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Public finances in Germany since 2010 – Analysis of the debt ratio

Abstract

The state sets the framework for the democratic coexistence of citizens and provides services that secure their existence. State finances also support the German economy. State measures and the financing of social systems mitigate economic consequences and damages triggered by crises or unforeseen events such as the corona pandemic or wars. First, a literature review describes the theory of public debt. Then is followed by an analysis of the development of public finances in Germany. The analysis aims to analyse unemployment as a lever. A regression analysis with R explains the development of the debt ratio through the unemployment rate. Subsequently, recommendations on reducing unemployment and the unemployment system should lead to a political discussion.

Keywords

Public finances, unemployment, financial sustainability, Germany

JEL classification

J64, H12, G28

Introduction

Many industrialised countries, including the European Union member states (EU), have high public debt levels. According to Kronberger Kreis, the risk of insolvency has risen sharply in countries such as Greece, Portugal and Spain (Kronberger Kreis, 2010). The development of public finances in Germany has been the focus of policy. Public finances in Germany have been heavily troubled after the global financial crisis (from 2007) and the subsequent euro crisis in 2009. The German debt ratio was at this time at an all-time high. Politicians were forced to act to stabilise the economy on the one hand and to stabilise public finances following the Maastricht Treaty. The author focuses on analysing the impact of unemployment on public finances. For this, it is necessary to know the two financing systems of unemployment benefits.

On the one hand, the unemployed and employers are supported by one of the five significant social security funds. The unemployment costs from this insurance are not visible in the public finances. Public finances support unemployed people who are not entitled to unemployment insurance benefits (basic social security). Since unemployment is generally considered as a whole, coming from both jurisdictions (unemployment insurance and basic security), the influence on public finances must be analysed.

According to the analysis, unemployment presents itself as a lever. Therefore, the author develops recommendations to stabilise public finances in the future. The volatile environment shows that crises will not be avoided in the future. It is, therefore, essential to bring these levers into a political discussion.

1 Material and Methods

1.1 Literature Review

1.1.1 State growth and Wagner's law

Blankart explains that the scholar Adolf Wagner that he established the "law of growing government spending" (Blankart, 2017). As a driving factor, Blankart suggests that the decisive institutions influence the growth of government spending. There are players, such as political representatives and opponents, such as institutional rules. For Germany, the debt brake is cited as an example.

In this work, the influence of population growth is not further deepened, which Blankert describes as neutrality (Blankart, 2017).

Priesmeier (2012 and 2013) and Köster investigated the question of the end of the growth of government spending. These examined the reciprocal adjustments between sovereign debt and the economy.

Government spending has risen in Germany over the last 100 years. Historically, the above authors found a correlation between GDP income growth and an increase in government finances. Crises and historical events such as the reunification of East and West Germany led to state action to keep state finances financeable.

Particular drivers of finances are political interest groups, which drive up public finances with programs such as the German scrappage bonus.

1.1.2 Cost of government debt

According to Blankart (Blankart, 2017), interest is the price of government debt. Accordingly, the interest price is determined by individuals' savings decisions and by companies' investment decisions.

(State) loans lead to spending money today and only paying it off later. Blankart explains that the scarcity of financial resources must lead to careful handling so that loans, interest and other government debts, such as pensions and other legally guaranteed benefits, can be paid to citizens and companies on time.

In Germany, the debt brake has been anchored. This is intended to prevent the government from pursuing an offensive, vote-induced spending policy.

Budgetary imbalances resulting from recession deficits and booms' surpluses balance each other. The so-called automatic stabilisers support the sustainability of finances (Blankart, 2017). Spending on additional costs as a result of shocks, such as the corona pandemic and other extreme events, such as the Russian war of aggression, leads to higher deficits. To this end, Germany undertakes to draw up repayment plans.

1.1.3 Analysis with the help of national accounts

National accounts give information to analyse economies' structure and development over time.

The primary aggregates of GDP report an overview of the most important economic developments.

