6th International Scientific Conference ITEMA 2022 – Proceedings
DOI: https://doi.org/10.31410/ITEMA.2022.161

Global Stagflation Shocks: Macroeconomic Challenges and Repercussions

Jovica Pejčić[1]

Received: October 25, 2022
Accepted: January 13, 2023
Published: June 12, 2023

Keywords:
Stagflation;
Macroeconomic repercussions;
USA;
Germany;
France

Abstract: *This paper analyses key macroeconomic repercussions of the global pandemic and geo-political crises in terms of growing recessionary and inflationary pressures, and finally, the potential occurrence of stagflation. Primarily, stagflation shocks in the 1970s are analyzed and compared to the current crisis for the period January 2020 - July 2022 in the example of selected economies (the United States, Germany and France). Descriptive analysis showed that in the observed period, inflationary and recessionary pressures existed in USA, Germany and France; however, those pressures could not be identified as stagflation, since they did not happen simultaneously. Namely, during the pandemic crisis, recessionary pressures were present, since the GDP growth decreased till the first quarter of 2021 in analyzed economies, while inflation rates were stable. On the other hand, with the recovery of economies in the second quarter of 2021 inflationary pressures were stronger, intensified by the geopolitical crisis. Therefore, it seems that the most visible anomaly of the global economic system in 2022 is the presence of inflationary pressures.*

1. INTRODUCTION

This paper investigates the realization of targeted macroeconomic goals in the circumstances of global discontinuities, which could lead to stagflation pressures. Namely, the focus is on the achievement of stable, sustainable and permanent economic growth and development of the observed economies when a high dose of uncertainty and insecurity in the global environment exists.

For the policymakers, the observation and improvement of three macroeconomic indicators are of primary importance: an increase in gross domestic product, a low unemployment rate and low inflation. These indicators are mutually intertwined as will be discussed. So far, it has been assumed that it is almost impossible to ensure a strong pace of GDP growth without reducing unemployment or without suffering inflationary pressure. Namely, conducting an anti-inflationary policy would come at the expense of a slightly lower gross domestic product with a higher unemployment rate. The bottom line is that there is bad news as well as good news. Current circumstances, which are a reflection of exogenous health shock and the current geopolitical crisis, lead to an even more complicated situation. Namely, nowadays economic policymakers are faced with the simultaneous pressure of inflation and recession, which can be recognized as stagflation.

Stagflation occurs when the economy experiences a halt or decline in production, a drop in overall output and an increase in unemployment, as well as high inflation. Hence, all three macroeconomic indicators are going in the wrong direction, and the economy is simultaneously threatened by output decline and inflationary adjustment. Furthermore, in the presence of stagflation pressure, high inflation and a stagnant economy can fully coexist, or low inflation and a growing economy, which has not been the case so far. Thus, the arrival of stagflation was something completely new, and far more complex for the functioning of the entire macroeconomic

[1] Faculty of Economics in Subotica, University in Novi Sad, Serbia

system that requires completely new solutions with a comprehensive approach and analyses (Boesler & Graffeo, 2022).

The goal of this paper is twofold: (1) to elaborate a review of the stagflationary shocks of the 1970s and (2) to conduct a descriptive analysis of potential stagflationary pressures in the period 2020-2022 during the pandemic and geo-political crises, evaluating the key macroeconomic indicators of the United States of America (USA), Germany and France. Hypotheses analyzed in the paper are: (H_1) recessionary pressures are present in the USA, Germany and France in the period January 2020 - July 2022; (H_2) inflationary pressures are present in USA, Germany and France in the period January 2020 - July 2022; (H_3) stagflationary pressures are present in USA, Germany and France in the period January 2020 - July 2022.

The rest of this paper is organized as follows. After the introduction, section 1 presents the literature review, section 2 deals with the speculative analysis of stagflation, and section 3 discusses the stagflation shock during the 1970s. Section 4 tests the functioning of the global economy through the presence of fear of stagflation caused by the emergence of Covid-19, and the prolonged escalation of geo-political relations between Russia and Ukraine. Concluding remarks are summarized within the last section.

