"while difficulties remain, 'it is in our mutual interest to manage the bilateral relationship". Both sides of the conflict have their truths; it is also important to note that both sides try to balance between their democratic and nationalistic supporters inside the country which complicates the issue even further. These problems will forever be a part of the difficult relations of Japan and South Korea. However, despite the issues countries find a way for cooperation in economic sphere. They trade, they invest and cooperate with each other. The regression clearly shows how the capital flows of countries affect their economies. Many other cooperations exist. There are many cultural and scientific cooperations between the two countries. Japanese and Korean military conduct exercises together. China's aggressive foreign policy also serves as a uniting factor of the sort, forcing two countries to seek further cooperation despite the many problems they faced in the past.

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ДИНАМІКА ЗАБОРГОВАНОСТІ КРАЇН ЄС В УМОВАХ ГЛОБАЛЬНОЇ ПАНДЕМІЇ COVID-19

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Анотація. У статті досліджується боргова ситуація в європейських країнах, особливо в Італії та Іспанії, оскільки ці країни є лідерами серед європейських країн за борговим

навантаженням. У статті розглядається як зовнішній, так і державний борг, але більше уваги приділено державному боргу, оскільки для Італії та Іспанії він є важливішим за зовнішній борг. Така ситуація пов'язана з тим, що обидві країни є членами Європейського Союзу та Єврозони, тобто вони сплачують свій зовнішній борг у євро, а національною валютою також є євро, що дає країнам більш сприятливі умови. Для порівняння з країнами зони євро у статті досліджується також боргова ситуація у Польщі, оскільки ця країна зберегла власну валюту, і для її економіки зовнішній борг є не менш значущим, ніж державний. Боргова ситуація у країнах аналізується в період з 2016 по 2021 роки і на початок 2022 року, оскільки цей проміжок часу дозволяє оцінити ситуацію до та під час пандемії. Згідно з аналізом даних найменший державний борг у 2021 році має Польща, а найбільший Греція, також у статті досліджуються такі показники як дохідність 10 річних облігацій країн, державний дефіцит та зовнішній борги Італії, Іспанії та Польщі. У 2021 році серед країн з найбільшою дохідністю 10 літніх державних облігацій лідирує Польща, також у 2022 році країна має найбільшу дохідність, така ситуація говорить про ріст ризиків для економіки країни та її стабільності. Найбільший ріст державного дефіциту у 2020 році відбувся у Італії, тоді як найменший у Польщі. Щодо державного боргу, то ситуація така ж сама, державний борг Італії у 2020 році зріс на 29,5%, Іспанії на 27%, а Польщі на 13,9% від ВВП. У статті було побудовані векторні авторегерсії для виявлення наявності залежності між дефіцитами бюджету та поточними рахунками платіжного балансу країн, що досліджуються. Результати модулювання довели, що в Іспанії існує така залежність, що також було підтверджено за допомогою лінійної регресії і було виявлено, що показники мають зворотний зв'язок. Результати модулювання також довели наявність зворотного зв'язку між прибутковістю 10-річних державних облігацій Іспанії та рахунком поточних операцій. В Італії та Польщі наявність подвійного дефіциту не було виявлено.

Ключові слова: пандемія Covid-19, Європейський союз, державний борг, подвійний дефіцит бюджету та поточного рахунку, зовнішній борг.

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THE DYNAMICS OF EU COUNTRIES DEBT IN THE CONTEXT OF THE GLOBAL COVID-19 PANDEMIC

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Abstract. The article examines the debt situation in European countries, especially in Italy and Spain, since these countries are leaders among European countries in terms of debt burden. The article examines both external and public debt, but more attention is paid to public debt, as it is more important than external debt for Italy and Spain. This situation is related to the fact that both countries are members of the European Union and the Eurozone, that is, they pay their foreign debt in euros, and the national currency is also the euro, which gives the countries more favorable conditions. For comparison with the countries of the euro zone, the article also examines the debt situation in Poland, since this country has kept its own currency, and for its economy the external debt is no less significant than the national debt. The debt situation in the countries is analyzed for the period from 2016 to 2021 and the beginning of 2022, since this period of time allows to assess the situation before

and during the pandemic. According to the data analysis, Poland has the smallest public debt in 2021, and Greece has the largest, the article also examines such indicators as the yield of 10-year bonds of the countries, the public deficit and the foreign debts of Italy, Spain and Poland. In 2021, among the countries with the highest yield of 10 summer government bonds, Poland is leading, and in 2022, the country has the highest yield, this situation indicates the growth of risks for the country's economy and its stability. The largest increase in the government deficit in 2020 occurred in Italy, while the smallest in Poland. Regarding public debt, the situation is the same, the public debt of Italy in 2020 increased by 29.5%, Spain by 27%, and Poland by 13.9% of GDP. In the article, vector autoregressions were constructed to reveal the presence of dependence between budget deficits and current accounts of the balance of payments of the countries under study. The results of the modulation proved that there is such a dependence in Spain, which was also confirmed by linear regression and the indicators were found to be inversely related. The modulation results also proved the presence of an inverse relationship between the yield on the 10-year Spanish government bond and the current account. In Italy and Poland, the existence of a double deficit was not detected.

Keywords: The Covid-19 pandemic, the European Union, public debt, the double deficit of the budget and current account, external debt.

Introduction. The debt crisis in the European Union began after the Global Financial Crisis of 2008. The countries most affected were Ireland, Spain, Cyprus, Greece, Portugal and Italy. And starting from this period, these countries have the greatest risks to the growth of public debt.

