

# ANALYSIS OF CHANGES IN KEY MACROECONOMIC INDICATORS OF THE EUROPEAN UNION COUNTRIES DURING THE DIFFERENT PERIODS OF ECONOMIC CYCLES

## EIROPAS SAVIENĪBAS DALĪBVALSTU GALVENO MAKROEKONOMISKO RĀDĪTĀJU IZMAIŅU ANALĪZE EKONOMISKĀ CIKLA DAŽĀDOS PERIODOS

**Simona Lapackienė** Utena University of Applied Sciences, simona.mas10@gmail.com, Utena, Lithuania

**Lukas Laucys** Utena University of Applied Sciences, laucyslukas@gmail.com, Utena, Lithuania

**Aidas Saladžius**<sup>3</sup> Utena University of Applied Sciences, aiddasca@gmail.com, Utena, Lithuania

Supervisor Dr. **Sandra Jakštienė**

---

**Abstract.** *The article delves into the changes in the main macroeconomic indicators of the European Union (EU) countries in the different periods of economic cycles. The research problem is formulated by raising a problematic question: what are the changes in the main macroeconomic indicators of the European Union countries (Lithuania, France, Sweden and Greece) in the different periods of the economic cycles? The aim is to analyse the main changes in the macroeconomic indicators of the European Union countries in the different periods of economic cycles. Research methods: analysis of scientific literature, analysis of statistical data, grouping of variables, graphical representation.*

*After analysing the changes in gross domestic product in Lithuania, France, Sweden and Greece, it can be stated that the largest positive change in gross domestic product (GDP) is observed in Lithuania, when it almost doubled at the end of the analysed period. The analysis of the statistical data revealed that the highest unemployment rate was recorded in 2010, during the global financial crisis and declining trend until 2020. It can be observed that changes in the unemployment rate during the period under review were affected not only by the global financial crisis in 2008, but also by the effects of the global health crisis in 2020. The analysis data on the dynamics of the inflation rate revealed that the highest inflation was observed in Lithuania. The data showed that in Lithuania in 2015 deflation was observed, possibly due to the introduction of the euro in the country. Meanwhile, higher deflation was observed only in Greece in 2013-2015 and 2020.*

**Keywords:** *economic cycles, gross domestic product, inflation, unemployment.*

---

## Introduction

**Relevance of the topic.** The scientific literature rarely and sometimes fails to find a new and comprehensive analysis of macroeconomic indicators in the EU member states. Although the interest in the EU member states economy and its evolution has been growing in recent years. There is widespread interest in how the economies of the EU member states have changed since the 2008 global financial and economic crisis, which began in the United States and quickly spread to almost every country in the world. This analysis of the main macroeconomic indicators of the EU member states and their change would help to form an overview and answer the **research problem** – what are the changes of the main macroeconomic indicators of the European Union countries during the different periods of the economic cycles?

**The aim of the study** is to analyse the main changes in macroeconomic indicators of the European Union countries during the different periods of economic cycles.

To achieve this aim, the following **tasks** were set up:

1. To perform a theoretical analysis of the main macroeconomic indicators in the context of economic cycles.
2. To analyse the changes in the main macroeconomic indicators of the European Union countries in 2009-2020 during the different periods of the economic cycles.

**Research methods:** analysis of scientific literature, analysis of statistical data, grouping of variables, graphical representation.

## Theoretical analysis of key macroeconomic indicators in the context of economic cycles

As the phases of economic downturn and upturn are random and irregular, economists and various economic researchers use and select various macroeconomic indicators that reflect specific economic cycles to assess and predict such economic cycles. These indicators best reflect the characteristics of the selected economic cycle and allow to

<https://doi.org/10.17770/iss2022.7020>

assess the current and predict other cycles, their level of strength and the overall level of development of the country and the economy. Gurskij and Liučvaitienė (2016) single out, use and emphasize that the most important macroeconomic indicators for assessing the country's economic situation are: gross domestic product, inflation and unemployment. Other authors include interest rates, foreign direct investment, exports, wages, and so on (Table 1).

Table 1

**Key Macroeconomic Indicators** (Compiled by the authors)

<b>Author</b>	<b>Key indicators</b>
Koncevičienė and Janickaitė (2011)	Industry output growth rate, interest rates, price inflation rate
Jakštienė (2013)	Exports, foreign direct investment, gross domestic product, purchasing power of the population, unemployment rate
Dabravalskaitė (2014)	GDP, inflation rate, unemployment rate
Matulevičius (2013)	Interest rate, foreign direct investment
Danilevičienė & Lukšytė (2017)	Foreign direct investment, exports, wages and salaries
Vaitkė & Martinkutė- Kaulienė (2018)	GDP, corporate capitalization, interest rate
Kriščiukaiytė (2021)	GDP, consumer price index, interest rate, retail trade volume, unemployment rate

As can be seen, macroeconomic indicators cover many economic indicators, but many researchers believe that the main macroeconomic indicators are such as gross domestic product, unemployment rate, inflation.

Table 2

**Summary of Economic Cycle Concepts** (Compiled by the authors)

<b>Author, year</b>	<b>The concept of economic cycle</b>
Barnett (2002)	The economic cycle is a long economic wave.
Girdzijauskas et al. (2009)	These are constant fluctuations in the economy from recovery (peak) and peak during recession and crisis to new recovery.
Grinin & Korotayev (2010)	Periodic fluctuations in output around the mean line, where recurring rises and falls can be distinguished.
Čiegis (2012)	The economic cycle consists of periodic but irregular fluctuations in output due to fluctuations in the unemployment rate and inflation rates.