2. LITERATURE REVIEW

The emergence of stagflationary pressures is a current and increasingly omnipresent topic that is discussed vigorously on a global scale. It directly affects the functioning of the state, the development of the economy, as well as the economic standard of individuals. Taylor (2022) explains stagflation as the worst experience of the 70s of the last century, indicating that the economic environment needs more than a decade to revitalize its constructs. Torry (2022) points out that the effects of stagflation shocks are seen as a trap through which the world's economy passes, due to the negative trends that stagflation brings with it, such as the radical destruction of the macroeconomic system. Koenigsberg (2022) explains the phenomenon of stagflation as a nightmare faced by economies, which has a harsh effect on key macroeconomic variables. Shipman and Tomlinson (2022) indicate that this far-reaching problem reflects chronic problems at the global level, emphasizing a high dose of stagflation fear, which resulted in a "flood" of ministerial resignations (mainly Ministers of Economy). Accordingly, only those countries which start working hard "today" and make extremely difficult decisions will be able to overcome the crisis.

Koegh (2022) emphasizes that the world's number one problem when it comes to the macroeconomy is rapidly growing inflation, describing its distorting effect on the purchasing power of the population; namely, this is explicitly reflected in the goods market's demand reduction, which spills over into the labor market's demand decline and consequently brings down the entire aggregate supply. Accordingly, problems of such proportions should be suppressed at the moment of creeping growth, and not at the moment when they take on galloping proportions. Rossouw (2022) indicates that at the moment the biggest problem of the global economic system is rising inflation because people on fixed incomes such as pensioners are getting poorer over time. As inflation rises, their purchasing power decreases.

Hawkins (2022) believes that "inflationary psychology" is a phenomenon that currently represents the foundation of the macro-economic problems; hence, the expected rise in prices tomorrow accelerates consumption today, automatically reflecting on damaging aggregate demand and price accumulation. Therefore, the reaction of the economic authorities, which is “required” to curb inflation through higher interest rates and reduce government spending, just pushes the economy into recession. Granville and Martin (2022) point out that the decline of economic activities is a crucial problem, believing that the form of the recession cannot be accurately predicted. However, one is certain, the recovery will not be fast, and that the economies will have to make a lot of efforts to return to the level of economic activity before the emergence of Covid-19.

Dolar (2022) indicates that the eventual continuation of the tightening of relations between Russia and Ukraine would lead to an increase in the price level of oil derivatives, which would increase global inflation, moreover a gradual entry into the phase of recession, i.e. possible stagflation. Olney (2022) explains that the presence of inflation is an enormous problem that can occur due to two reasons. The first reason is that there is an increase in demand that results in an increase in the price level, while the second reason refers to disruptions in the supply chain. Furthermore, he points out that the limited supply of oil derivatives, electricity, or agricultural inputs could be recognized as a stagflation generator, highlighting the fact that people nowadays buy less at higher prices.

Katić (2022) indicates that the global economy has reached the highest level of uncertainty and that almost all economic activities are getting out of control. Namely, some „hidden hand is pushing us into ruin”, referring to the “state that thinks”, with the active intervention of the state apparatus to remove the negative consequences of the market model of the functioning of the economy.

Kapoor (2022) points out that an eventual rise in interest rate levels by Central Banks in response to a rise in price levels would have the effect of wreaking havoc on household budgets. The author also asserts two essential reasons that preceded the current condition of the global economy - first, the decline in industrial production caused by the emergence of Covid-19, and second, the effects of events on the territory of Ukraine.

3. THEORETICAL FRAMEWORK OF STAGFLATION

The theoretical framework of stagflation analysis can be based on the application of the AS-AD model, on which basis, it is possible to see the dynamics of changes and the effects of shocks caused by stagflation movements. To analyze the effect of external shocks and macroeconomic repercussions, diagram 1 is presented. Diagram 1 shows two axes (X and Y). On the Y-axis is the price level within one economy, that is, the economic system, while on the X-axis is the movement of output, that is, the produced quantity of products in a time interval of one year in one country.

Diagram 1 shows three curves:
- Supply curve AS,
- Supply curve AS’
- AD demand curve.

At the point where the demand curve and the original supply curve intersect, the equilibrium point (E) is read and defines the given price level (p) and the given output level (q). In a situation where there is a negative shift in the supply curve (AS), i.e. moving to the left (or up) and creating a new supply curve (AS’), a new intersection with the original demand curve (AD) creates a new equilibrium point (E’). E’ is formed on a new, higher, price level (p’) and it is defined with a new, lower, quantity of output (q’).