According to previous studies J. Bulow, C. Reinhart, K. Rogoff and C. Trebesch (2020) considered the issue of debt during the pandemic. The pandemic has given rise to debt problems in many developing and emerging market countries. Many international organizations, including the IMF and the World Bank, provided the financing that countries needed due to the reduction in government revenues. The authors also report that emerging market governments issued $124 billion in hard-currency debt during the first six months of 2020, with two-thirds of borrowing in the second quarter. Many businesses in emerging markets continue to accumulate foreign currency debt. E. Krecke (2022) in her publication mentions the debt crisis of 2009-2012 and wonders if such a scenario could be repeated today. She also states that the public finances of many countries are now in a worse state than at the peak of the previous crisis, for example, Greece's public debt to GDP ratio has increased to 211 percent in 2020. Italy's public debt in relation to GDP rose to 155 percent, and Spain to 120 percent since the start of the pandemic. Due to the growing health problems, the situation in the countries has worsened, and one can only imagine how worse it will be in connection with the Russian invasion of Ukraine, since many decisions have been made by Europe regarding sanctions, refugees and energy. The author also touched upon the problem of rising inflation, which may lead to an increase in the cost of inquisition for countries.

S. Yakubovskiy, G. Dominese, T. Rodionova, V. Derenko in their article analyze the yield of 10-year government bonds of Greece, Italy, Portugal and Spain from 2005-2020. The authors, using the construction of a regression model, determined that there is a strong relationship between the demand for government bonds and the cost of public debt service, which may have a negative impact in the future after the expansionary policy is terminated.
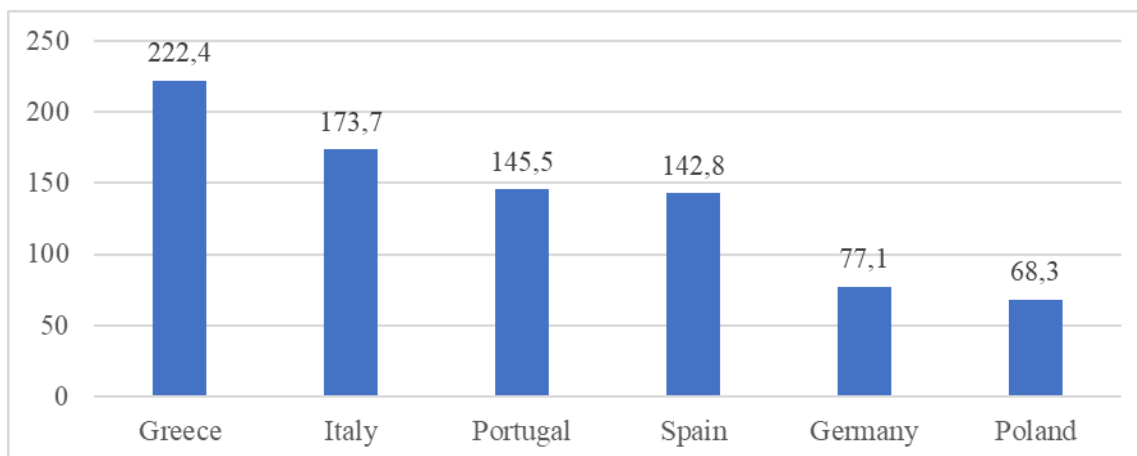
Fig. 1. Government debt in European countries 2021 (% of GDP)
Source: data from OECD [4]

According to the data above, it can be seen that the same countries that had problems after the 2008 crisis also faced problems with debt growth after the pandemic. The state debt of Greece in 2021 amounted to 222.37% of the country's GDP, the state debt of Italy amounted to 183.49%. Spain's public debt amounted to 142.76% of GDP, while Poland took the last place in this list with a public debt of 68.28% of GDP in 2021.
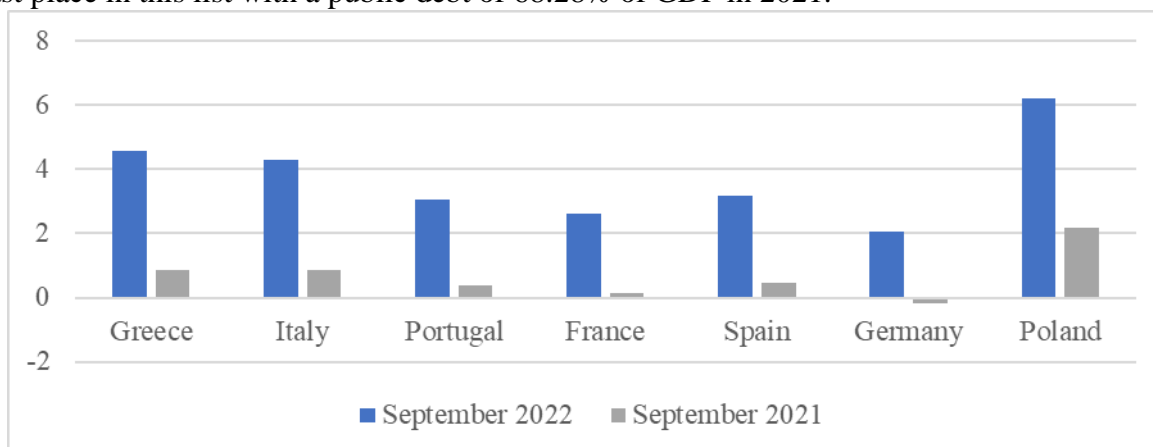

Fig. 2. European 10-year bond yields
Source: data from Investing.com [5],[6],[7],[8],[9],[10]

The graph depicts countries in Europe that have experienced problems with a high level of public debt relative to GDP. Consider the situation with the yield of their state 10-year bonds and how this figure has changed compared to last year. It can be seen that the last graph practically coincides with this one, that is, countries with growing public debt have an increase in the yield of government 10-year bonds. This situation has developed due to the fact that the greater the risk, the greater the profitability. There is a significant increase in bond yields in all countries. But the most striking trend is Poland's bond yield. This situation may be mediated by the Russian invasion of Ukraine, which increased the number of refugees from Ukraine to Poland. As well as the growth of other risks due to the provision of assistance to Ukraine and rising fuel prices. Thus, it can be assumed that in 2022 there was such a significant increase in the indicator for all countries precisely because of the high risks for Europe in connection with the war of Russia against Ukraine.

