Università Bocconi

Navigating the Economic Landscape of Belgium: Comprehensive Analysis and Proposed Policy

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Executive summary

Objective of the Report:

This report analyzes the economic situation of Belgium and the policies implemented by previous governments over the last decade. It considers economic growth, shocks like the pandemic and the Russia-Ukraine war, and critical issues concerning the country's political-economic structure.

Major Points:

Up until 2019, Belgium presented GDP growth, a decreasing unemployment rate, and a major decrease in government debt. However, the pandemic and the Ukrainian war caused a significant rise in public debt and inflation.
In 2022, the country's GDP of 554 billion EUR was mainly composed of consumption and government spending. An unemployment rate of 5.63%, a debt-to-GDP ratio of 106%, and an annual inflation of 9.6% show that the country was in dire condition.
The main problems discovered during the analysis were a significantly high debt deficit and inflation rate, a pension system damaged by an aging population, and various problems related to climate change. Our solutions include tax reforms, pension adjustments, and initiatives towards sustainability.

Results, Conclusions, and Recommendations

Firstly, Belgium has very problematic public finances, with a 2023 deficit of 4.9% of GDP and a debt ratio of 106.3%. As Belgium's political system has 6 governments and 3 regions, coordination for successful economic policies results very difficult. We propose a clear binding fiscal framework that provides a fiscal target for the general government and subnational ones as a solution.
Secondly, the pension system is in shambles due to an aging population, with a projected pension cost of 11.5% of GDP for 2023. High inflation and borrowing costs are also an issue. We propose a gradual and selective reduction of wage indexation to decrease public deficit by creating more fiscal space, easing the pension expenditure, and lowering inflation expectations (expansionary fiscal and monetary policies may be needed during the transition).
Lastly, for issues related to climate change regulations and renewable energy, we propose two solutions. One is becoming a hub for hydrogen renewable energy in Europe, reducing the country’s dependence on fossil fuels and increasing electricity production. The second one is improving the National Climate Commission by increasing the authority of the federal government and inviting climate and public policy scientists as well as private sector representatives. These measures aim to improve Belgium's sustainability in the long term.
To conclude, the report offers viable solutions to Belgium's economic problems, following a thorough analysis of the country's situation, growth, shocks to its economy, and structural deficiencies.

1.Key economic indicators

1.1. The Present Economic Scenario

Considering its size and geographical location within the EU, Belgium is a highly integrated small open economy with exports concentrated on intermediate products. In fact, imports and exports belong roughly to the same category of products (chemical, mineral, and pharmaceutical products, vehicles, machinery). Medium and high-tech manufactures account for more than 50% of the total exports of goods, above the euro area median.
Currently, Belgium stands in between economic challenges and resilience. The nation’s annual nominal Gross Domestic Product (GDP) for 2022 equaled approximately 554 billion Euros and it was significantly composed of consumption and government spending, respectively 50.6% and 23.7%. The distribution of

economic sectors within the GDP for 2022 showed a heavy dominance of the service sector with 68.3% of the labor force, followed by 20.7% working in industry and manufacturing and a 0.7% minority in agriculture. The most recent unemployment rate is 5.63%, which is between the lowest and highest points during the last decade. Although the annual GDP for 2023 is not certain as of now, the government debt-to-GDP ratio in the 2nd quarter of 2023 was 106%, signaling fiscal concerns on the country's economy. Inflation, as well, has increased to a rate of 9.6% in the 2022-2023 period, highlighting rising living costs.

1.2. A Decade of Transformation

Looking back at the last decade, Belgium's economic situation consists of periods of both growth and turbulence. The country's GDP has gone through a regular ascent, with the nominal GDP showing an approximate growth of 41.02% over the decade, while the real GDP, adjusted for inflation, increased by about 15.76%. The steady increase in the real GDP indicates that Belgium's economy has substantively expanded. Still, the growth path has not always been linear, as changes in inventory and net exports varied from year to year because of the economy reacting to various effects. Like the current situation, the GDP was dominated by the service sector in the last 10 years as well, with an average rate of 69.1%, followed respectively by industry and agriculture.

The unemployment rate has experienced a continuous decrease reaching a record low of 4.9% in April of 2020. In August 2020 it increased to 6.4%, and in March 2021 up to 6.7%. In terms of government debt, a clear downward trend was evident in the period between 2014 and 2019. However, the unpredictable COVID-19 pandemic led to a sharp rise in public debt, which was even more increased between 2022 and 2023 due to the Russia and Ukraine war. Annual inflation in Belgium has remained constant from 2013 to 2019. Its value was between 0.34% and 2.14%. The country had an initial negative annual change in inflation in 2013 and 2014 but saw these values rise in 2016 when inflation rose by 1.41%. It then continued to diminish gradually, until 2021, when it reached 2.41%. Far from reducing this effect, the following year saw an increase of 7.16%, reaching a total of 9.60% for the 2022-2023 period.