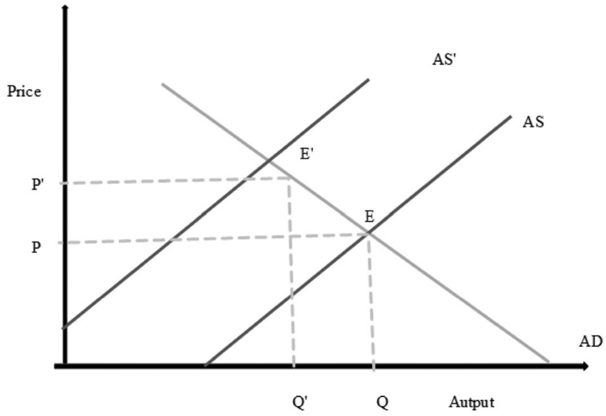


Diagram 1. Stagflation

Source: Author, based on Bajracharya (2018)

The conclusion is that in the new equilibrium point, a smaller amount of products is produced at higher prices, which indicates stagflationary pressures. The question arises, what factors cause a negative shift in the AS supply curve and consequently stagflation? Stagflation most often occurs when there is a supply-side shock, if the supply structure of a key factor of production, such as the supply of labor, electricity or oil, is disrupted. Oil, as one of the key sources of energy, can be used as input and output for almost all existential and business activities. Certainly, the primary importance of understanding a very complex topic is that if a country faces a shortage of the mentioned production factors, it will automatically be reflected in an increase in prices, along with a decrease in production.

Overcoming the situation explained in Diagram 1, refers to the active role of the state and policymakers. In terms of recession, policymakers apply an expansive fiscal policy to initiate and stimulate production in order to return the economy to a state of economic balance. Another high-frequency situation is the occurrence of inflationary pressure. The problem itself was overcome by the gradual application of a restrictive monetary policy, i.e. by withdrawing the money supply from circulation and increasing the reference interest rate, in order to minimize the harmful aggregate demand. When the economy is faced with inflation and recession simultaneously, the application of expansive fiscal and monetary measures would certainly lead to the recovery of the economic environment; however, then inflationary pressure could lead to a hyperinflationary problem, which is certainly not the goal. On the other hand, although restrictive adjustment measures application would return inflation to economic normality, the economy would move from recession to depression and face an even more catastrophic macroeconomic scenario.

The complexity of these problems could be stressed by the fact that stagflation is a rare economic situation; thus, there is no standard solution for overcoming it, especially having in mind that current stagflation is a consequence of war and global economic uncertainty.

4. REVIEW OF THE STAGFLATIONARY SHOCKS OF THE 1970S

The question arises whether any economy has experienced stagflationary consequences so far, i.e. the so-called supply-side shock. The last time such a situation, which economists also call a nightmare, happened in the United States of America (USA) was in the 70s of the last century. Namely, it was a period in which energy prices rose incredibly. The USA is an economy that in the 1960s and 1970s imported enormous amounts of petroleum products in order to strengthen its macroeconomic structure, accumulate industrial production and generally meet the needs of the population. Jackson (2022) pointed out that everything was completely normal, functioning smoothly until the appearance of the embargo by the Organization of the Petroleum Exporting Countries (OPEC).

At that moment the US economy in a short period simultaneously experienced an increase in the consumer price index, above 10% (such an increase has not been recorded in the US almost since the Second World War), while unemployment jumped from 4.6% in 1973 to 9% in 1975, and GDP plummeted. The OPEC countries continued to increase the oil price in the following period, thus, this was automatically reflected in the fact that inflation grew from year to year, and the economy sank into recession. Doubtless, the USA, as one of the most developed economic systems, tried to minimize the effects of the increase in oil-derivate prices. The USA government changed Americans' lifestyles through policy measures, which was reflected in increased savings and rationalization of the consumption of an irreplaceable energy source (Krugman, 2022).