Problem statement. Since it is precisely the problem of debt that is acute for the EU countries, research will be carried out to reveal the problem of double budget deficits. Namely, the relationship between the budget deficit and the current account. Vector autoregression will be carried out, followed by a Granger causality test, and if there is a correlation, a least squares test will be carried out, which can lead to consistent estimates.

Mathematically vector regression for these indicators will look like this:

$$CA_t = a_1 + \sum_{i=1}^{p} \beta_{1i} BB_{t-i} + \sum_{i=1}^{p} y_{1i} CA_{t-1} + \varepsilon_{1t}, \tag{1}$$

$$BB_t = a_2 + \sum_{i=1}^{p} \beta_{2i} CA_{t-i} + \sum_{i=1}^{p} y_{2i} BB_{t-1} + \varepsilon_{2t}, \tag{2}$$

where: CA-current account (% of GDP); BB- budget balance (% of GDP); α – constant; β, γ - coefficients to be estimated; p - lag order selected; i – number of observations (countries); t – time variable.

At the beginning, a graph is built to determine the general trend of the indicators towards each other. Next, a correlation table is built to determine the percentage of possible influence of indicators on each other, a significant indicator is above 50%. Next, a 5-lag vector autorepression is constructed for R-squared and F-statistical analysis. Further use of the criteria for choosing the order of lag is determined by the most optimal number of lags for constructing a vector autoregression and then regression with such a number of lags is performed. After analyzing the data, a Granger test is finally carried out to determine the influence of indicators on each other and to assess the presence of a double deficit problem. If there is a significance that has an influence, then a linear regression is carried out using the least squares method in order to more accurately confirm the presence of the influence of indicators.

The model will look like this:

$$CA = a_1 * BD + a_2 * GD, \tag{3}$$

Where: CA-current account (% of GDP); BD- budget deficit (% of GDP); GD-government debt (% of GDP).

The analysis period is 26 years from 1995-2021. The main data source is Eurostat.

Results. Consider the state of Italy's debts, namely the country's rating in terms of public debt in relation to GDP. In 2016, the country ranked 6th in the world after Lebanon and 2nd in Europe in terms of public debt. In 2020, the country began to rank 5th in the world after Cape Verde and is still 2nd in Europe after Greece [11], [12].
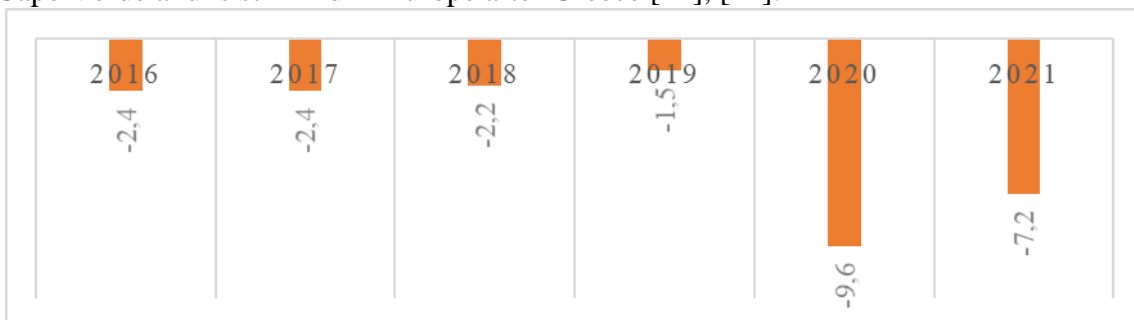

Fig. 3. Italian government deficit (% of GDP) in 2016-2021
Source: data from Eurostat [13]

According to the chart, Italy experienced an increase in the government deficit against the backdrop of a global pandemic. In 2016-2017, the budget deficit was -2.4% of GDP, in

2018 the budget deficit decreased by 0.2% and became -2.2%. In 2019, the deficit fell by 0.7% to -1.5%. In 2020, just with the onset of the pandemic the state deficit has increased dramatically and has become -9.6%. The data on the budget deficit since 1995 was reviewed and it was found that this is the largest increase in the budget deficit in Italy over the past 25 years. In 2021 the budget deficit has decreased to -7.2%.
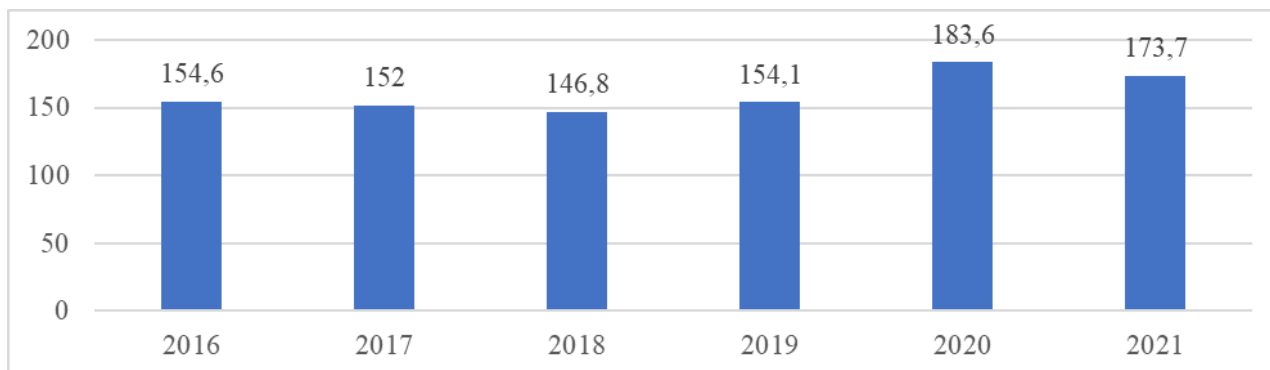