The country's economic progress and its economic cycles are an important part of each country's economic policy, so we do not escape the relevance and importance of this topic at the present time. Gurskij and Liučvaitienė (2016) conducted a study and performed an analysis of the concepts of economic cycles of different authors in the scientific literature, which is presented in Table 2.

As the analysis shows, there is no single definition to explain the economic cycle. However, the analysis reveals a consensus among researchers that economic cycles are related to certain processes in the economy or to periodic fluctuations in output. Gurskij and Liučvaitienė (2016) also distinguish the classification of economic cycles (Table 3).

Table 3

**Classification of economic cycles** (Compiled by the authors, Gurskij & Liučvaitienė, 2016)

<b>Nature of classification</b>	<b>Cycle types</b>
Cycle duration	Short – term cycles, medium – term and composite medium – term cycles, long cycles (long waves).
Extent of difficulty	Moderate, severe, very severe.
Origin of essential technical economic processes	Induced by technological revolutions, essential initial inventions, initial inventions, inadequate institutions, behaviour of producers and consumers, and other circumstances.
Institutional management and prevention options	Avoidable cycles, unavoidable cycles.
Scope of activity	Agriculture, industry.
Specifics of manifestation	Occurring in the foreign exchange market, individual industries, etc.
Form of spread	Structural, branching.
Territorial layout	International, national.
Limited market capacity	Operating at infinite capacity, variable capacity and finite capacity markets.

As can be seen, economic cycles are classified according to the broad nature of their occurrence. The classification of economic cycles distinguishes the following phases of economic cycles:

- 1) Upturn – during economic upturn, the level of general demand and supply increases, the level of employment, wages, corporate profits, demand for imported goods and services, investment, and many other indicators increase;
- 2) Peak – this phase can be described as the highest point of the economic upswing cycle;
- 3) Recession is the opposite phase of rise, when almost all the listed indicators of the country are declining;
- 4) Crisis – often, but not always, is reached after a severe stage of recession, and this phase can be described as the opposite of the aforementioned peak, when almost all the aforementioned indicators reach their lowest value. The crisis is described as the lowest stage of the economic cycle.

In summary, macroeconomic indicators are very important because economists and other economic researchers often take them and their developments into account when analysing countries and their economies. After analysing the macroeconomic indicators, it can not only be drawn conclusions about the country’s economic period, but also forecast certain future cycles based on the already existing signs. This not only makes it possible to find out and prepare for the potential challenges that the country will still have to face, but also to benefit from the experience it has already brought in dealing with them.

### Empirical research methodology

*Research problem:* what are the changes in the main macroeconomic indicators of the European Union countries during the different periods of the economic cycles in 2009-2020?

The *aim of the empirical study* is to perform the analysis of the changes in the main macroeconomic indicators of Lithuania, Sweden, France and Greece during the different periods in 2009-2020 of the economic cycles.

In order to analyse the changes in the macro indicators of the European Union countries, the changes in the main macroeconomic indicators of Lithuania, Sweden, France and Greece in the selected period were taken. The empirical study uses the method of statistical data analysis, and the data are compared and grouped. The data were processed in Microsoft Excel 2019 program. The research period is 2009-2020.

*Indicators used in the study.* The indicators selected for analysis are taken from the official information provided by the European Union:

- Gross domestic product of Lithuania, Sweden, France, Greece, million EUR.
- Unemployment rate in Lithuania, Sweden, France, Greece, in per cents.
- Inflation rate of Lithuania, Sweden, France, Greece, in per cents.

### Research results

In order to analyse the main macroeconomic indicators of Lithuania, Sweden, France and Greece, the analysis of statistical data was performed and the following macroeconomic indicators were examined: GDP, unemployment rate, inflation rate.



Figure 1. Change in Lithuania’s GDP in 2009-2020, million EUR  
(Compiled by the authors, Oficialiosios statistikos portalas, 2022)

In order to analyse the level of development of the country and to compare it with the other chosen countries, the analysis of the change in the gross domestic product of Lithuania in the study period 2009-2020 was performed (Figure 1).

Analysing Lithuania’s GDP and its percentage change in the period 2009-2020, it can be seen from Figure 1 that Lithuania’s GDP has risen sharply over the whole period under review, showing a medium-term and severe GDP growth cycle. The largest positive percentage change in the country GDP is seen in 2011 – GDP rose by 11.71 per cent, which is an increase of 3283 million euros. Large positive percentage changes are observed in 2012, 2017,

2018, 2019, they increased from 6.68 to 8.71 per cent. In 2010, 2013, 2014, 2015, 2016, 2020 the positive percentage change in GDP changed slightly from 1.32 per cent to 4.88 per cent. The analysis revealed that the smallest positive percentage change is observed in 2020, it remained at 1.32 per cent. The highest level of GDP was observed at the end of the period, amounting to 49507 million euros in 2020, and the lowest level was at the beginning of the period, in 2009, it amounted to 26879 mill euros. Comparing the whole period of 2009-2020, it can be seen that it has changed significantly – it increased by 22610 million euros, which is as much as 84.06 per cent positive percentage change (GDP almost doubled).