Table 1. Trends in the rate of unemployment, inflation and GDP in the USA (1968 - 1983)

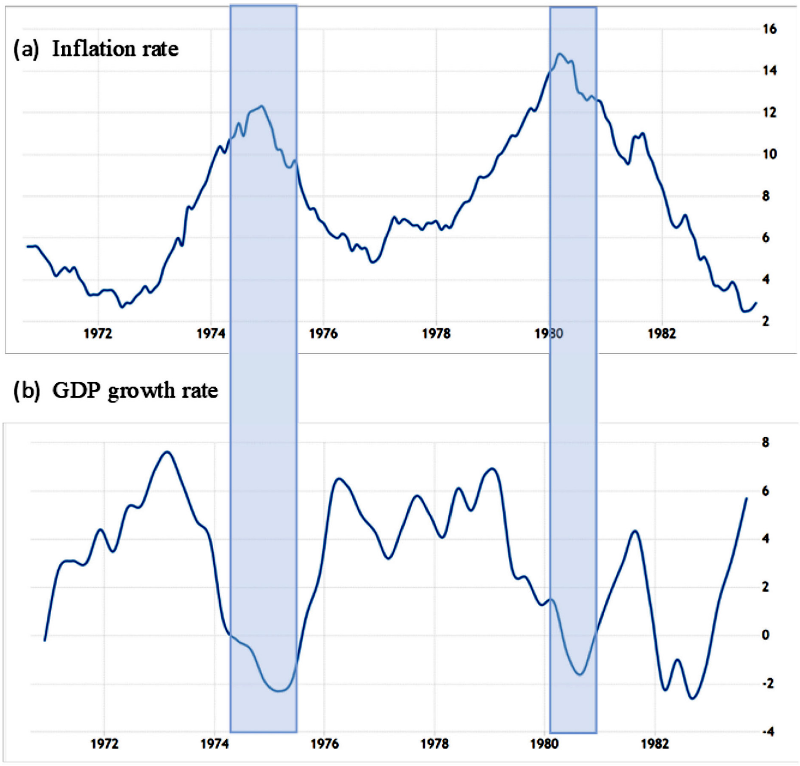
Year	Unemployment rate %	GDP %	Inflation Rate %
1969	3.5	3.1	6.2
1970	6.1	0.2	5.6
1971	6.0	3.3	3.3
1972	5.2	5.3	3.4
1973	4.9	5.6	8.7
1974	7.2	-0.2	12.3
1975	8.2	-0.5	6.9
1976	7.8	5.4	4.9
1977	6.4	4.6	6.7
1978	6.0	5.5	9.0
1979	6.0	3.2	13.3
1980	7.2	-0.3	12.5
1981	8.5	2.5	8.9
1982	10.0	-1.8	3.8
1983	8.3	2.2	3.6

Source: Trading economics (2004)

A strong US economy, which employs hundreds of millions of people, has huge industrial production and has ambitions for further growth and development. If the oil supply on the market decreases, it would automatically lead to an increase in the price level (inflation), while on the other hand, producers would reduce the aggregate supply. Further, a reduction in supply would lead to a decline in national production, with a rapidly growing unemployment rate.

Based on Table 1, it could be concluded that from 1969 until 1982, unemployment rose from 3.5% to 10%. While in the observed time interval, the level of inflation rose from 6.2% to the highest 13.3%. This certainly indicated that the US economy was facing stagflationary movements.

Graph 1 shows that two stagflation episodes were identified, due to two oil shocks, in 1974 and 1979-1980. Beginning with a recession, the 1970s was a decade of pessimism and ended very painfully with the Vietnam War. Memories of the Great Depression made economic policymakers reluctant to use contractionary monetary and fiscal policies to curb inflationary pressures, as it was believed that an increase in unemployment would be completely unacceptable, meaning that the American population would experience additional deflationary adjustment.



Graph 1. Stagflationary shocks in the USA (1969-1983)

Source: Author, according to Trading economics

Graph 1, (panel a) shows the movement of the inflation rate, while (panel b) shows the movement of the GDP growth rate in the United States of America in the time interval 1969 -1982. The conclusion is that the American economy faced simultaneous inflationary and recessionary pressure twice, the first time in the period 1974 - 1975, while the second time was in 1980, which indicated the presence of stagflation.

