9625 | 29886 | 30836 | 33345 | 35348 | 34333 | 35206 | 34044 | 36053 | 37098 | 36913 | |
| IFV f | mil.lei | 9808 | 12257 | 4163 | 15413 | 17625 | 40629 | 84756 | 19767 | 9420 | 9919 | 10207 | 11197 | 10525 | |
| IPF | mil.lei | 236389 | 220124 | 245714 | 133568 | 130908 | 163880 | 157090 | 139319 | 133049 | 123137 | 155152 | 192389 | 236638 | |
| IVF f | mil.lei | 27248 | 37814 | 26599 | 23217 | 25049 | 19325 | 7155 | 1101 | 7987 | 58169 | 55870 | 41954 | 48223 | |
| PFE f | mil.lei | 211552 | 156639 | 90358 | 75978 | 102196 | 77445 | 99516 | 25177 | 46989 | 151464 | 71223 | 22234 | 36949 | |
| PFP f | mil.lei | 29592 | 28140 | -1738 | -4442 | 1478 | 563 | 665 | 2556 | 6674 | 14429 | 12191 | 15739 | 13339 | |
| PIB | mil.lei | 416007 | 514007 | 501139 | 533881 | 565097 | 595367 | 637456 | 668590 | 712588 | 765135 | 856727 | 940478 | 105980 3 | |
| POP | mii | 22562 | 22542 | 22516 | 22481 | 22434 | 22391 | 22346 | 22298 | 22242 | 22223 | 22215 | 22197 | 22175 | |
| Rdp | % | 13,30 | 15,80 | 17,30 | 14,11 | 14,00 | 13,26 | 11,32 | 9,47 | 5,69 | 5,64 | 5,93 | 5,94 | 7,69 | |
| Rdi | % | 6,70 | 9,55 | 11,89 | 7,29 | 6,24 | 5,31 | 4,00 | 2,92 | 1,24 | 0,60 | 0,69 | 2,14 | 1,97 | |
| VDB | mil.lei | 251208 | 330147 | 313038 | 321980 | 324227 | 336621 | 448548 | 470408 | 426795 | 434358 | 492590 | 611554 | 667122 | |
| VBP | mil lei | 200549 | 265161 | 279977 | 276993 | 255752 | 171336 | 180202 | 250692 | 239711 | 296852 | 310832 | 400611 | 458224 | |

| Table 1. The evolution of the primary indicators regarding the characterization of the |
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| financial status of the population in the period 2007 - 2019 |

Source: databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2019, Monthly Statistical Bulletin from December, 2007 - 2020), Report on financial stability, 2020, NBR, Bucharest

The values of the relevant relative indicators that characterize the financial status of the population.

Indicator 1. Rate of financial savings of the population (Ref)

It highlights the degree of financial saving of the population, in other words, the degree of financial capitalization, the formation of the financial wealth of the population, being influenced by the evolution of population income, interest rates and dividends, and the development of the banking system.

The calculation formula is as follows:

$$\operatorname{Re} f = \frac{ECF}{PIB} \times 100$$

Determination of the indicator for the analyzed period:

| Indicator | | Period | | | | | | | | | | | | |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--|
| indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| ECF s mil.lei | 281719 | 268151 | 267400 | 258937 | 275787 | 329856 | 412876 | 436677 | 456547 | 499919 | 530414 | 534176 | 532039 | |
| PIB mil.lei | 416007 | 514007 | 501139 | 533881 | 565097 | 595367 | 637456 | 668590 | 712588 | 765135 | 856727 | 940478 | 1059803 | |
| Ref % | 67,72 | 52,17 | 53,36 | 48,50 | 48,80 | 55,40 | 64,77 | 65,31 | 64,07 | 65,34 | 61,91 | 56,79 | 50,20 | |

Source: databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2020, Monthly statistical bulletin from December, 2007 - 2019)

Figure 1. Evolution of the financial saving rate of the population in the period 2007 -



2019

financial savings rate

Source: databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2020, Monthly statistical bulletin from December, 2007 - 2019)

In the analyzed period there is a decreasing trend of the level of this indicator, at the end of 2019 it has a value by 6.60 pp lower than in 2018, being maintained a decreasing rate similar to that of 2018 compared to 2017, respectively by 5, 11 pp. It is obvious that the population's investments in financial securities were mainly determined by the revenues generated by the gradual development of the Bucharest Stock Exchange and by the impact of the financial crisis. The indicator can be divided into types of financial savings, and can be correlated with indicators specific to the financial situation of the population, calculated below.