In order to find out the employment rate of the Lithuanian population in the analyzed period, an analysis of the change in the unemployment rate of the Lithuanian population was performed (Figure 2).

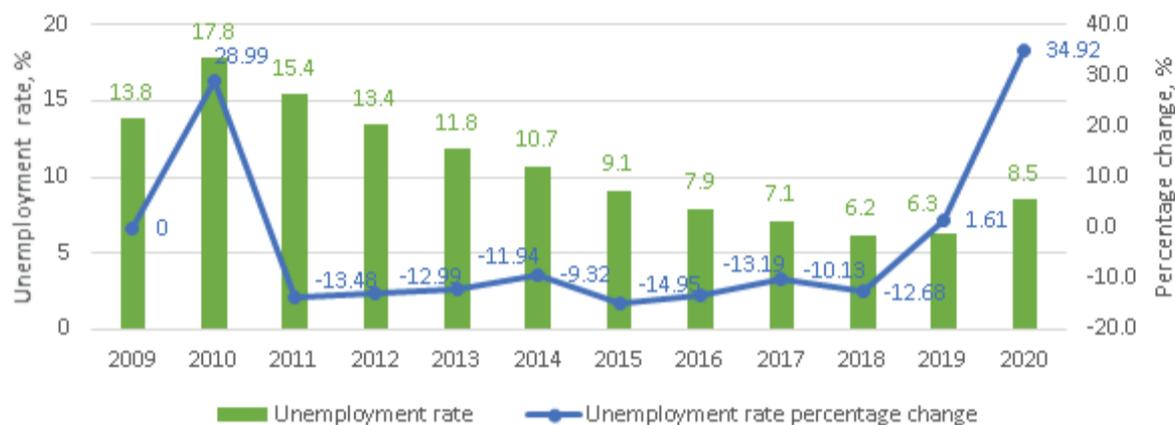


Figure 2. Dynamics of the Lithuanian unemployment rate in 2009-2020 period, %  
(Compiled by the authors, Oficialiosios statistikos portalas, 2022)

Analysing the Lithuanian unemployment rate in the period 2009-2020, a decreasing trend of the unemployment rate is observed. The data shows short-term slight increases in the unemployment rate in 2009-2010 and 2019-2020, as well as a medium-term and severity decline in the unemployment rate in 2010-2018. The data shows that the highest unemployment rate is seen in 2010, it remained at 17.8 per cent, while the lowest unemployment rate was observed in 2018 and it remained at 6.2 per cent. Over the whole period, the unemployment rate fell by 5.3 percentage points. Analysing the change in percentage changes over the whole period, it is observed that it was stable for almost the entire period (it fell by 9-15 per cent), the increase in the percentage change in the unemployment rate is most visible only in 2010 and 2020 – the unemployment rate rose by 28.99 and 34.92 per cent.

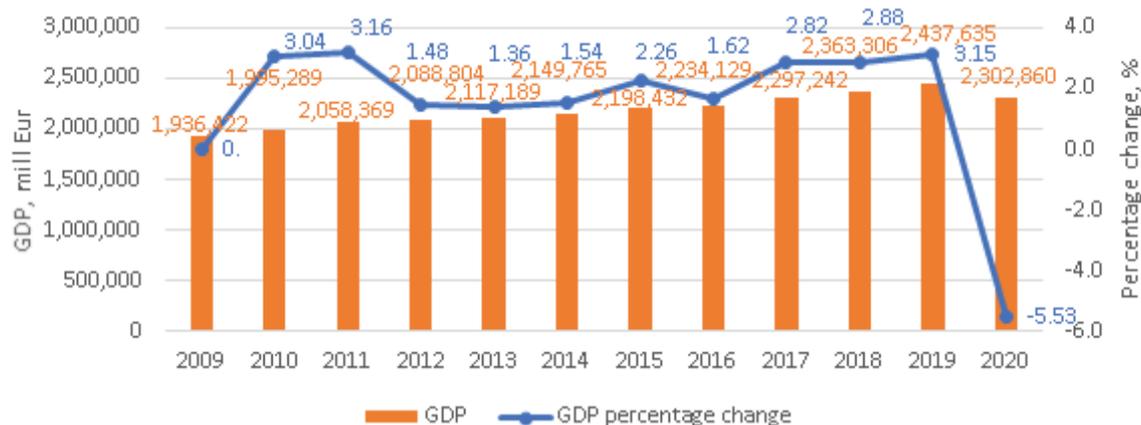
Another important macroeconomic indicator in examining each country's economy is inflation. Figure 3 shows the dynamics of the inflation rate in Lithuania in 2009-2020 period. Analysing the changes in the inflation rate in Lithuania (compared to the previous year) in the period 2009-2020, Figure 3 shows unstable changes in the inflation rate over the whole period and 5 short-term, mild cycles. There are 2 short-term increases in 2010-2011 and 2015-2017, and 3 short-term declines in 2009-2010, 2011-2015 and 2017-2020. The data shows that the highest increase in the inflation rate is seen at the beginning of the period in 2009 it was 4.2 per cent, while the lowest inflation rate (its decline, also known as deflation) was observed in 2015 and it was -0.7 per cent. Inflation was volatile throughout the whole period, declining by 3.1 percentage points to just 1.1 per cent at the end of the period.