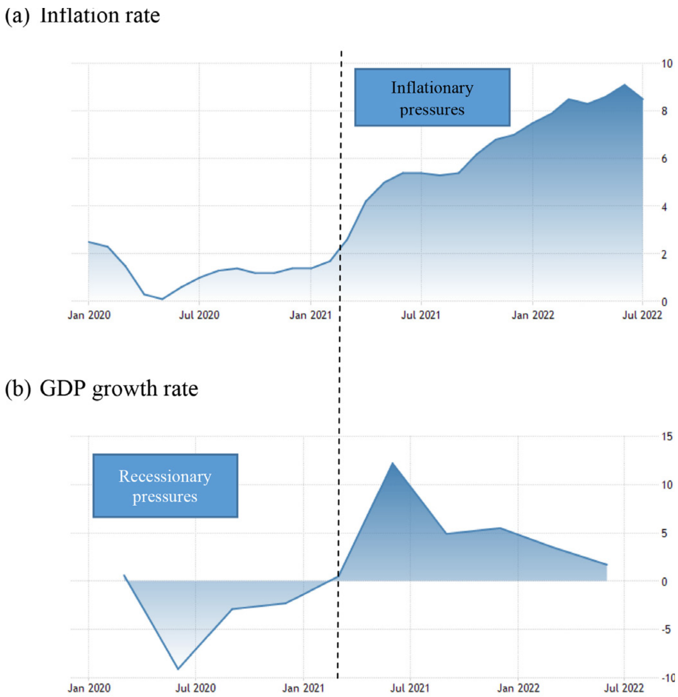
5. DESCRIPTIVE ANALYSIS OF STAGFLATIONARY PRESSURES DURING THE PANDEMIC AND GEO-POLITICAL CRISES (2020-2022)

Fifty years after the 1970s, fears of stagflation are vivid again. The combination of rising inflation and slowing economic growth after the initial strong recovery from the Covid-19 crisis has been challenging for major economies around the world. It is expected that the conflict in Ukraine further raises global inflation and further dampens growth momentum. Moreover, in order to make a comparative analysis of the crisis that happened in the 1970s and the one that is happening today, it is necessary to observe from several years back. In the first months of its origin, the coronavirus was considered exclusively as a health problem. However, the speed of its spread which caused the lockdown of economies had final effects in slowing down economic activities. Certainly, it imprinted on the economic context of 2020. Global connectivity, intertwined relations between countries, dependence on production factors, as well as the high mobility of labor, capital, goods and services, rapidly led to a negative impact on the macroeconomic indicators of almost all countries of the world (Mitchell & Duehren, 2022). The decrease in production was followed by a decrease in demand in the labor market, which was reflected in the increase in the unemployment rate. The decrease in industrial production is mostly noticeable in Germany (almost the most developed economy of the European Union before the pandemic crisis), the USA, and France, but also in the rest of the world. Russia's invasion of Ukraine which began on February 24, 2022, directly complicated enough complex situation for the functioning of the global economy. Ukraine is one of the most important producers of basic food that is an inevitable part of everyone's consumer basket. That country fulfills almost half of the world's needs for sunflower oil, 15% of corn and 10% of wheat. The lack of food was especially felt in the large number of European economies that are directly dependent on Ukrainian imports, grains and edible oil. However, the consequences are far greater. In May 2022, the United Nations warned that the level of hunger in the world had reached a "new high" and that tens of millions of people could face long-term hunger because of the war. As of May 2022, 23 countries have imposed food export restrictions. Until the beginning of the war on the territory of Ukraine, the Russian Federation was the leading supplier and main source of energy for the whole of Europe. They ranked first when it comes to natural gas exports to the world market, second when it comes to crude oil and third when it comes to supplying coal. In 2020, Russian oil, gas and coal accounted for a quarter of energy consumption in the European Union (Schifferes, 2022).

The description of the situation and pressures after the pandemic crisis and the crisis in Ukraine is irresistibly reminiscent of the period of oil shocks and stagflation in the 70s - inflationary pressures are rising again caused by the same triggers in the context of rising energy prices, with a decline in economic activity. In order to analyze whether stagnation pressures are real, it will be analyzed the level of GDP and inflation on the example of the US, German and French economies. Since that stagflation is analyzed for the US economy in Section 3, stagflation pressures are analyzed in the present period in the USA, followed by an analysis of stagflation pressures in the largest European economies, Germany and France.