Indicator 2: Population saving coefficient (Cie)

The calculation formula is as follows:
$$(A E G E / E G E)$$

$$Cie = \frac{(\Delta ECF/ECF_b)}{(\Delta VBP/VBP_b)}$$

Where:

b = previous, basic period

Determination of the indicator for the analyzed period:

| | | | | pv | 1100 2 | 1007 - | 2017 | | | | | | |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| T H (| Period | | | | | | | | | | | | |
| Indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| ECF mil.lei | 281719 | 268151 | 267400 | 258937 | 275787 | 329856 | 412876 | 436677 | 456547 | 499919 | 530414 | 534176 | 532039 |
| VBP mil.lei | 200549 | 265161 | 279977 | 276993 | 255752 | 171336 | 180202 | 250692 | 239711 | 296852 | 310832 | 400611 | 458224 |
| ΔECF | 56149 | -13568 | -751 | -8463 | 16850 | 54069 | 83020 | 23801 | 19870 | 43372 | 30495 | 3762 | -2137 |
| ΔVBP | 1991 | 64612 | 14816 | -2984 | -21241 | -84416 | 8866 | 70490 | -10981 | 57141 | 13686 | 89604 | 57613 |
| $\Delta ECF/ECF_b$ | 0,25 | -0,05 | 0,00 | -0,03 | 0,07 | 0,20 | 0,25 | 0,06 | 0,05 | 0,10 | 0,70 | 0,12 | -0,56 |
| $\Delta VBP/VBP_b$ | 0,01 | 0,32 | 0,06 | -0,01 | -0,08 | -0,33 | 0,05 | 0,39 | -0,04 | 0,24 | 0,23 | 6,55 | 0,64 |
| Cie | 25.00 | -0.16 | -0.05 | 3.00 | -0.88 | -0.61 | 5.00 | 0.15 | -1.25 | 0.42 | 3.04 | 0.02 | -0.88 |

Table 3. The evolution of the coefficient of inclination towards saving in theperiod 2007 - 2019

Source: databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2020, Monthly statistical bulletin from December, 2007 - 2019)





coefficient of inclination towards saving the population

Source: databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2020, Monthly statistical bulletin from December, 2007 - 2019)

The evolution of the level of this indicator highlights two phenomena: in certain periods (2008, 2009, 2011, 2012, 2015 and 2019) the coefficient of increase of the saving was exceeded by the coefficient of increase of the monetary incomes, because in other periods (2007, 2010, 2013, 2014, 2016, 2017, 2018) the financial saving to register an increase coefficient of saving much higher than that of money income.

Although there was a reduction in the increase of money income of the population in 2019 compared to 2018, respectively from 6.55 to 0.64, the coefficient of increase reduced from 0.32 to 0.22, in the period 2007 - 2018, the saving of the population, reflected by the increase coefficient of saving, has decreased recently (reaching a negative

minimum of (-0.44) in 2019 compared to 2018), and the coefficient of propensity to save the population has decreased from 25.00 (in 2007 compared to 2006) reaching a negative minimum of (-0.88) for 2019 compared to 2018. At the same time, it will be found, through other indicators, that the degree of indebtedness of the population will increase.