Fig.4. Italian government debt (% of GDP) in 2016-2021
Source: data from OECD [4]

The debt-to-GDP ratio in Italy for 2016-2018 had a downward trend from 2016 to 2017, it decreased by 2.6% and in 2018 by another 5.2%. In 2019, the ratio also decreased by about 0.5%. In 2020, Italy's debt-to-GDP ratio was 183.6%, up 29.5% from 2019. This is due to an increase in the public debt deficit by 8.1% and a fall in Italy's GDP by 8.9%. In 2021, the public debt amounted to 173.7% of GDP, which is 9.9% less than in 2020, which indicates positive trends in the country.

Although the debt in Italy is of lesser importance as it is mostly covered by the national currency, it will still be considered for a better comparison of the situation in the countries.
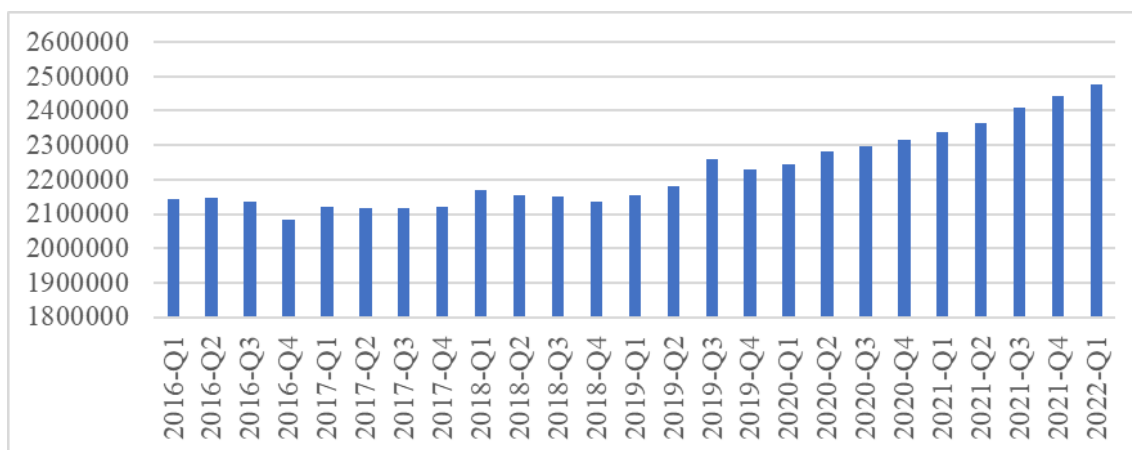

Fig.5. Italian gross external debt (Millions of Euros) in 2016-2021
Source: data from European Central Bank [14]

Italy's external debt had an upward trend on average. In particular, rapid growth can be seen in the third quarter of 2019, where the indicator grew by about 3.7%. Then there is a slight decrease, and in the second half of 2020, growth again. Also, comparing the beginning of 2016 and the end of 2021, the growth of external debt occurred by 14.03%. As for the first quarter of 2022, Italy's external debt is still on an upward trend.

Spain, in turn, in 2016 ranked 17th in the world and 6th in Europe in terms of public debt in relation to GDP. In 2020, the country ranked 15th in the world and 4th in the world in terms of public debt to GDP ratio [11],[12].
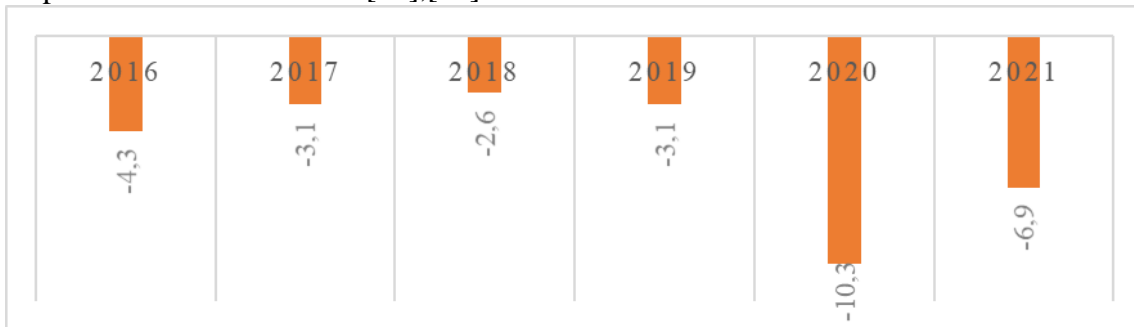

Fig.6. Spanish government budget deficit (% of GDP) in 2016-2021
Source: data from OECD [15]