The US's inflation rate increased to 8.7% in May 2022 (Graph 2, panel a). In the US economy, there is an increase in the price level of almost all products. The prices of energy products increased by 34.6%, due to the increase in the price of gasoline (48.7%), fuel oil (106.7%, the largest recorded increase), electricity 12%, and natural gas (30.2%, the highest since July 2008). The costs of the most basic existential activities increased by about 10%. A large increase was recorded in the prices of meat, fish and eggs (14.2%). Other increases were also seen in accommodation costs (5.5%), used cars (16.1%) and airfares (37.8%). The citizens of one of the most developed economies in the world are facing a significant reduction in purchasing power caused by inflationary pressure. The gross domestic product of the USA (Graph 2, panel b) indicated complete stability until the emergence of Covid-19. In 2020, there will be a "negative growth" of the observed indicator by 3.4%. After the fall, the US manages to consolidate its public finance, refusing recession pressures.

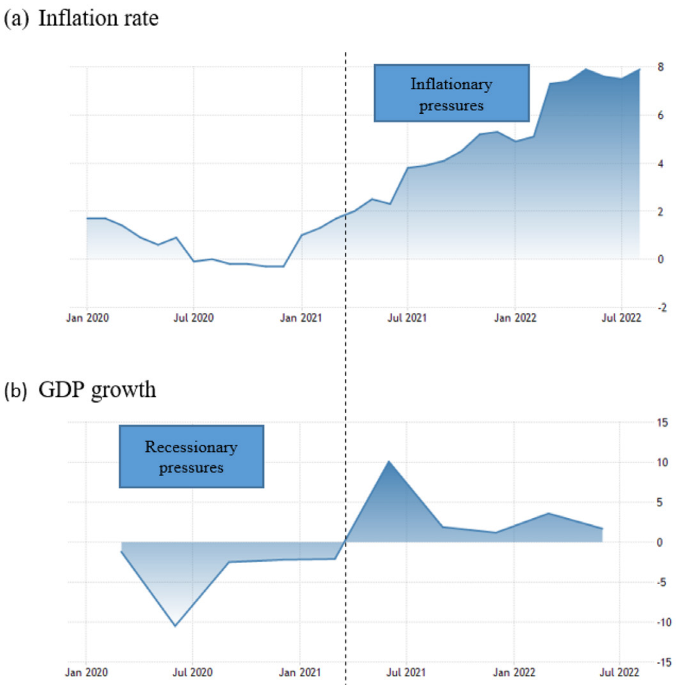
As can be seen from Graph 3 (panel a), the annual inflation rate in Germany was confirmed at 7.9% in May 2022. It was the third consecutive month of record-high inflation since German reunification, also it was the highest since 1973/1974, driven mainly by faster increases in energy (38.3%) and food (11.1%) prices. Energy prices rose sharply, especially fuel oil (94.8%), motor fuel (41.0%) and natural gas (55.2%), reflecting the impact of Russia's invasion of Ukraine.



Graph 2. Inflation Rate and GDP growth rate in the USA (2020 – 2022)

Source: Author, according to Trading economics (2022)

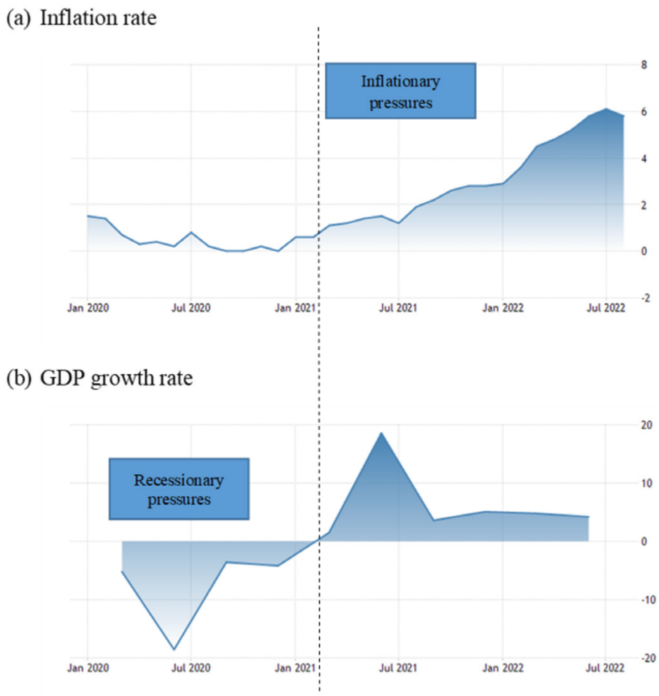
Based on Graph 3 (panel b), although it is visible that the presence of Covid-19 had a direct impact on the reduction of GDP in 2020 to an almost record level, in the next few months, by conducting a responsible policy, Germany's macroeconomic environment returned to a state of stability, which repeated the average growth during the last decade of 3.6%. It seems that the reduction of GDP in Germany had character as a structural break, and therefore could not be identified as recession and stagflation, although stagflation pressures are still present.