Figure 3. Changes in the inflation rate in Lithuania in 2009-2020 period, %  
(Compiled by the authors, Oficialiosios statistikos portalas, 2022)

Analysing the change in the percentage change over the whole period, similar trends with the inflation rate are observed, the percentage change was unstable and several large jumps are seen (2011, 2015, and 2017). Declines in the percentage change of inflation ranged from -100 per cent to 0 per cent for most of the period. The sharpest jump in growth was seen in 2017 at 428.57 per cent and inflation rose by 3 percentage points, while the smallest is seen in 2015 at -450.00 per cent, and inflation fell by 0.9 percentage points.

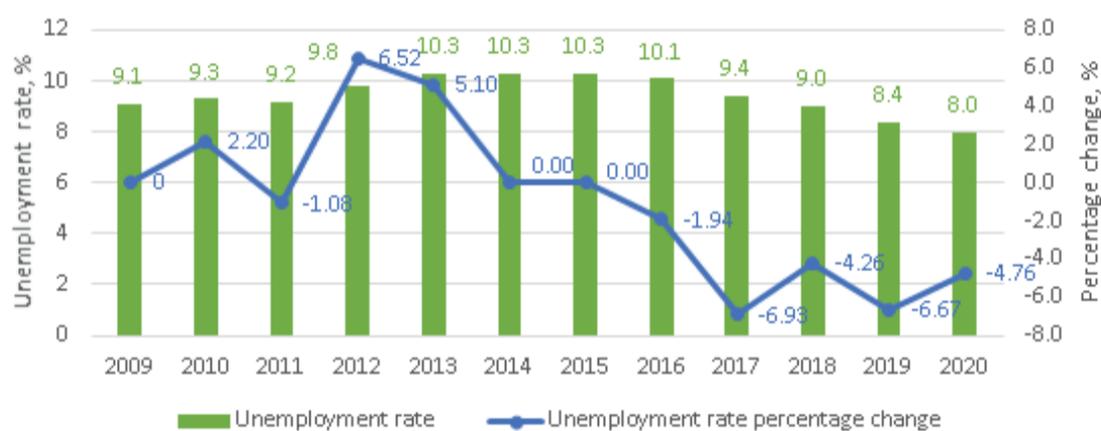
The following is an analysis of macroeconomic indicators in France.



**Figure 4. Change in France's GDP in 2009-2020 period, million EUR**  
(Compiled by the authors, Eurostat, 2022)

Figure 4 shows the change in French GDP over the period 2009-2020. Throughout the period, 2 economic cycles are visible: medium-term, slight GDP growth in 2009-2019 and a short-term slight decline in 2019-2020. The largest decrease in the percentage change in GDP is seen only in 2020, when a sharp decline in GDP is observed, its percentage change is – 5.53 per cent or 134,775 million decrease in the amount of euros. Meanwhile, the largest increase in the positive percentage change in the level of GDP is seen in 2013 – an increase of 28,385 million euros or 1.36 per cent. The highest level of GDP is visible in 2019, it amounted to 2,437,635 million euros, and the lowest – at the beginning of the period, its value in 2009 was 1,936,422 mill euros. Over the whole period, the level of GDP in the country increased from 1,936,422 (2009) to 2,302,860 million euros (2020).

In order to find out the employment of the French population during the research period, as in the analysis of Lithuania, an analysis of the change in the unemployment rate and percentage change was performed (Figure 5).



**Figure 5. Change in the French unemployment rate in 2009-2020 period, %**  
(Compiled by the authors, Eurostat, 2022)

An analysis of the French unemployment rate and its percentage change over the period 2009-2020 shows that France has experienced 4 economic cycles in changes of the unemployment rate during this reference period. There were 2 short-term mild declines in 2010-2011 and 2015-2020 and 2 short-term and mild increases in 2009-2010 and 2011-2015. The largest percentage change in the rise in the unemployment rate was observed in 2012, when it rose by 6.52 per cent, which is an increase of 0.6 percentage points in inflation rate to the previous 9.2 per cent. The largest negative percentage change in the unemployment rate was observed in 2017, it was a decrease of -6.93 per cent or 0.7 per cent from the previous 10.1 per cent limit in 2016. The highest unemployment rate was found 3 times, in 2013, 2014 and 2015, it reached 10.3 per cent, and the lowest unemployment rate in 2020 was 8 per cent. In short, the unemployment rate has changed little over the period from its initial level at the beginning of the period, falling from 9.1 per cent in 2009 to 8 per cent in 2020.

Figure 6 presents the analysis of the third macroeconomic indicator – the changes in inflation in France over the period 2009-2020. The analysis in Figure 6 shows an unstable upward and downward trend in inflation in France between 2009 and 2020. During this period, France's inflation rate has experienced 4 economic cycles: 2 short-term small increases in 2009-2011, 2015-2018 and similar declines in 2011-2015 and 2018-2020. The largest increase in percentage change was observed in 2010, with an increase of 1,600 per cent and an increase of 1.6 percentage points in inflation, for a total of 1.7 per cent in 2010. Meanwhile, the lowest percentage change observed in 2012 was only – 4.35 per cent. In terms of inflation rate, the highest inflation rate in 2011 was 2.3 per cent, while the lowest inflation rate was observed twice during the whole period - in 2009 and 2015 it was only 0.1 per cent. Compared with the whole period, the change in the inflation rate remained slightly higher, from 0.1 per cent in 2010 to 0.5 per cent in 2020.