The ratio of government budget balance to GDP in Spain has a negative value, which indicates the excess of government spending over government payments. In the period from 2016-2019, the decrease in government deficit was a maximum of 1.2% in the period from 2016 to 2017. Consider 2020, when the pandemic began, the budget deficit increased by 7.2% compared to Italy, in Spain the deficit growth was the same. But there is good news, in 2021 the level of the state budget deficit decreased by 3.4%. The reduction in the budget deficit in 2021 is due to an increase in tax collection in 2021 by 15.1%. And the increase in tax collection at one time is associated with an increase in the number of jobs in Spain and an increase in the minimum wage.
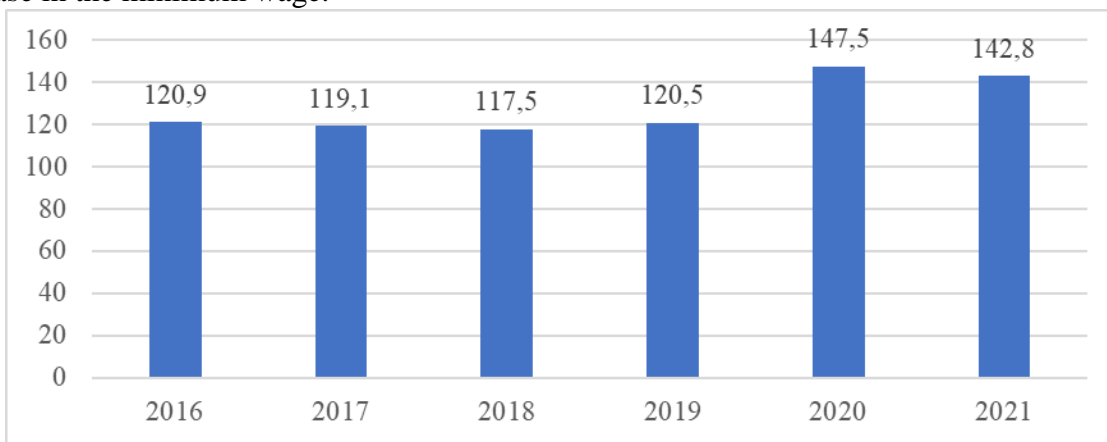

Fig.7. Spanish government debt (% of GDP) in 2016-2021
Source: data from OECD [4]

Public debt for Spain, as well as for Italy, is a big enough problem compared to their external debt. From 2016 to 2018, Spain's public debt to GDP ratio tended to decrease by 1.8% in 2017 compared to 2016 and by 1.6% in 2018 compared to 2017. In 2019, the indicator increased by 3%. Initially, the level of public debt in Spain was less than in Italy and in 2020 the public debt to GDP of Spain was (147.5%) less than the similar ratio of Italy (183.6%). In 2021, Spain's public debt fell by 4.7% to 142.8% of GDP.
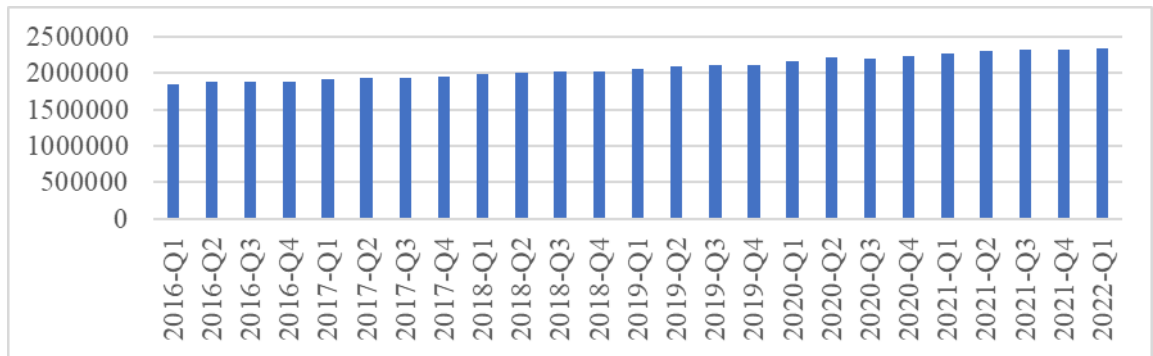
Fig.8. Spanish gross external debt (Millions of Euros) in 2016-2021
Source: data from European Central Bank [16]

Consider Spain's gross foreign debt. It can be immediately noticed that it is larger than Italy's gross foreign debt and at the same time it is growing more due to the pandemic - the growth of the indicator from the beginning of 2016 to the end of 2021 was 26.3%. In the first quarter of 2022, Spain's external debt increased by less than one percent, namely by about 0.5%.

Poland in 2016 ranked 78th in the world in terms of the ratio of public debt to GDP and 23rd among the countries of Europe. In 2020, the situation has changed, Poland has become 83rd in the world and 22nd in Europe [11],[12].
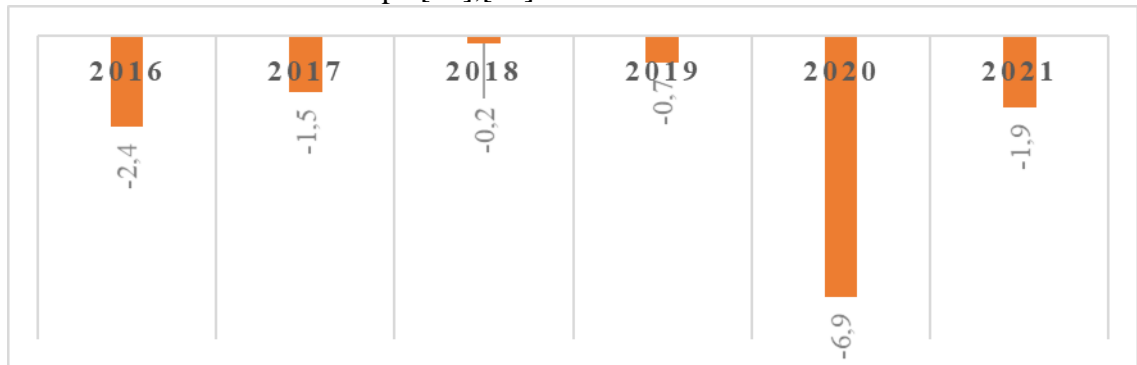