1.3. Belgium in the European Context

Unemployment trends in the last decade are like those of other countries in the EU. However, in the Eurozone, Belgium is one of the two countries (along with Luxembourg) where wages are automatically indexed to inflation. Between January 2022 and January 2023, all wages in Belgium will have increased between +/- 9 and 10%. This system may pose one of the main risks to the country's economic outlook by inducing more persistent inflation. As mentioned in the previous paragraph, the current debt-to-GDP ratio equals 106%, which is high compared to other European countries and has been a cause for concern due to its potential impact on the country's fiscal stability and economic growth. Therefore, Belgium's credit rating, reported on an AA basis with a stable outlook, does not have the highest credit score. Throughout the last decade, the CA (current account)-to-GDP rate did not have huge fluctuations compared to other EU countries, and the last recorded value is -3.5 % of GDP. Compared to the EU, inflation followed a similar pattern as well. While Belgium had an average inflation of 2.6% in the last ten years, the Eurozone had an average of 2%.

1.4. The COVID-19 Disruption

The real GDP growth rate during 2020 for Belgium was -5.3%, again, close to the average of the EU, which was -5.6%. One of the main reasons for the sharp decline was that restrictions were limiting the functioning of the service sector, which covered 68.8% of the GDP at the time. However, with a 6.9% growth rate in 2021, Belgium was able to overcome the decline at a better pace than the EU average. Workers in Belgium are among those with the greatest commuting distances in Europe, with an average of 50 minutes every day and the lockdown has hindered their movement, increasing the level of unemployment since it takes time for workers to relocate. The previously mentioned restrictions forced businesses to reduce their operations, resulting in a loss of economic activity for many companies which led them to layoffs and reduced hiring. With a 14% increase in the public debt and a -7.9+ decline in the surplus-to-deficit ratio, the COVID-19 situation unavoidably affected the government budget as well.

1.5. Ukraine War's Economic Ripples

Although due to its geographical location Belgium's economy was not directly affected by the Russia-Ukraine war, 20% of its energy consumption depended on Russia a year before the war. Still, when a major gas supplier from Russia called Gazprom decided that they would stop their supply to several Dutch companies in May 2022, the Belgian government announced that they were fully prepared. Nevertheless, the Ukraine war has inevitably affected energy prices and supply stability in Europe, and with the increase in cost production, real wage decreased, labor market frictions increased, unemployment increased, and potential output permanently decreased due to the structural supply shock. As a result, after reaching a low of 5.3% in February 2022, the unemployment rate increased by 0.6% in the following months. The GDP contracted by 6.7% in 2022, therefore we had a positive output gap and the Philips curve shifted upward. Despite the energy crisis, Belgium remained a massive importer of Russian uncut diamonds, with a level of imports equal to 2019 and 2020. In the other direction, Belgium exported goods worth €3.6 billion.

2. Critical issues

2.1. Debt ratio and public deficit

Belgium's public finances have been under pressure since the 1960s, as the country has adopted a Keynesian economic policy and tried to stimulate domestic consumption and public investment by increasing government spending, lowering taxes, or expanding the money supply. However, this policy led to unbalanced public finances, as the country has been running large public deficits and accumulating high public debt.

The current deficit for 2023 is estimated at 4.9% of GDP, or €27.9 billion, which is well above the EU's limit of 3% of GDP. The debt ratio has reached 122.1% of GDP in 2022 due to coronavirus crisis. It declined slightly to 105.1% of GDP in 2022, but this was due to the temporary effect of high inflation and low interest rates.

The public deficit in Belgium was negatively affected by the automatic stabilizers which are elements built into government's revenues and expenditures that aim to reduce the fluctuations in economic activity. They are the result of the Keynesian economic approach. They increased public spending and reduced tax revenues during the recession caused by the Covid-19 pandemic, by providing income support and protection to the vulnerable households and firms. Wage indexation also increased the public spending on pensions, social benefits, and wages, as the inflation rate rose significantly due to the high energy and food prices and the supply chain disruptions.

The Belgian government is facing higher borrowing costs because investors lose confidence and demand a higher interest rate to lend money to the government. This may reduce the fiscal space and may crowd out private investment and consumption, since the private sector may not be able to afford the higher interest rates.

Reduced fiscal credibility can trigger a debt crisis or increase the risk of default. This can damage the country's credit rating, making it even harder to borrow money in the future. A high debt ratio can limit the government's options to respond to shocks, such as recessions, pandemics, or natural disasters. It can also put pressure on the government to reduce its spending or increase its taxes, which can have negative effects on growth, employment, and welfare.

2.2. Pensions

Belgium, like many European countries, is facing significant challenges due to the aging population and its impact on the pension system. Approximately 30% of Belgians are over 65, which is higher than the average in Europe.

The impact is a high pension cost in public spending. It was projected to constitute 11.5% of GDP in 2023, with a forecasted increase to around 13.5% by 2050. Belgium is expected to have one of the most rapid escalations in pension spending in the euro area.

The current pension system is structured into the 'public pension', the 'occupational pension', and the 'private pension'. Public pension consists of employed people with an average state pension of €1,100, the self-employed with €900, and the civil servants with €2,600. The occupational pension is provided by companies or across industries (unions). A private pension can be established with providers offering different kind of products to invest in. Apart from pension expenditures, other elements like rising healthcare expenses further imply a structural increase in spending.