**Figure 6. Change in the French inflation rate in 2009-2020 period, %**  
(Compiled by the authors, Eurostat, 2022)

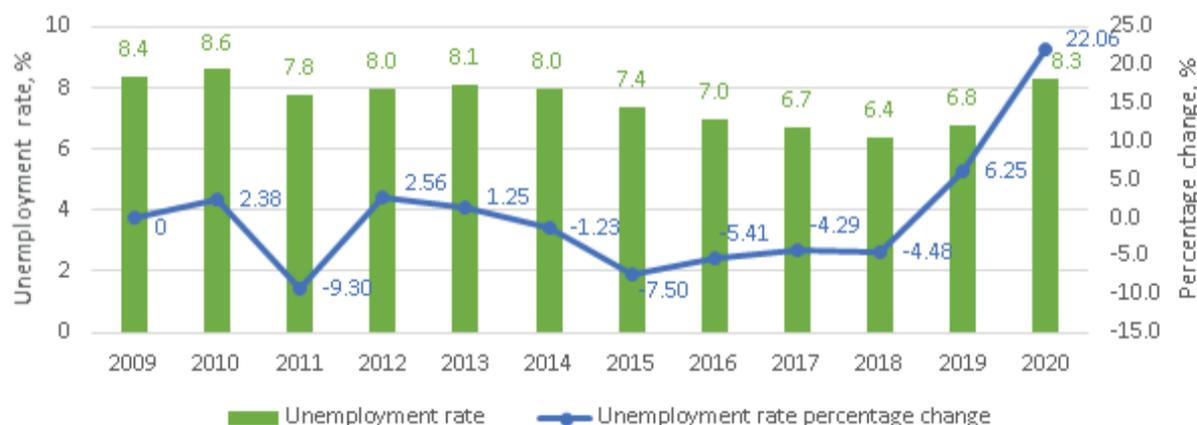
The results of the Swedish macroeconomic indicators are presented below. Figure 7 shows the change in Swedish GDP over the period 2009-2020.



**Figure 7. Sweden's GDP change in 2009-2020 period, million EUR**  
(Compiled by the authors, Eurostat, 2022)

Analysing the level of Swedish GDP in the period 2009-2020, upward and downward trends can be seen throughout the period, with 6 economic cycles. There are 3 cycles of short-term and mild recessions in 2013-2014, 2017-2018 and 2019-2020. There are also 3 increases: a short-term moderate GDP growth cycle in 2009-2013 and 2 short-term, mild increases in 2014-2017 and 2018-2020. The largest positive percentage change (rise) in GDP was observed in 2010, amounting to 19.09 per cent, while the largest negative (decline) value of -1.95 per cent is seen in 2018. Analysing the level of GDP, the lowest level was observed at the beginning of the period in 2009, it amounted to 314 638 million euros, meanwhile the highest level was observed in 2017 and it was equal to 480 026 million euros. Throughout the period under review, Sweden's GDP increased by 160 657 million euros (compared with the beginning and the end of the period).

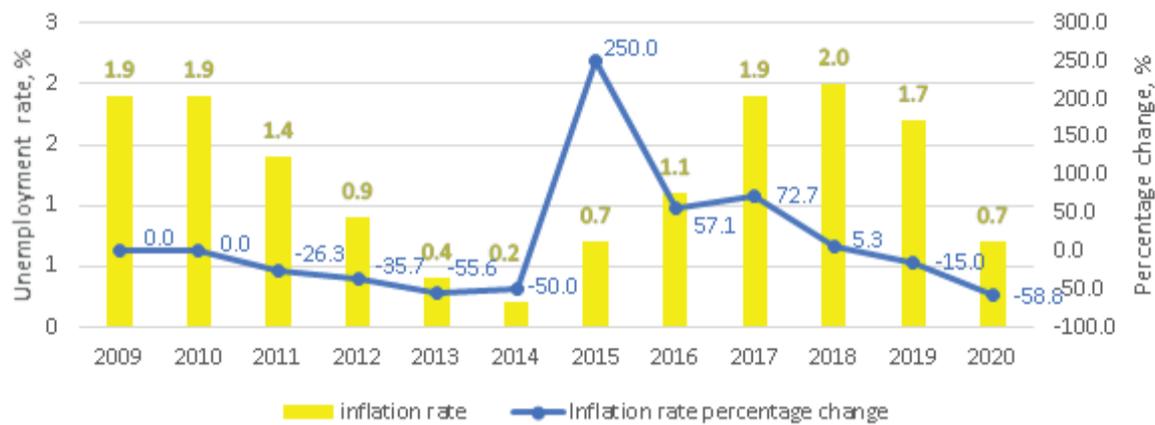
Figure 8 shows the change in the Swedish unemployment rate over the period 2009-2020.