Fig.9. Poland Government Budget (% of GDP) in 2016-2021
Source: data from OECD [15]

Poland's government deficit is generally smaller than that of Italy and Spain, and it also showed a downward trend, with a minimum in 2018 of -0.2% of GDP. The increase in the budget deficit in Poland since the beginning of the pandemic was 6.2%, which is 1% less than in Italy and Spain (7,2%).
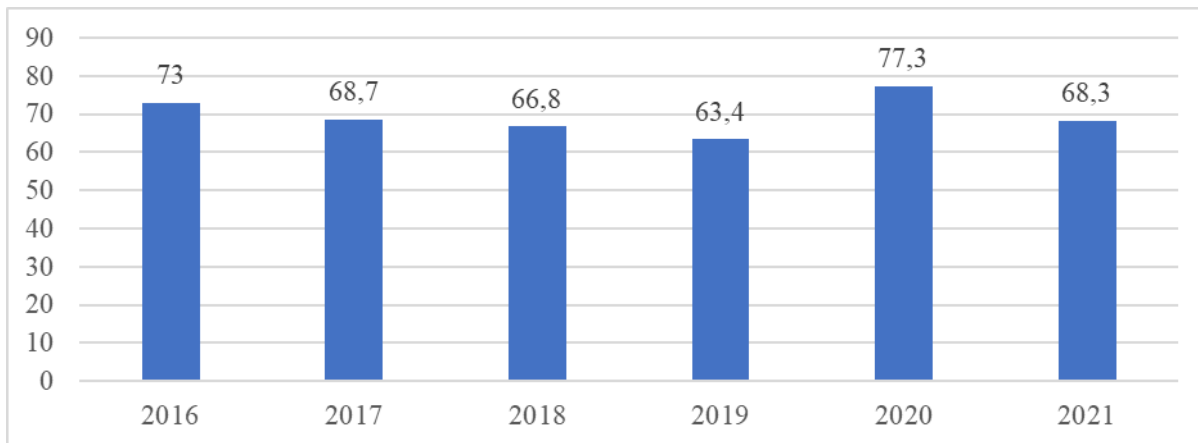
Fig.10. Poland Government Debt (% of GDP) in 2016-2021
Source: data from OECD [4]

The ratio of Poland's public debt to GDP is much less than that of Italy and Spain. The public debt of Poland in 2019 compared to 2016 decreased by 3.4%. But, as in other countries, the debt ratio has risen since the start of the pandemic. In 2020, the indicator increased by 13.9%, for comparison, in Italy it grew by 29.5%, and in Spain by 27%. That is, in general, Poland has a more stable position with regard to public debt. In 2021, the indicator began to recover and overall decreased by 9% compared to 2020.
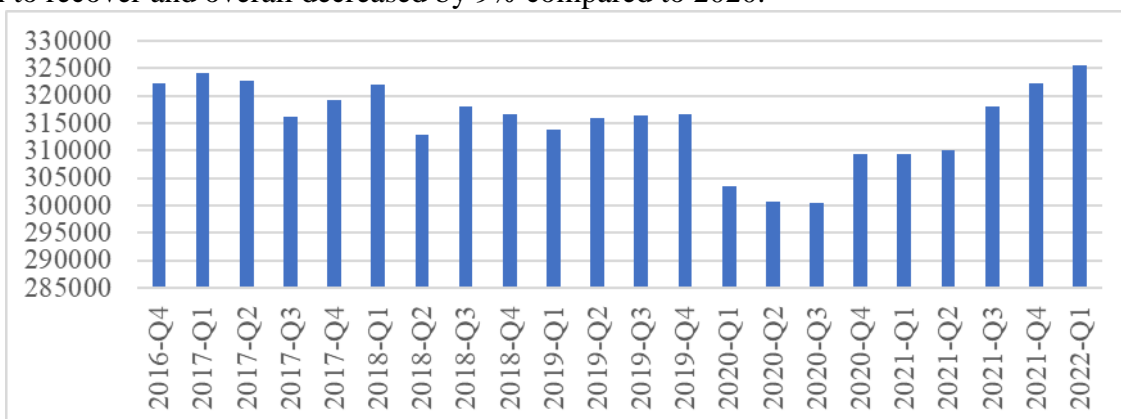

Fig.11. Poland gross external debt (Millions of Euros) in 2016-2021.
Source: data from European Central Bank [17]

Poland's gross external debt can be seen to have fluctuated greatly. Until the first quarter of 2017, it grew, then the trend reversed and the indicator decreased until the third quarter of 2017. It can also be noted that at the beginning of 2020, the indicator did not increase, but rather fell. In general, from the beginning of 2016 to the end of 2021, Poland's gross external debt increased by 5.8%, which is the smallest percentage increase among the countries considered. In the first quarter of 2022, the country's external debt also grew by less than 1%. But in general, it should be noted that all three countries have growth dynamics in external debt at the beginning of 2022.

To identify whether there is a problem of double budget deficit in the countries, an econometric study of the relationship between the budget deficit and the current account will be carried out. First, a graph was built to determine the correlation of indicators. Italy had both a positive and a negative current account. It can also be said that there is no special correlation according to the figure.

As a result of the analysis of the correlation table correlations between the current account and the balance of the Italian budget, the dependence of these variables is -0.24 out of 1, the coefficient is negative, which indicating an inverse relationship between these indicators. So, the correlation is -24%, which is less than 50% and this suggests that there is no relationship between the indicators. The next step was to build a vector autoregression with 5 lags, according to which the main indicators such as R^2 = 39% and 89%, F statistics = 0.69 and 8.74, which is quite small with such a number of measurements. The first lag turned out to be the optimal lag for analysis, so a vector regression was constructed using one lag, according to which value of indicators has changed, namely, and F statistics has values of 2.28 and 45.02, $R^2 = 16.57\% \ i \ 79.65\%$.