Graph 3. Inflation rate and GDP growth in Germany (2020 – 2022)

Source: Trading economics (2022)

The annual inflation rate in June 2022 was changed to 5.8% (Graph 4, panel a). This increase in inflation is linked to an increase in the price level of energy products (27.8%), especially oil derivatives (36.7%), diesel (35.2%), gasoline (24.2%) and gas (55.0%). As far as the price of electricity is concerned, there is a slight decrease (6.5%). The prices of agricultural and food products have accumulated by about (5%). Until the emergence of Covid-19, France had a stable GDP growth of about 4%, until experienced a steep decline in the second quarter of 2020 (Graph 4, panel b). Also in the second quarter of 2021, France achieves recovery. In comparison to Germany and the USA, France had a similar dynamic of GDP growth and inflation rate, although, the decline of GDP in the second quarter of 2022 was deeper. On the other hand, inflationary pressures in France are lower in comparison to Germany and USA, achieving maximum inflation of 6 %.



Graph 4. Inflation rate and GDP growth in France (2020 - 2022)
Source: Author, according to Trading economics (2022)

Based on the previous analyses, we can conclude that in the observed countries (USA, Germany and France) similar dynamics of GDP growth and inflation rate exist in the period January 2020 - July 2022. Namely, during the pandemic crisis, the GDP decreased till the first quarter of 2021 in all analyzed economies, which could be recognized as recessionary pressures. In that period inflation rate was stable, below 2%. However, with the recovery of economies, in the second quarter of 2021, the inflation rate started to increase, while inflationary pressures were stronger in each quarter till July 2022. Therefore, the conclusion drawn is that although in the observed period, inflationary and recessionary pressures existed in USA, Germany and France, those pressures could not be identified as stagflation, since they did not occur simultaneously. Although no country has recorded major discontinuities in economic activities that would indicate chronic macroeconomic problems, the dose of insecurity and danger of current period is certainly at a high level. What is evident is that the impact of the conflict between Russia and Ukraine is already showing itself in sharply higher prices of key goods. Many developing countries that are highly dependent on food imports are now even more vulnerable. Whether the geo-political crisis will have more far-reaching effects on the functioning of the global economy remains to be seen.

6. CONCLUSION

Based on the described and empirically documented problem of stagflation, taking into account experiences from stagflation in the 1970s, it could be concluded that the global economy is currently in an unenviable situation. The increase in inflation with a short-term decrease in economic activities was reflected in current macroeconomic variables. Descriptive empirical analysis showed that a similar dynamic of GDP growth and inflation rate occurred in USA, Germany and France in the period January 2020 - July 2022. Namely, during the pandemic crisis, recessionary pressures were present, since the GDP growth decreased till first quarter of 2021 in analyzed economies, while inflation rates were stable, below 2%. On the other hand, with the recovery of economies in the second quarter of 2021, inflationary pressures were stronger in each quarter till July 2022. Therefore, the conclusion is that inflationary and recessionary pressures existed in USA, Germany and France in the period January 2020 - July 2022; however, those pressures could not be identified as stagflation, since they did not occur simultaneously. Namely, according to the descriptive analysis conducted, hypotheses, H_1 and H_2 are confirmed: recessionary and inflationary pressures were present in USA, Germany and France in the period January 2020 - July 2022; while hypothesis (H_3) is rejected: stagflationary pressures were not present in USA, Germany and France in the period January 2020 - July 2022.

It seems that the most visible anomaly of the global economic system is the presence of inflation, which is partly caused by the emergence of Covid-19, and then prolonged by the military conflict in Ukraine. Consequently, it is important to highlight the quote of economist Katić (2022): „When the tide of printed money recedes, only then will you see who was swimming in it". Namely, the real cost of living for the largest part of the world's population very often exceeds statistical inflation rates. If the states decided to return the price level to normal and "rein" inflation, then interest rates would increase, money would stop being printed, and governments would borrow less, but there would be a certain danger of deflationary adjustment and a potential collapse of the financial system. Certainly, the coming crisis will make low-developed and poor economies dissatisfied, since big capital will withdraw even faster, protecting high-profit rates, industrial production will melt, and states will be powerless because their economic capacities will hardly be able to support their economy.