**Figure 8. Change in the Swedish unemployment rate in 2009-2020 period, %**  
(Compiled by the authors, Eurostat, 2022)

Analysing the change in the Swedish unemployment rate and its percentage change in 2009-2020, a changing trend can be observed. This analysis shows 5 economic cycles of the unemployment rate in Sweden: 3 short-term and mild increases in the periods 2009-2010, 2011-2013, 2018-2020, a decline in the same cyclical form in 2010-2011 and a medium-term, mild decline in 2013-2018 period. The highest unemployment rate was observed in 2010, it reached

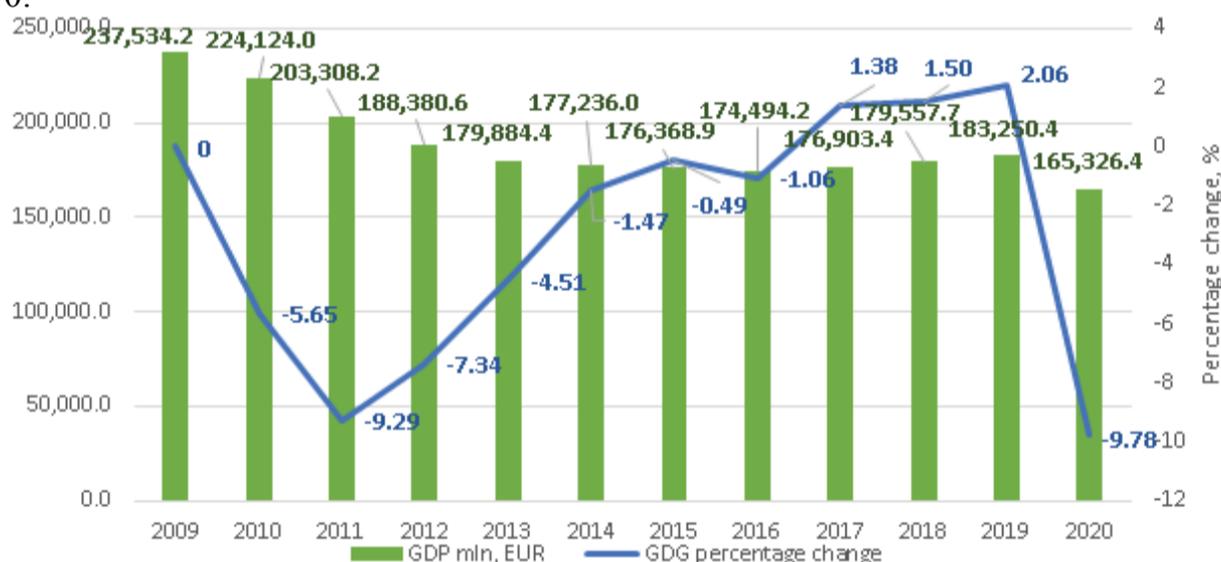
8.6 per cent, while the lowest – in 2018, it reached 6.4 per cent. Assessing the whole study period, it can be concluded that the unemployment rate remained almost unchanged (decreased by only 0.1 percentage point).



**Figure 9. Dynamics of the Swedish inflation rate in 2009-2020 period, %**  
(Compiled by the authors, Eurostat, 2022)

Analysis of the change in the Swedish inflation rate in 2009-2020 period is presented in Figure 9. Analyzing the inflation rate, we can observe a high dynamics of the change in the Swedish inflation rate in the period 2009-2020. Over the whole period, the highest inflation rate was observed in 2018, when it reached 2.0 per cent, and the lowest in 2014, it reached 0.4 per cent. Meanwhile, the largest jump in the positive percentage change is seen in 2015, when inflation rose 250 per cent (compared to the previous year), and the largest negative percentage change is seen at the end of the period, in 2020. From this figure, 3 economic cycles of inflation can be distinguished: the medium-term and mild decline in 2010-2014 and the rise in the same cycle form in 2014-2018, as well as the short-term and mild decline in 2018-2020. Summarizing the whole period and its change, we can see that the inflation rate decreased by 1.2 percentage points from the beginning of the period (in 2009, when the inflation rate was 1.9 per cent), to the end of it (in 2020, the inflation rate was only 0.7 per cent).

The macroeconomic indicators for Greece are analyzed below. GDP change in Greece during 2008-2020 period is shown in Figure 10.



**Figure 10. Change in Greek GDP in 2009-2020 period, million EUR**  
(Compiled by the authors, Eurostat, 2022)

As shown in Figure 10, GDP is on a declining trend over the period 2009-2020. The highest GDP was observed in 2009 and it amounted to 237,534.2 million Eur. The lowest GDP is observed in the 2020 pandemic period. Between 2009 and 2011, GDP fell by 9.29 percentage points. The percentage change in GDP is growing in the period 2011-2019, with the percentage change in GDP increasing by 7.23 percentage points. The most significant decrease in the percentage change in GDP is observed in the period 2008-2020 and it has decreased by 7.72 percentage points in 2020. Over the whole 2009-2020 period the percentage change in GDP is observed to be highly volatile.

The dynamics of the unemployment rate in Greece in the period 2009-2020 is presented in Figure 11.

As shown in Figure 11, the unemployment rate increased from 2009 to 2013, with the unemployment rate rising by 17.9 percentage points over the period and the country's total non-employment rate in 2013 reached 27.5 per cent. Between 2013 and 2020, the unemployment rate fell by 11.2 percentage points to 16.3 percent in Greece in 2020. An increase in the change in the unemployment rate is observed in the period 2009-2011. In the period of 2012-2014, a

sharp decrease in the change in the level of unemployment is observed. In the period 2014-2020, a slight decrease in the change in the unemployment rate is observed and it decreased by about 10 percentage points.