According to Granger's test, the following conclusions can be drawn about the interdependence of indicators. The current account does not affect the budget deficit, as the Prob indicator. = 0.5138. The balance of the state budget also does not affect the balance of the current account, because Prob. = 0.5959, ie there is almost a 60% chance that the coefficient of the variable is 0, that it is statistically different from zero.

Next, the situation in Spain was considered, doing the same manipulations as for Italy. Let's first look at the correlation between the current account and the budget deficit. According to the schedule, there is no strong correlation, but it can be seen that most likely these indicators have an inverse relationship. Consider a correlation table to confirm such a relationship. The correlation table shows that the relationship is indeed inverse, since the correlation indicator is with a minus sign, but it should also be noted that the correlation is not significant, since the indicator is -0.47. Correlation with 5 lags showed that this number of lags is not suitable for analysis, since the R-squared value is 0.68 and 0.95. In turn, the F index is 2.38 and 19.21. The first lag is the most optimal, because the values of the criteria FPE, AIC, SC and HQ are minimal. It can be argued that with autoregression with 1 lag, the value of the indicators changed, and R-squared itself = 40% and 91%, and F statistics may have a value of 7.95 and 119.1. Autoregression with 1 lag, the value of the indicators changed, and R-squared itself = 62% and 91%, and F statistics may have a value of 18.70 and 121.84.

Table 1

VAR Granger Causality/Block Exogeneity Wald Tests for Spain

Dependent variable: Current account balance (% of GDP)			
Excluded	Chi-sq	df	Prob.
Budget deficit (% of GDP)	14.96056	1	0.0001
All	14.96056	1	0.0001

Source: author's calculations, data from Eurostat and OECD [15],[18]

The current account does not affect the budget deficit, as the Prob indicator. = 0.2224. But the budget deficit affects the current account balance, because Prob. = 0.0001. It turns out that the probability of an error is less than 1% and 99% that the indicator is not equal to zero.

In order to check whether there really is a dependence and the impact of the budget deficit on the current account, a linear regression will be carried out next. This regression model will consider the impact of Spain 10-Year Bond Yield (at the end of the year), the budget deficit (% of GDP) on the current account balance.

A regression analysis will be performed to identify the theoretical relationship between Spanish current account balance CA (% GDP) and such independent variables as:

1. Budget deficit (% of GDP) (BD);
2. 10-Year Bond Yield (GB).

The model will look like this:

$$CA = a_1 * BD + a_2 * GB, \qquad (4)$$

The final model will look like this:

$$CA = -0,474*BD - 0,396*GB,$$ (5)

<div align="center">(-2,948***)   (-2,463**)</div>

It can be seen that the impact of the budget deficit has a negative dependence on the current account, with an increase in the budget deficit, the current account of Spain decreases. There is also a negative relationship between the yield of 10-year bonds and the current account, that is, with an increase in the yield of 10-year bonds, the current account decreases. This is due to the growing risks due to which the yield of 10-year bonds is growing. It turns out statistically that the study confirmed the relationship between the current account and the budget deficit, which indicates the existence of a double deficit in Spain. But it is also worth considering the error of the model, since the coefficient of determination of the model is only 0.380, which indicates a very weak connection. The actual value of the Fisher coefficient is 7.347, which exceeds the critical value of the indicator (3.42), which indicates that the model is significant.

Next, the effect of the Spanish 10-year bond yield on the current account will be tested by constructing a vector autoregression. Judging by the figure, there may be a negative correlation, since the opposite trend is observed, but not by a strong measure. The correlation table gave the results that the correlation between the current account and the 10-year bond yield is -.039 out of 1, a negative coefficient, which confirms the assumptions according to the table, but the relationship is still not significant.

So, the correlation is -39%, which is less than 50%, and this indicates that there is a very weak relationship between the indicators. A 5-lag vector autoregression yielded the following results: R squared = 91% and 91%, F statistic = 11.69 and 10.95 which is low with so many measurements. The VAR lag order selection criteria showed the results that lag 1 is the most optimal, as it is indicated by a large number of asterisks. Autoregression with 1 lag, the value of the indicators has changed, and the R-square itself = 85% and 82%, and the F-statistic can have a value of 69.9 and 57.80.

Table 2

VAR Granger Causality/Block Exogeneity Wald Tests for the current account and 10-year bond yield of Spain

Dependent variable: 10-Year Bond Yield			
Excluded	Chi-sq	df	Prob.
Current account balance (% of GDP	9.238367	1	0.0024
All	9.238367	1	0.0024

Source: author's calculations, data from Eurostat and Investing.com. [18],[19]

According to the Granger test, there is an influence of the current account on the yield of 10 Spanish bonds. But there is also a 1% chance that the variable is zero.

The last vector regression for Poland will be built to see what the situation is in this country. Judging by the graph, the correlation indicator occurs to some extent, the same can be seen that if it exists, then most likely it is direct. According to the correlation table, the indicator is 11%, which indicates a low correlation. Vector autoregression with 5 lags showed the following results: R squared = 61% and 71%, F statistic = 1.76 and 2.65, which is quite small for such a large number of victims. But the first lag is the most optimal, because the values of the criteria FPE, AIC, SC and HQ are minimal. In autoregression with 1 lag, the

values of indicators changed, namely R square = 23% and 54%, and F statistics has values of 3.42 and 13.73.