Indicator 3: Coefficient of indebtedness of the population (Cip) The calculation formula is as follows:

$$Cip = \frac{DTP}{POP}$$

Determination of the indicator for the analyzed period. **Table 4. The evolution of the indebtedness coefficient in the period 2007 - 2019**

| Indicator | Period | | | | | | | | | | | | l |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mulcator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| DTP mil.lei | 101479 | 137544 | 137835 | 151112 | 158433 | 163460 | 165072 | 161484 | 151870 | 189838 | 205594 | 219986 | 233185 |
| POP mii loc | 22562 | 22542 | 22516 | 22481 | 22434 | 22391 | 22346 | 22298 | 22242 | 22223 | 22215 | 22197 | 22175 |
| Cip mii lei/loc | 4,50 | 6,10 | 6,12 | 6,72 | 7,06 | 7,30 | 7,39 | 7,24 | 6,83 | 8,54 | 9,25 | 9,91 | 10,52 |

Source: databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2020, Monthly statistical bulletin from December, 2007 - 2019)





indebtedness coefficient of the population

Source: databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2020, Monthly statistical bulletin from December, 2007 - 2019)

It is found that the indebtedness of the population, expressed per capita, increased significantly, but we must also take into account the effect of inflation, in nominal terms the degree of indebtedness increasing, during the analyzed period the evolution of the indebtedness coefficient increased to 10.52 pp, respectively with 0.91 pp in 2019 compared to 2018.

Obviously, the evolution of this indicator must be correlated with the evolution of interest rates, the purchasing power of the population, and other financial indicators of the population, the indicator highlighting the borrowing capacity of the population, but also the quality of the banking and financial system.

Personal conclusions and recommendations

The interpretation of the evolution of the indicators took into account the correlated and corresponding evolutions of the absolute values of the primary indicators, presenting the evolutions, on the same graph, of the relevant relative indicators, but also of the determining primary indicators. Moreover, the primary data identified were based on the databases of the National Bank of Romania (from the National Financial Accounts 2007 - 2019 and the monthly bulletins from 2007 to 2020) and the National Institute of Statistics (Statistical Yearbook of Romania, editions 2007 - 2019, Monthly statistical bulletin from December, 2007 - 2020).

The analyzes so far of the financial indicators relevant to the households sector, allow to draw some generic conclusions regarding the characteristics highlighted by the population, from a financial point of view, in the analyzed period, namely:

Fluctuating evolutions of relevant financial indicators, often contrary to the financial dynamics of a market economy, mainly due to two factors: the strong intrusion of the political factor, accompanied by insecure and uncompetitive governance; the distortions and distortions that characterized the evolution of the financial system, of the banking system in full financial crisis, after 2009, and until 2018. For example, the evolution of the indicator Income Banking Rate (Rbv) highlights the evolution of the income of the degree of employment of the population in activities on the banking and financial markets, allowing to know the state and evolution of the financial behavior of the population, for the forecast and design of this indicator, as well as for the elaboration of monetary policies. The reduced financial potential of the population, compared to that of the countries recently entered the EU, but also compared to the needs of the development of the saving-investment cycle, primordial to the beneficial evolution of the economy. In this sense, the assertion of the population as the priority internal financier of the economy, often unique, highlights the shortage of investment opportunities specific to households, in an economy with financial resources that are rather unviable, authentic. Relevant indicators on assessing the financial status of the population are directly influenced by the evolution of nationally and European representative indicators, such as: the evolution of economic growth, the evolution of the active population in the economy and labor market, the evolution of public finances and the evolution of demographic change at national and European level.

The evolution of the primary indicators regarding the characterization of the financial status of the population in the period 2007 - 2019, especially for the active population, is directly influenced by the quality of employment of fit and employed adults. Furthermore, we appreciate that indicators such as the rate of financing the income of the population, the rate of financial saving of the population, net financial assets and the net financing capacity of the economy are directly influenced by employment in economic sectors and the evolution of the labor market. both at national and European level.

Decorations and dynamic deviations between the relevant financial indicators, derived from absolute financial indicators, which highlights the still turbulent state of financial flows and circuits in the economy. At the level of 2019, in the EU, we notice that Romania is, from the perspective of both components (assets and liabilities), at the "tail" of the ranking (according to Table no. 2.4.19). Financial assets relative to GDP increased in the EU, but in Romania, households have the lowest value of financial assets relative to GDP, only a third of the EU average in 2019. *Regarding the limitations of the research, we*

can appreciate that the relevant statistical data for 2020 are not yet available. Moreover, we intend to continue research with the same research topic.

We recommend deepening the existing indicators at national level, so that the orientation of the action directions at national level is in the direction of sustainable development at national level.

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