References

Boesler, M., & Graffeo, E. (2022). *What's Stagflation, and Why Is It Such a Worry Now? Retrieved from* https://www.washingtonpost.com/business/energy/whats-stagflation-and-why-is-it-such-a-worry-now/2022/07/15/5c0162c6-0459-11ed-8beb- 2b4e481b1500_story.html

Dolar, V. (2022). *Why stagflation is an economic nightmare – and could become a real headache for Biden and the Fed if it emerges in the US. Taken from* The conversation, https://theconversation.com/why-stagflation-is-an-economic-nightmare-and-could-become-a-real-headache-for-biden-and-the-fed-if-it-emerges-in- the-us-179036

Granville, B., & Martin, C. (2022). *Is a major recession unavoidable? Three economists give their views,* The conversation, https://theconversation.com/is-a-major-recession-unavoidable-three-economists-give-their-views-185233

Hawkins, J. (2022). *1970s-style stagflation now playing on central bankers' minds. Taken from the site,* The conversation, https://theconversation.com/1970s-style-stagflation-now-playing-on-central-bankers-minds-185868

Jackson, L. (2022). *Is The US Economy Heading For Stagflation? Retrieved from,* The conversation, https://www.forbes.com/advisor/investing/stagflation/

Kapoor, S. (2022). *Inflation: why it's happening and why interest rates are going up to combat it,* The conversation, https://theconversation.com/inflation-why-its-happening-and-why-interest-rates-are-going-up-to-combat-it-187665

Katić, N. (2022). *Kada momci iz Davosa drže reč*, Politika, https://www.politika.rs/scc/clanak/516210/Kad-momci-iz-Davosa-drze-rec

Koegh, B. (2022). *Fed hopes biggest rate hike in 22 years tames inflation without recession or stagflation: 3 essential reads on what it all means,* The conversation, https://theconversation.com/inflation-should-be-viewed-as-public-enemy-number-1-heres-why-18319

Koenigsberg, O. (2022). 3 *Strategic Options to Deal with Inflation. Retrieved from Harvard business review,* The conversation, https://hbr.org/2022/01/3-strategic-options-to-deal-with-inflation

Krugman, P. (2022). *That Was the Stagflation That Was, The New York times,* https://www.nytimes.com/2022/07/07/opinion/inflation-recession-the-fed.html

Mitchell, J. & Duehren, A. (2022), *High Inflation, Slowing Growth Raise Risk of Global Downturn,* The Wall Street Journal, https://www.wsj.com/articles/high-inflation-slowing-growth-raise-risk-of-global-downturn-11652908756?mod=Searchresults_pos6&page=2

Olney, M. (2022). *Inflation rates are rising in the US – an economist explains why,* The conversation, https://theconversation.com/inflation-rates-are-rising-in-the-us-an-economist-explains-why-187757

Rossouw, J. (2022). *Inflation should be viewed as a public enemy number: here's why. Retrieved from The conversation,* The conversation, https://theconversation.com/inflation-should-be-viewed-as-public-enemy-number-1-heres-why-183193

Schifferes, S. (2022). *Ukraine: how the Russian invasion could derail the fragile world economy,* The conversation, https://theconversation.com/ukraine-how-the-russian-invasion-could-derail-the-fragile-world-economy-177937

Shipman, A., & Tomlinson, P. (2022). *Inflation, recession fears and tax cuts: any new UK chancellor faces an unenviable in-tray,* The conversation, https://theconversation.com/inflation-recession-fears-and-tax-cuts-any-new-uk-chancellor-faces-an-unenviable-in-tray-186484

Taylor, A. (2022). *Why a 1970s-style 'stagflation' crisis would hit the world's poor hard,* The Washington post, https://www.washingtonpost.com/world/2022/06/09/stagflation-poor-countries-world-bank/

Torry, H. (2022). *What Is Stagflation? What to Know About the Combination of High Inflation and Stagnating Economic Growth. Taken from The Wall Street Journal,* The conversation, https://www.wsj.com/articles/what-is-stagflation-meaning-explained-global-economy-worldbank-11654723092