2.3. Inflation

Inflation has reached record-levels in the 2022-2023 period (9.60%) and the population was struggling to keep up with the increase in prices due to the supply chain disruption caused by the pandemic and the Ukrainian war. Wage indexation aims to link wages with the cost of living following various indexes and increase wages accordingly to protect the citizens' purchasing power. Since its establishment on January 23, 1952, it has undergone various changes and modifications. The most recent one occurred in 2013. The government limited the automatic indexation of wages, as part of labor market reforms. This measure was put into effect to increase competitiveness in the context of the EU. While this law's purpose was initially well-intentioned, nowadays it is counterproductive and leads to bigger problems. Following the spike in inflation levels in recent years, the cost of living had increased a lot due to rising intermediate input costs in production. This loss in purchasing power, however, is not the only consequence of wage indexation. It also affects the public deficit, as it increased the public spending on pensions, wages, and social benefits, following the supply chain disruptions of recent years. For instance, the war between Russia and Ukraine has left, and continues to leave, long-lasting impacts on the European economy. Many trade routes with Russia have been blocked, although this is not the case with Belgium. The main issue caused by the war was the inflation on energy prices due to the halt of trade with Russian oil and gas companies. The war in Ukraine has led to a surge in fuel prices, compounded by EU taxes on fossil fuels, resulting in Belgium experiencing a decline in international competitiveness.

2.4. Climate change

Climate change damages infrastructure, affects human health, reduces competitiveness of tourism sector, and increases energy demand and greenhouse gas emissions.

Belgium’s current energy transition strategy depends on electricity. However, the low heating oil and gas prices along with high electricity prices limit the incentive for electrification. In 2019, gas prices in the country were among the lowest in Europe, while the electricity prices for households were the third highest and electricity prices for industries were the sixth highest among International Energy Agency countries. The high electricity prices are caused by costs that are not associated with electricity generation or transmission but are caused by the complexity of managing the supply of electricity. High costs of electricity reduce the incentive for stakeholders to invest in the electrification of building heating, transport, and industrial processes.

The most recent National Energy and Climate Plan of Belgium does not provide a common ground for the three different regions and therefore falls short of a fully integrated plan that would allow for an efficient allocation of resources.

3. Current Government Solutions

To comply with the EU fiscal rules, the budget deficit of a Member State must not exceed 3% of GDP each year, and public debt must not exceed 60% of GDP. Therefore, Belgium must reduce its deficit by at least 0.5% of GDP per year from 2024 until it reaches 3% or lower. In the latest Stability Programme, the Belgian government has already committed to reduce its structural deficit from 4.6% of GDP in 2023 to 2.7% in 2026

3.1. Tax reform

One of the most important solutions to be implemented (from 1st January 2024) is the tax shift reform plan of Finance Minister Vincent Van Peteghem.

Labor taxes have been historically extremely high by international comparison. A single worker’s take-home pay, after tax and benefits, was 59.7% of their gross wage, compared with the OECD average of

75.4%. This revenue neutral, growth-oriented reform consists primarily of a shift from labor to consumption taxes. Indeed, the government plans to increase the tax-free amount, raise the 45% tax bracket range from net taxable income of EUR 46,440 to 60,000. This will allow savings to be carried forward tax-free, and labor income becomes more attractive, boosting employment by increasing disposable income and incentives of workers. These combined will stimulate long run GDP growth and consequently benefit public deficit.

To counteract the lower tax revenues the government plans the following. It will introduce the Global Minimum Tax which requires multinational companies to pay at least 15% tax on their global profits, regardless of where they are located or where they shift their profits. Secondly, the government plans to repeal the notional interest deduction (at least for large companies), which allows companies to deduct a fictitious interest from their taxable income based on their equity.

Both measures prevent tax avoidance and ensure a fair contribution of large companies to the public finances. Lastly, they will implement a carbon tax on fossil fuels and a tax on financial transactions to generate additional revenues and reduce greenhouse gas emissions.

3.2. Pensions reform

Policies which directly address the problem of an ageing population and the support of the pension system include diverse measures.

Firstly, reducing the coverage ratio. The retirement age in Belgium is set to increase from 65 to 66 in 2025 and to 67 in 2030. Also, the 'early retirement age' was raised from 60 in 2012 to 62 in 2016, and subsequently to 63 in 2018. Additionally, the duration of service needed to qualify for such an early pension was increased, from 40 years to 42 years in 2019. This concludes a drop in the coverage ratio which had a favorable influence on the labor market component because it lowered the number of younger pensioners while increasing the number of workers.

The pension bonus, which has been dropped in 2015, but was restored, provides a progressively increasing bonus to those working beyond retirement age, up to a maximum of €22,645, payable in one instalment upon retirement starting January 2025. This policy leads to an incentive to prolong working lives.

Moreover, the 'Wijninckx' contribution has been doubled. The 'Wijninckx' contribution is a pension payment made by employers. The reform doubled this contribution from 3% to 6%. It is to be implemented from January 2028 on. This measure is designed to enhance pension funding.