General government gross debt is one of the most critical indicators. The indicator is defined (in the Maastricht Treaty). Net borrowing relative to nominal GDP is a second key debt indicator used to identify the presence of a fiscal crisis or emergency. Eurostat data sources from the European Commission, data from the Federal Ministry of Finance, or data from Statista are used for the analysis.

1.2 Analysis Approach

Fiscal statistics reflect the general government budget's revenue, expenditure and debt and provide a detailed picture of the entire public finance sector (European Commission, 2021).

The author uses linear regression analysis to analyse the development of public finances in Germany from 2010 to 2021 to explain the gross public debt. The indicator is defined (in the Maastricht Treaty) as the consolidated gross debt of the general government at nominal value (face value).

The author examines the influence of the favourable labour market situation and the unemployment rate on the debt ratio (gross debt). The unemployment rate is the share of unemployed persons in the labour force. The labour force is the sum of employed and unemployed persons. Unemployed persons include all persons aged 15 to 74 (a) who were unemployed, (b) who were available to the labour market, (c) who were actively seeking work.

The Statistical Office of the European Union (Eurostat) and the European Commission provide the data used.

2 Results

The global financial crisis in 2009 left a gap in public finances. The banks' financing problems are spilling over into the real economy. In 2010, Germany reported a net borrowing deficit of -4.4% of GDP. Compared to the European Union (27 states), public finances stabilised as early as 2012. From there, Germany accounts for a government surplus as the net borrowing of the entire government sector according to the concept of national accounts according to the Maastricht Treaty.

Figure no. 1.1: Development of the german debt ratio since 2010 compared to the European Union

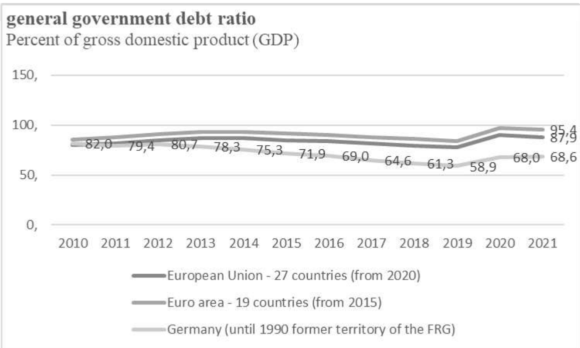
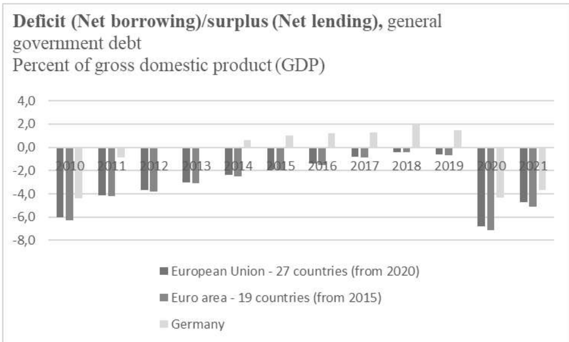


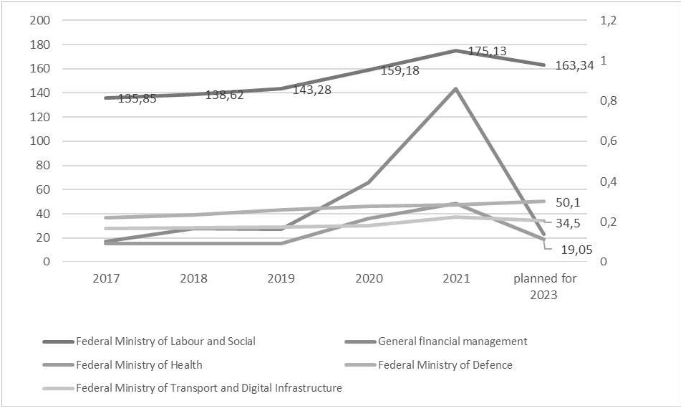
Figure no. 1.2: Development of the debt level of the German government since 2010 compared to the European Union



Source (both): Statistics Service of Eurostat (Datenbank - Eurostat (europa.eu)), own presentation

The positive economic development of recent years has been the starting point for the positive effect of public finances in Germany since 2010. The corona pandemic abruptly stopped this positive development (net credit deficit of -3,7% of GDP). The corona pandemic has led to significant expenses.