Table 3

VAR Granger Causality/Block Exogeneity Wald Tests for Poland

Dependent variable: Current account balance (% of GDP)			
Excluded	Chi-sq	df	Prob.
Budget deficit (% of GDP)	6.182929	1	0.0129
All	6.182929	1	0.0129

Source: author's calculations, data from Eurostat and Trading Economics [15],[18]

According to Granger's test, the following conclusions can be drawn about the interdependence of indicators. The current account doesn't affect the budget deficit, as the Prob indicator. = 0.1119. The balance of the state budget affects the balance of the current account, because Prob. = 0.0129. The probability of error does not exceed 5%. In order to clarify the dependence, a linear regression will be performed.

This regression model will consider the impact of Spain 10-Year Bond Yield (at the end of the year), the balance of the state budget (% of GDP) on the current account balance. A regression analysis will be performed to identify the theoretical relationship between Poland current account balance CA (% GDP) and such independent variables as:

1. Budget deficit (% of GDP) (BD);
2. 10-Year Bond Yield (GB).

The model will look like this:

$$CA = a_1 * BD + a_2 * GB,$$ (6)

The final model will look like this:

$$CA = -0{,}722 * GB,$$ (7)
$$(-5{,}138***)$$

According to the least squares method, the budget deficit does not have a significant impact on the current account. But in this case, the yield of 10-year bonds of Poland matters, namely, the error is not higher than 1%. The indicators have a negative relationship, that is, with an increase in profitability, the current account decreases. But in this case, the regression model has a higher coefficient of determination, which is equal to 0.576, it will exceed 50%, which indicates the acceptability of the model. The actual value of the Fisher coefficient is 13.602, which exceeds the critical value of the indicator (5.55), which confirms the adequacy of the model.

Consider the results of vector regression for the current account and public debt of Poland. The correlation was -76%, which indicates a significant influence between the indicators, since it is more than 50%, it also indicates a negative dependence of the indicators, which was also seen on the graph. The vector regression was built with 1 lag because it had the lowest scores. The following results were obtained: R square = 48% and 72%, and the F statistic has values of 10.79 and 28.37. The Granger test showed that the current account does not affect the yield of 10-year bonds, and they in turn do not affect the current account, since their Prob indicators are 0.1504 and 0.4365, respectively.

Conclusions. The situation with the budget balance of the countries differs, although all three countries have a negative value of the indicator, which indicates the presence of a budget deficit. In Italy, there was a sharp increase in the budget deficit and its slow recovery in 2021 in Spain, the deficit also increased significantly, but less than in Italy, but it also began to decrease more rapidly. Poland had the smallest initial budget deficit and also the smallest growth in relation to its GDP, although the deficit grew significantly and also rapidly decreased in 2021. It turns out that Italy had the biggest problem with the growth of the

budget deficit due to the pandemic, and there is also a slower decrease relative to other countries. The public debt was the largest initially in Italy, but the largest increase is observed in Spain. For Poland, indeed, public debt was initially smaller and less prone to growth due to pandemics. As for external debt, here the situation is reversed, Poland has a larger increase in the indicator, which continues to increase even until the first quarter of 2022. Italy's external debt also rose significantly, but this happened more evenly, as for Spain, its debt was stable with a slight increase compared to other countries. According to the results of vector autoregression in Italy, the presence of the double deficit problem was not statistically confirmed; in Spain, this model showed the result that there is an impact of the budget deficit on the current account, which was later confirmed when checking using linear regression. According to linear regression, the current account and budget deficit are negatively related. It was also noticed that there is an influence of the yield of 10-year government bonds of the country on the current account, there is a negative relationship between the indicators. Further, using vector autoregression, it was confirmed that the current account affects the yield of 10-year Spanish bonds. The double deficit problem was not confirmed in Poland after testing with linear regression, but there was also a relationship between Poland's 10-year bond yield and its current account, but this was not confirmed by vector autoregression.

It can also be assumed that the situation with the debts of countries will worsen in the context of a possible energy crisis, which may cause problems for countries and the need for additional financing. Also in Italy, there is an increase in bond yields, which is caused by a decrease in their price, this may indicate an increase in risks within the country, since higher yields indicate greater risk for the bond buyer. It also indicates the growth of risks in the country, this may be caused by the growth of uncertainty against the background of the change of government in the country, which has become the cause of certain political instability.

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ОЦІНКА СТАНУ ІНВЕСТИЦІЙНОГО СЕРЕДОВИЩА УКРАЇНИ ЧЕРЕЗ ПРИЗМУ МІЖНАРОДНОГО РЕЙТИНГУВАННЯ

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Анотація. Сучасні умови господарювання характеризуються стрімким технологічним розвитком, тому інвестиції є надзвичайно важливим засобом стимулювання прогресивних структурних змін в економіці кожної країни.

Україна знаходиться на шляху економічних перетворень, за таких умов, поліпшення інвестиційного середовища є одними із основних напрямів державної політики на сучасному етапі. Українське інвестиційне середовище одночасно і приваблює і відштовхує. Україна займає стратегічне географічне положення, має багаті природні ресурси та робочу силу з високим рівнем освіти, що робить її інвестиційно привабливою, проте вона ще не досягла свого очікуваного потенціалу, оскільки сьогодні на території країни триває повномасштабна війна, також не зведено до мінімуму втручання держави у дію ринків, не усунуті адміністративні перешкоди, що заважають веденню бізнесу. Вивчення позитивних і негативних сторін інвестиційної діяльності на території нашої держави набуває все більшої актуальності.

Дослідження питань пов'язаних з оцінкою та аналізом українського інвестиційного середовища є об'єктом дослідження багатьох науковців, вчених. Цінність наукових праць з їх теоретичними та практичними дослідженнями є достатньо високою, але багато аспектів потребують подальшого дослідження. Так, для формування ефективної стратегії та визначення інструментів залучення закордонних інвестицій необхідно проводити моніторинг сучасного