Another action taken was the elimination of considering study periods in the calculation of career duration for civil servants upon early retirement.

Lastly, the current 80% limit, which restricts the sum of public and occupational pension benefits to 80% of the last gross annual salary and allows employer contributions to be tax-deductible when the sum of pension benefits does not exceed that percentage of last gross annual salary, will be removed. This will encourage more employees to participate in the occupational pension plan and more employers to provide retirement benefits to their employees, consequently promoting overall pension coverage and boosting individual savings for future.

3.3. Climate change reform

In 2019, the federal government invested more than €13 billion in subsidies to fossil fuels, through various incentives including tax exemptions and reduced rates of VAT. In 2021, the European Commission endorsed Belgium's €5.9 billion resilience plan against COVID-19 impacts, with 50% of the budget supporting climate objectives, such as renovating the buildings to increase their energy efficiency and accelerating the transition to green mobility. In 2020, fossil fuels (oil and natural gas) accounted for 71% of Belgium's energy supply.

3.4. National Pact for Strategic Investments

The National Pact for Strategic Investments will mobilize funds to important sectors of the economy, such as infrastructure, digitalization, energy, health, and education. It aims to invest 150 billion euros in various projects by 2030, with the contribution of both private and public sector. Increasing investment, boosting innovation, and creating more jobs and income could increase the tax revenues for the government, and reduce the need for public spending on social programs. Moreover, it could support the green and digital transitions.

4. Recommendations for Future Policy

4.1. Binding fiscal framework

The fragmentation of the fiscal federalism system makes it hard to coordinate fiscal policies. Belgium' s political system with 6 governments and 3 regions is making the implementation of fiscal policy difficult. The Flemish parties want to take urgent action to reduce the deficit, while the Walloon parties argue that the debt is not a priority.

To improve efficiency among different governments, and to strengthen the fiscal rules some changes are needed, such as a clear binding fiscal framework that provides fiscal target for the general government and subnational ones. The 2013 Cooperation Arrangement, which was intended to provide such a framework, has not been fully implemented.

4.2. Reducing wage indexation

Implementing a gradual and selective reduction of wage indexation could decrease public deficit by creating more fiscal space and more room for tax cuts. Moreover, it lowers the public wage bill and public pension expenditure (which are major sources of public deficit in Belgium), reduces inflation expectations and borrowing costs and enhances the international competitiveness by allowing wages to reflect market conditions, not inflation. However, this would reduce domestic demand and aggregate output, as lower wages reduce disposable income and consumption, so expansionary fiscal and monetary policies may be needed during the transition. To reduce income inequality as different groups of workers may experience different wage dynamics, the government may provide targeted social transfers and tax credits to vulnerable workers.

4.3. Hub for renewable energy in Europe

The first hydrogen strategy announced by the Energy Minister Tinne Van der Straeten in 2021 was clear in stating the role Belgium wants to play as an import and transit hub in Europe for renewable molecules. The strategy was specifically relevant as Belgium had competitive geographical advantage with its strong energy transmission infrastructure (such as direct pipeline connections to France, Luxembourg, and Netherlands), allowing the country to dominate three key routes: the North Sea route, the Southern route, and shipping route. Keeping in mind that Belgium is a key country in offshore wind energy production, such strengths can be further utilized to make Belgium the European hub for renewable energy transmission and distribution. By introducing optimal planning of energy transport networks and initiating agreements with closer states at first, Belgium can become one of the central energy hubs of Europe. Following a concentric zone expansion strategy, the country can go through a test period to see issues that may arise with lower costs. Becoming a main hub for renewable energy will reduce the country's dependence on fossil fuels and increase electricity production, leading to a direct decrease in electricity prices as well as helping the country keep its competition in various sectors. Positively affecting the GDP by increasing investments and output, such a policy can decrease public debt with the growing number of export duties, resulting in lessening the burdens of the pension system.

4.4 Improving the National Climate Commission

The National Climate Commission created in 2002 is a great starting point for initiating cooperation among regional and federal governments. To accelerate the effectiveness of the work, the authority of the federal government within the commission can be increased. Furthermore, restructuring the format of the commission by inviting climate and public policy scientists as well as private sector representatives from industrial foundations like the Federation of Belgian Industrial Energy Consumers can help with increasing the reliability and inclusivity of the commission. Including new stakeholders will pace up the process of producing realizable solutions that have broader effects and help allocating the resources much more efficiently.

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6.Tables

Table 1 – Public debt in % of GDP

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
105.5	107	105.2	105	102	99.9	97.6	112	108.0	104.3	106.0[1]

Table 1 shows the public debt in % of GDP. A clear downward trend was evident in the period from 2014 to 2019. However, the unpredictable Covid event led to a sharp rise in public debt. Furthermore, the increase in government debt between 2022 and 2023 results from the pending war in Ukraine.