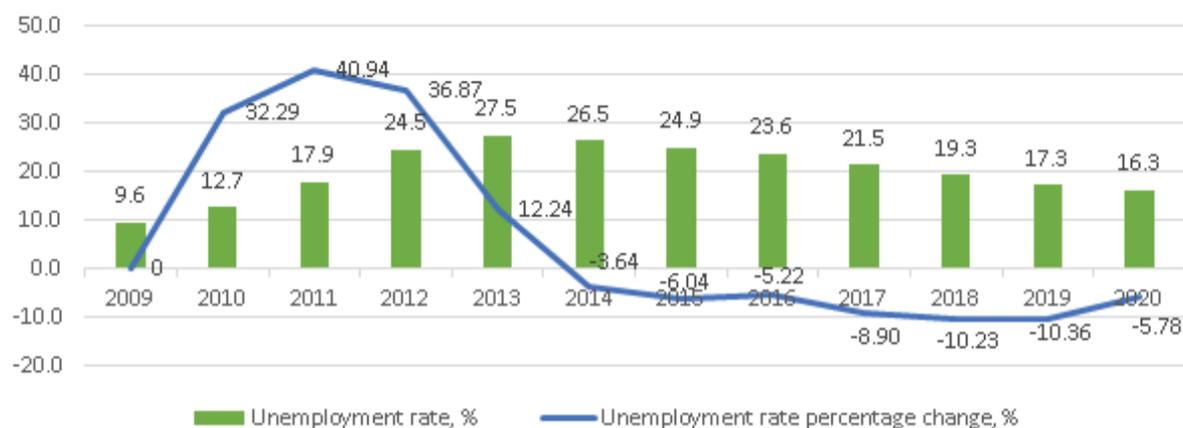


Figure 11. Change in the Greek unemployment rate in 2009-2020 period, %  
(Compiled by the authors, Eurostat, 2022)

The change in inflation in Greece over the period 2009-2020 is presented in Figure 12.



Figure 12. Change in inflation in Greece in 2009-2020 period, %  
(Compiled by the authors, Eurostat, 2022)

Figure 12 shows a clear change in inflation and the percentage change in inflation over the period 2009-2020. The highest inflation rate was observed in 2010 and it was 4.7 per cent. In 2016, inflation equal to zero was recorded in Greece. In the period 2013-2015 and 2020, inflation was negative, also known as deflation. The highest negative inflation was observed in 2014 and amounted to – 1.4 per cent. The largest increase in the change in inflation was observed in 2010 and increased by 72.3 per cent, while the largest decrease in the change in inflation was observed in 2020.

### Conclusions

1. The analysis revealed that economic cycles are classified according to the duration of the cycle, according to the severity, according to the area covered or according to the sphere of activity, the change of which we study, and so on. Economic cycles show how the country's economic situation is changing. An analysis of the literature revealed that the most important macroeconomic indicators are gross domestic product, inflation, foreign direct investment, unemployment, labor force-related indicators and many others. The analysis shows that macroeconomic indicators are very important indicators and are often used to analyse and forecast economic changes.
2. After analysing the changes in gross domestic product in Lithuania, France, Greece and Sweden, it can be stated that the largest positive change in GDP is observed in Lithuania, when it almost doubled at the end of the analysed period. The data shows that the biggest change was between 2009 and 2011, when the downturn phase of the economic cycle was replaced by a boom phase. Meanwhile in other EU countries, GDP has been growing steadily over the period under review. In Greece GDP peaked in 2009 and was declining until 2020. It can be argued that the global economic downturn of 2008 also affected the economies of all countries analysed, in particular Greece, which lasted the longest of all economies until 2015, meanwhile the transition of other economies to growth began in 2011-2012.

3. An analysis of the statistics revealed that the highest unemployment rate was recorded in 2010, during the global financial crisis and had a declining trend until 2020. Meanwhile, an increase in the unemployment rate in 2020 is observed in Lithuania and Sweden. Unemployment in other EU countries remained stable throughout the period under review, with the exception of Greece, where it rose steadily to 27.5 per cent until 2013. However, even during the Covid-19 pandemic, Greece had the highest unemployment rate in 2020 compared to all the countries analysed. It can be observed that changes in the unemployment rate during the period under review were affected not only by the global financial crisis in 2008, but also by the effects of the global health crisis in 2020.
4. The analysis data on the dynamics of the inflation rate revealed that the highest inflation was observed in Lithuania, and the lowest, but not slightly different from Sweden, France. The data shows that deflation was observed in Lithuania in 2015, which may have been affected by the introduction of the euro in the country. Meanwhile, higher deflation is observed only in Greece in 2013-2015 and 2020.