Figure no. 2: Expenditure of the most extensive five ministries in the federal budget by the department from 2017 to 2021 (values in billions of euros)



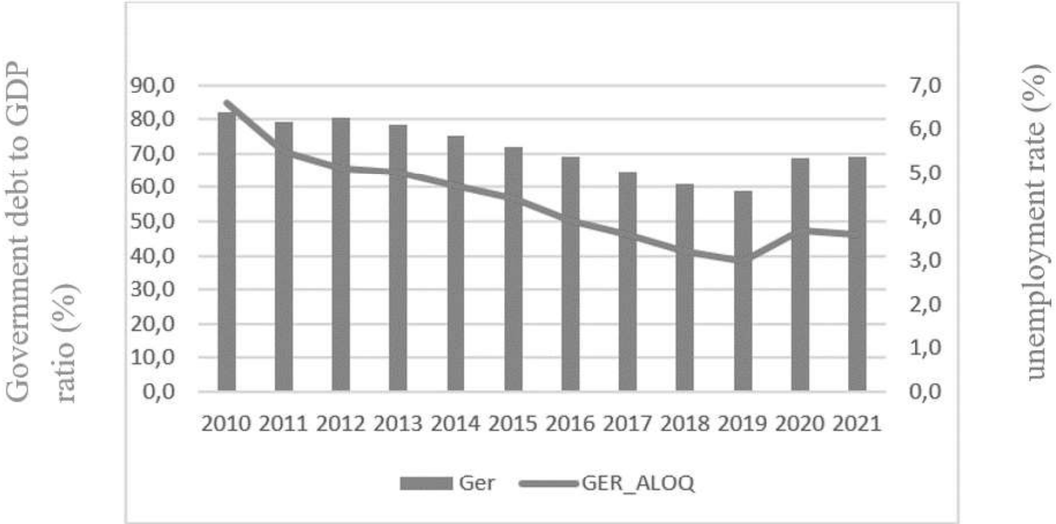
Source: Federal Ministry of Finance Bundeshaushalt - Bundeshaushalt digital, own presentation

The rash in the Ministry of General financial management line is very clearly due to Corona Business support (support is called “Corona Soforthilfen” and “Corona Überbrückungshilfen”). Another essential financial item under this line is the Energy and Climate Fund allocation. The focus below is on the ministry with the highest expenditure.

Before Corona and during Corona, the most significant expenditure was attributed to the Ministry of Labour and Social Affairs. However, most of the expenses went to Pension insurance and were subsidies for primary security in old age and the event of reduced earning capacity (72.5%). 26.29% of the ministry’s expenditure was on benefits under the Second and Third Books of the Social Code and similar benefits. That is financing the unemployed, who do not receive unemployment insurance benefits. This so-called basic security is different from the other unemployment system - unemployment insurance. Unemployment insurance is one of the social insurance. Contributions from employees and employers finance unemployment insurance. That means that support for the unemployed from this insurance is not visible in public finances. The Ministry of Labour and Social Affairs finances unemployment benefit II and active labour market policy services for this group. The Ministry of Labour and Social Affairs also subsidised the Federal Employment Agency during the Corona Crisis.

After the development of costs, the analysis of unemployment has been carried out since 2010. The unemployment rate has been declining since 2010 until the onset of the corona pandemic.