Table 2 – Budget surplus / deficit in % of GDP

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
-3.1	-3.1	-2.4	-2.4	-0.7	-0.9	-2.0	-8.9	-5.4	-3.5

The budget deficit has been high and is estimated to be 4.7% of GDP for 2023[1]. The impact of covid to a deficit of 8.9% is evident. In the years of 2013 and 2014 the budget deficit surpassed the threshold of 3% for an excessive deficit procedure (EDP).[2]
Over the last decade, the development has followed a similar course as the eurozone's.

Table 3 – Current account balance in % of GDP

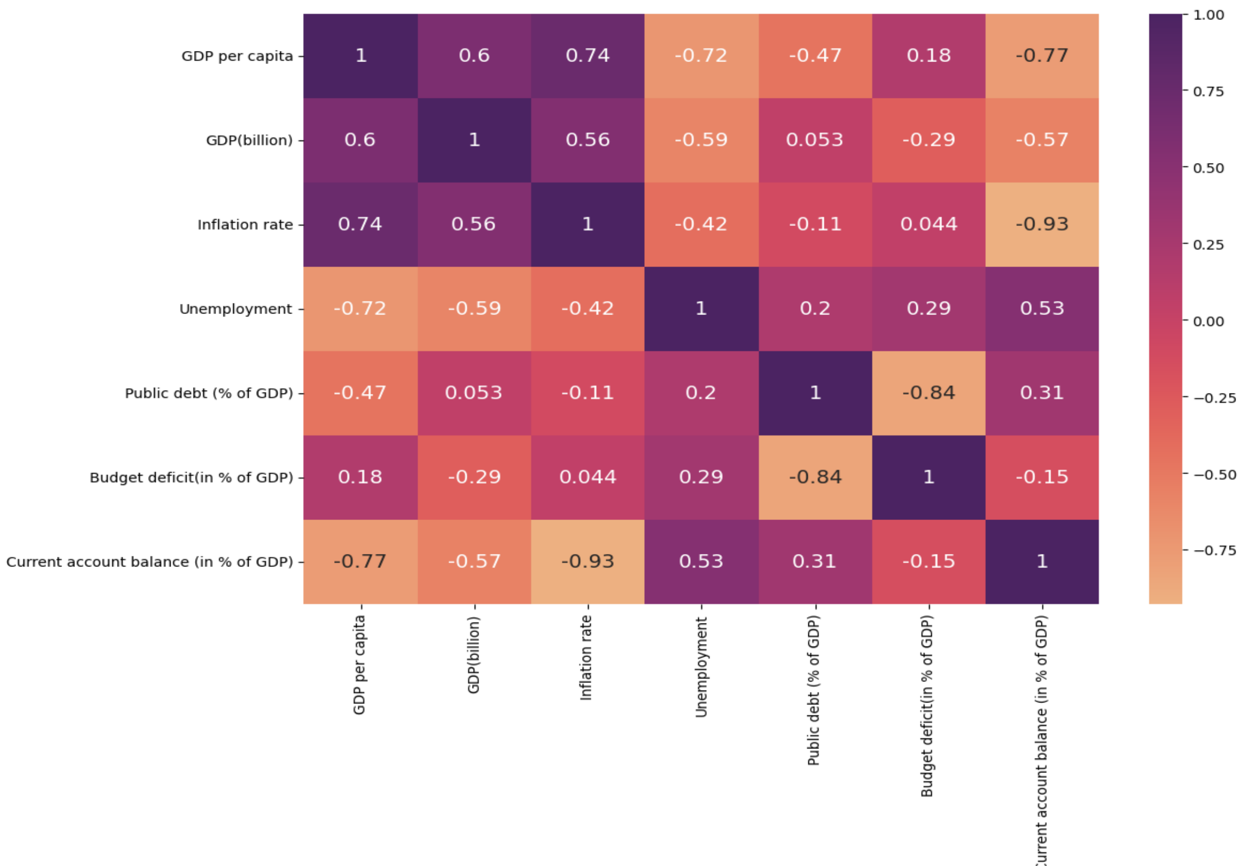
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1	0.8	1.4	0.6	0.7	-0.9	0.1	1.1	0.5	-3.5

As observed, throughout the last decade, CA-to-GDP did not have huge fluctuations compared to other EU countries, such as Netherlands, and the last recorded value is -3.5 % of GDP (World Bank data). This indicates that Belgium was in deficit last year.

7.Figures

Figure 1. Correlation matrix which shows how strongly and in what direction economic indicators are related to one another

- *GDP per capita is positively correlated with inflation rate, meaning that higher economic growth tends to be associated with higher prices. (0.74)*
- *GDP per capita is negatively correlated with unemployment rate, meaning that higher economic growth tends to be associated with lower unemployment.*
- *Public debt as % of GDP is negatively correlated with current account balance as % of GDP, meaning that higher public debt tends to be associated with lower trade surplus or higher trade deficit.*
- *Budget deficit as % of GDP is negatively correlated with current account balance as % of GDP, meaning that higher budget deficit tends to be associated with lower trade surplus or higher trade deficit.*
- *The inflation rate is negatively correlated with the unemployment rate (-0.42), meaning that higher inflation tends to be associated with lower unemployment. This is in accordance with Phillips curve, which suggests a negative relationship between inflation and unemployment.*
- *Inflation and CA balance are negatively correlated because higher inflation makes a country's exports less competitive and imports more attractive, leading to a lower CA balance (-0.93)*