### Bibliography

1. Barnett, V. (2002). Which Was the “Real” Kondratiev: 1925 or 1928? *Journal of the History of Economic Thought*, 24 (4), 475-478. <https://doi.org/10.1080/1042771022000029904>
2. Čiegis, R. (2012). *Makroekonomika*. Vilniaus universiteto leidykla.
3. Dabravalskaitė, A. (2014). *Investavimo sprendimai Lietuvos vertybinių popierių rinkoje*. Lietuvos edukologijos universitetas.
4. Danilevičienė, I., & Lukšytė, V. (2017). Tiesioginių užsienio investicijų įtakos šalies ekonomikos konkurencingumui vertinimas. *Mokslas–Lietuvos ateitis: Verslas XXI amžiuje*, 9(2), 183-196. <https://doi.org/10.3846/mla.2017.1017>
5. Eurostat (2022). *Europos Sąjungos ekonomikos rodikliai*. <https://ec.europa.eu/eurostat/web/main/data/database>
6. Girdzijauskas, S., Štreimikienė, D., Čepinskis, J., Moskaliova, V., Jurkonytė, E., & Mackevičius, R. (2009). Formation of economic bubbles: Causes and possible preventions. *Ūkio technologinis ir ekonominis vystymas*. 15 (2), 267-280. <https://doi.org/10.3846/1392-8619.2009.15.267-280>
7. Grinin, L., & Korotayev, A. (2010). Will the Global Crisis Lead to Global Transformations? The Global Financial System: Pros and Cons. *Journal of Globalization Studies*, 1 (1), 70-89. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1640507](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1640507)
8. Gurskij, P. & Liučvaitienė, A. (2016). Lėtėjančios ekonomikos poveikis įmonių veiklai. *Mokslas – Lietuvos ateitis*, 8(2), 159-170. <http://dx.doi.org/10.3846/mla.2015.894>
9. Jakštienė, S. (2013). Užimtumą lemiančių mikroekonominių ir makroekonominių veiksnių modelis. *Ekonomika ir vadyba: aktualijos ir perspektyvos*, 3(31), 160-168. <https://epubl.ktu.edu/object/elaba:6080425/>
10. Koncevičienė, I., & Janickaitė, D. (2011). Makroekonominių veiksnių įtaka NASDAQ OMX Vilnius listinguojamų įmonių akcijų pelno normoms. *Ekonomika ir vadyba: aktualijos ir perspektyvos*, 2 (22), 93-105. <https://www.lituanistika.lt/content/32724>
11. Kriščiukaiytė, K. (2021). *Efficiency and productivity analysis in the banking sector: methods and applications Darnus vystymasis: teorija ir praktika*. <https://www.laei.lt>
12. Matulevičius, G. (2013). Vertybinių popierių rinkos plėtros tendencijos Lietuvoje: teorija, praktinės problemos ir perspektyvos. Mykolo Riomerio universitetas.
13. Oficialiosios statistikos portalas (2022). *Lietuvos ekonomikos rodikliai*. <https://osp.stat.gov.lt/pagrindiniai-salies-rodikliai>
14. Vaitkė, E., & Martinkutė-Kaulienė, R. (2018). Analysis of the influence of investors' expectations to the development of the Lithuania securities market. *Mokslas – Lietuvos Ateitis*, 10, 1-11. <https://doi.org/10.3846/mla.2018.420>

### Kopsavilkums

Pētījumā autori iedziļinājās Eiropas Savienības valstu galveno makroekonomisko rādītāju izmaiņās dažādos ekonomikas cikla periodos. Pētījuma mērķis bija analizēt Eiropas Savienības valstu galvenos makroekonomiskos rādītājus un aprēķināt to izmaiņas dažādos ekonomisko ciklu periodos 2009. – 2020. gadā. Pētījuma uzdevumi: 1) veikt galveno makroekonomisko rādītāju teorētisko analīzi ekonomisko ciklu kontekstā; 2) analizēt Lietuvas, Francijas, Zviedrijas un Grieķijas galveno makroekonomisko rādītāju izmaiņas dažādos ekonomisko ciklu periodos 2009. – 2020. gadā. Pētījuma metodes: zinātniskās literatūras analīze, statistikas datu analīze, mainīgo datu grupēšana, grafiskais attēlojums.

Analīze parāda, ka makroekonomiskie rādītāji ir ļoti svarīgi rādītāji un bieži tiek izmantoti ekonomikas parādību analīzei un prognozēšanai.

Analizējot iekšzemes kopprodukta (turpmāk - IKP) izmaiņas Lietuvā, Francijā, Grieķijā un Zviedrijā, var konstatēt, ka lielākās pozitīvās IKP izmaiņas vērojamas Lietuvā. Var apgalvot, ka 2008. gada globālā ekonomikas lejupslīde skāra arī visu analizēto valstu ekonomiku, īpaši Grieķiju, kas no visām ekonomikām ilga visilgāk līdz 2015. gadam, kad 2011. – 2012. gadā sākās citu ekonomiku pāreja uz izaugsmi. Statistikas analīze atklāja, ka augstākais bezdarba līmenis fiksēts 2010. gadā globālās finanšu krīzes laikā un līdz 2020. gadam visās valstīs tam bija tendence samazināties. Var novērot, ka bezdarba līmeņa izmaiņas apskatāmajā periodā ietekmēja ne tikai 2008. gada globālā finanšu krīze, bet arī 2020. gada globālās veselības krīze. Analīzes dati par inflācijas līmeņa dinamiku atklāja, ka augstākā inflācija bija Lietuvā, bet zemākā, ar nelielu atšķirību Zviedrijā un Francijā. Dati liecina, ka Lietuvā 2015 gadā tika novērota deflācija, iespējams, saistībā ar eiro ieviešanu valstī. Tikmēr augstāka deflācija vērojama tikai Grieķijā 2013. – 2015. gadā un 2020. gadā.