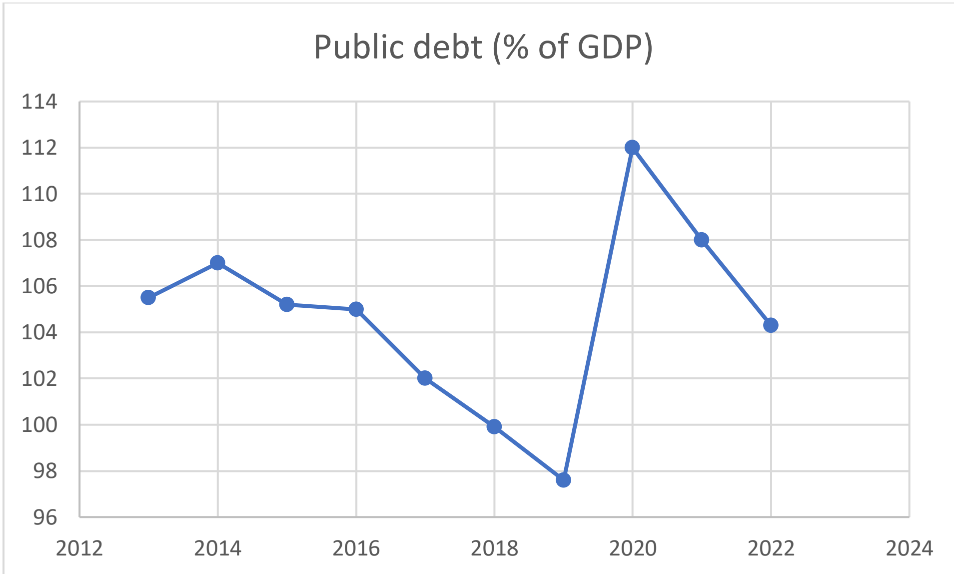


Figure 2: Public debt as percentage of GDP over 10 years

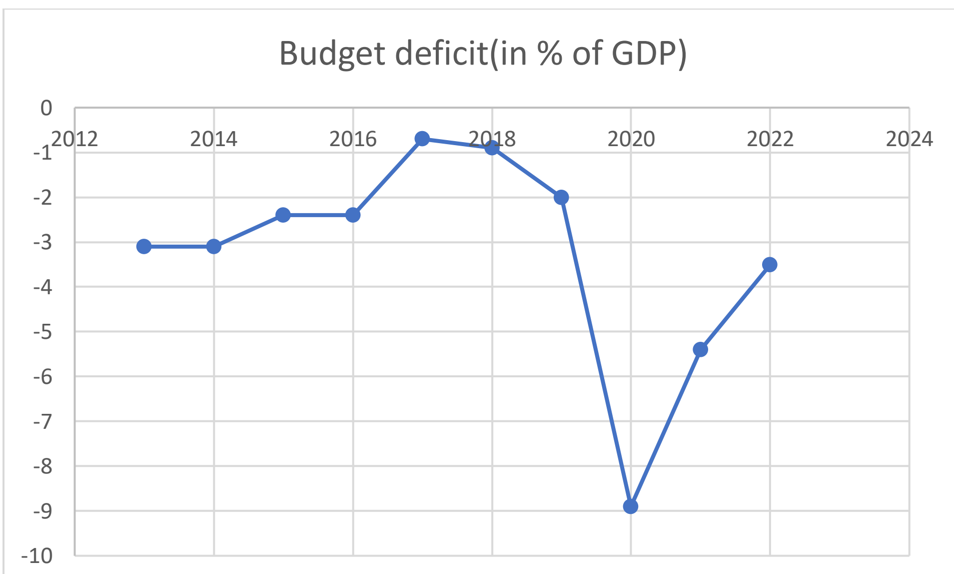


Figure 3: Budget deficit as percentage of GDP over 10 years

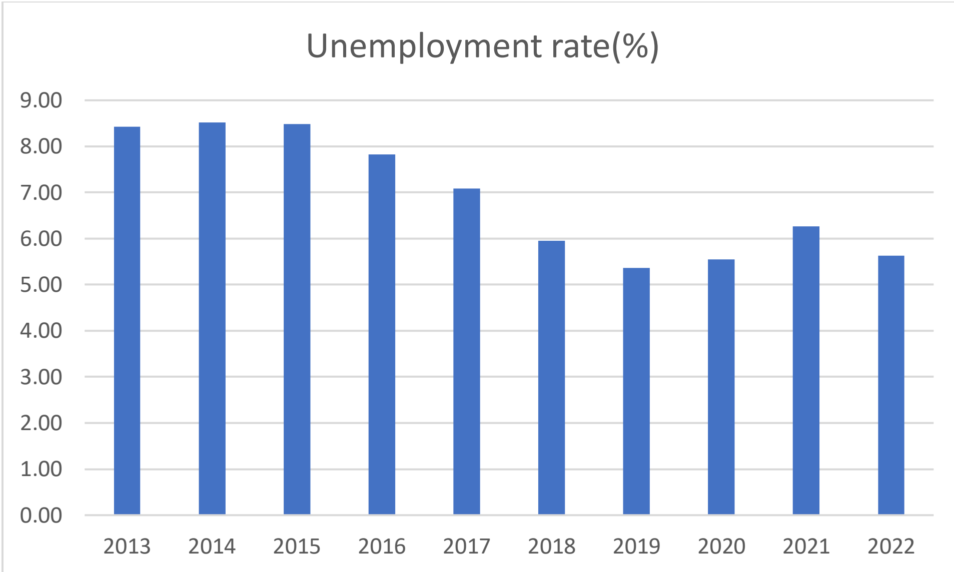


Figure 4: Unemployment rate over 10 years

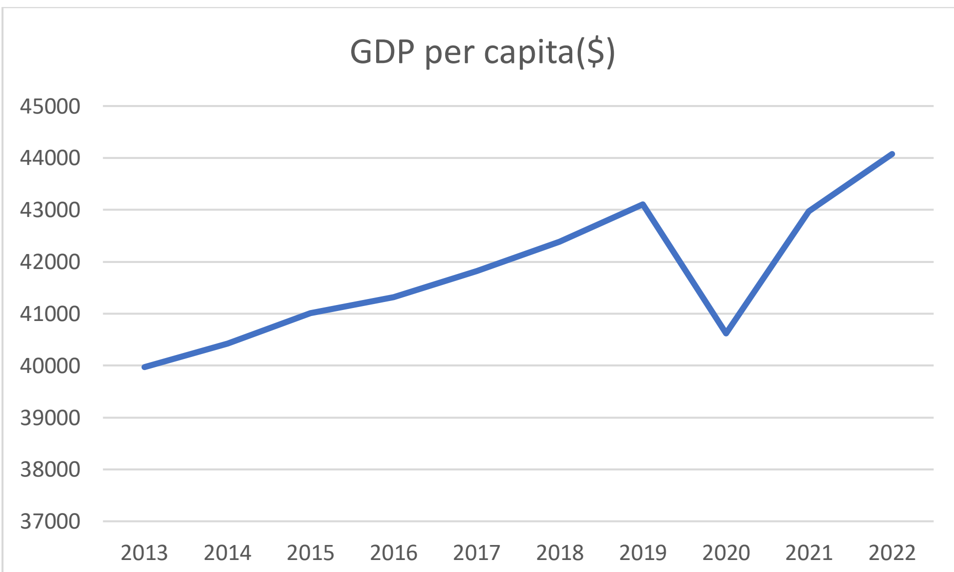


Figure 5: GDP per capita over 10 years

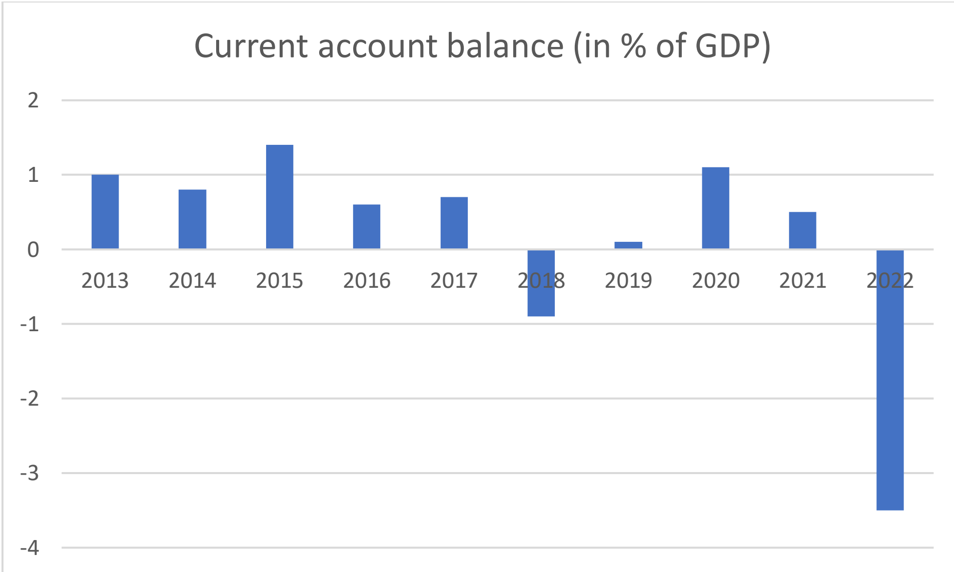


Figure 6: Current account balance as percentage of GDP

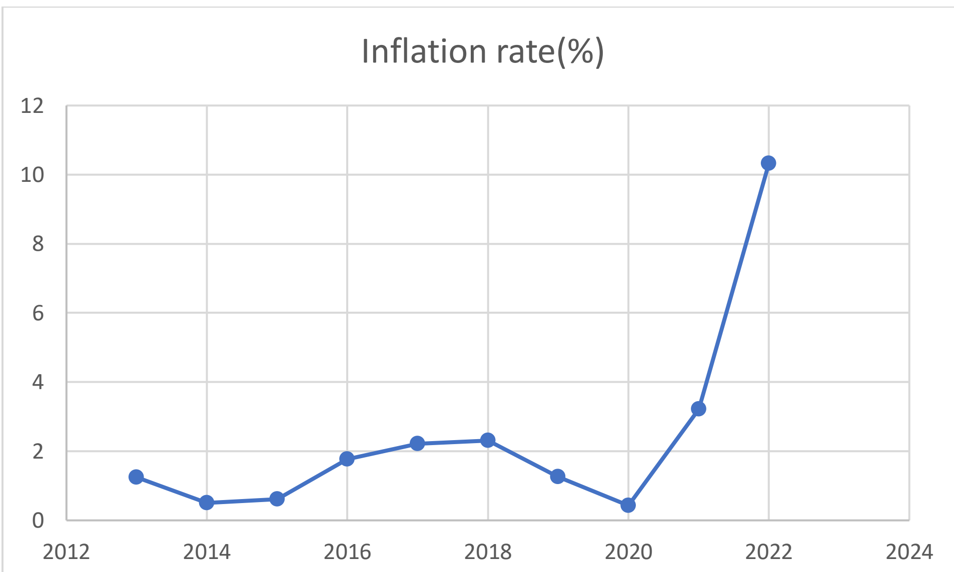


Figure 7: Inflation rate

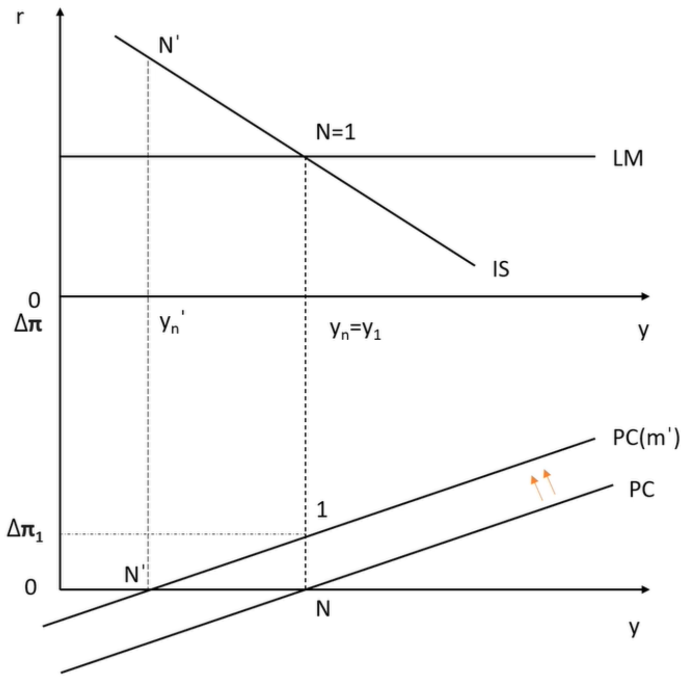


Figure 8: IS-LM-PC model describing the negative supply shock caused by the Ukraine War

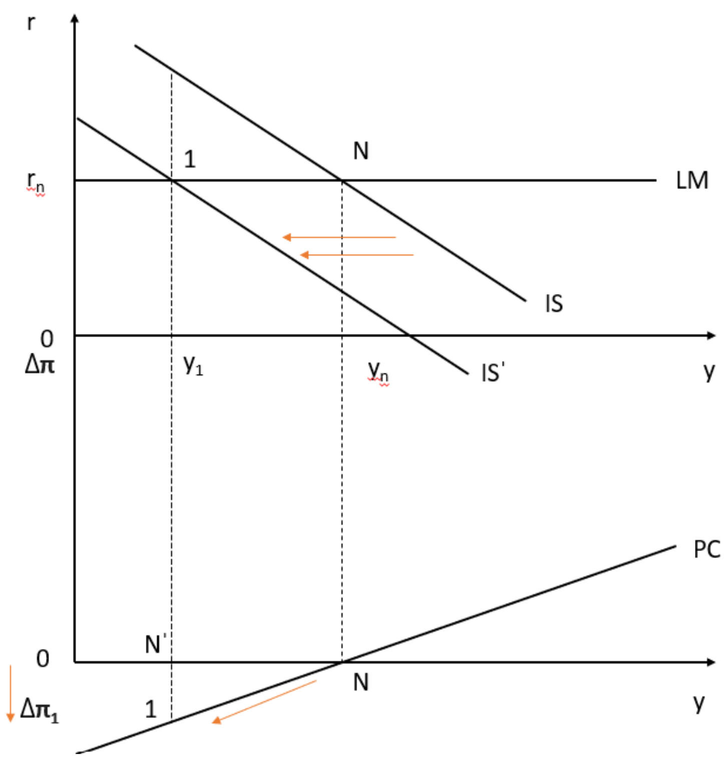


Figure 9: IS-LM-PC model describing the negative demand shock caused by COVID-19