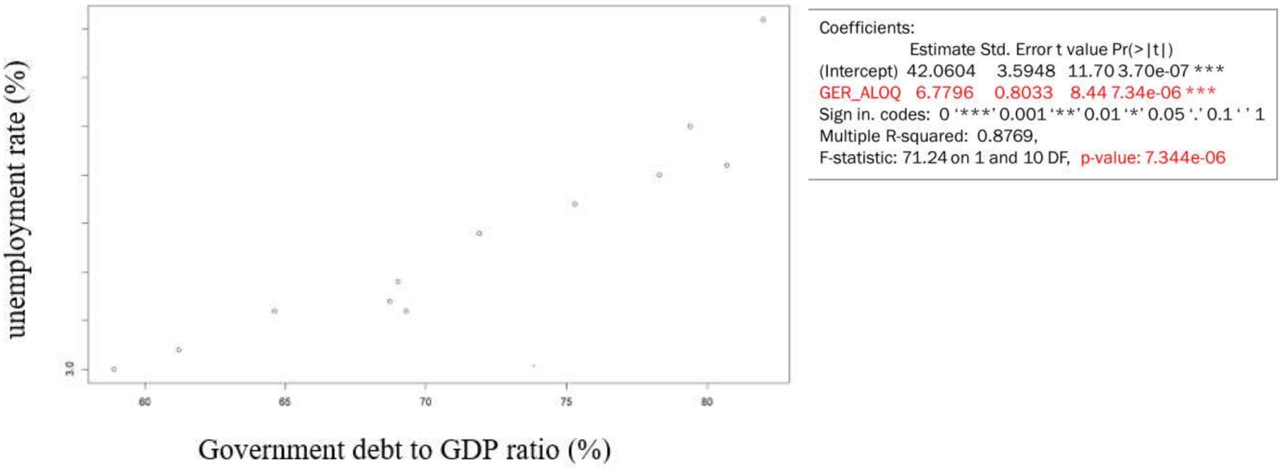
Figure no. 3: Development of gross public debt/per cent of gross domestic product (GDP) and unemployment rate in Germany as of 2010



Source: Statistics Service of Eurostat, own presentation

The next step is to check whether the regression analysis model makes an explanatory contribution between the two parameters.

Figure no. 4: Explanation of the dependent variable "government debt/per cent of gross domestic product (GDP)" by the "Unemployment rate in Germany" as of 2010

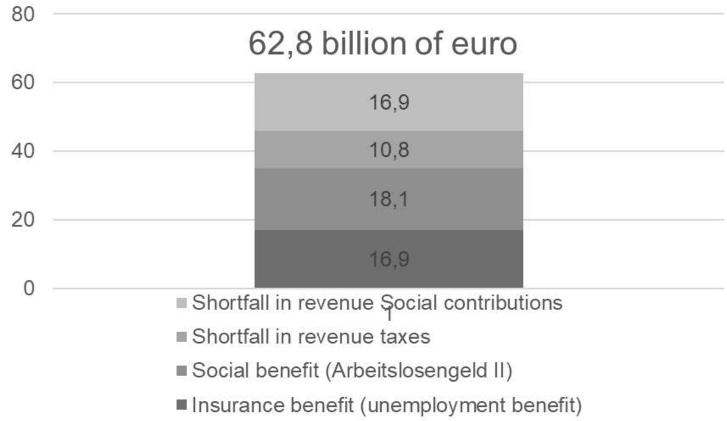


Source: Statistics Service of Eurostat, own presentation

The result of the analysis is that it can be proven that the development of unemployment explains the government debt of the state of Germany. That means when unemployment increases, the level of debt increases.

The IAB, Institute for Employment Research has published an article from the IAB Forum 12/2021. It analysed the costs of unemployment in 2020.

Figure no. 5: Impact of unemployment on overall fiscal costs- Total fiscal costs of unemployment in 2020 in Germany



Source: Hausner et al.: Total fiscal costs of unemployment in 2021 in Germany, IAB-Forum 12/2021, own illustration

Of course, it has been proven that unemployment causes costs, but not insignificant is the loss of taxes and social security contributions. This shortfall leads to a lack of state revenue to balance the national budget - while at the same time, expenditure on support for the unemployed is rising.

Therefore, combating unemployment is and remains one of the most critical goals to positively influence public finances' stability.

Recommendation and Conclusion

Recommendation related to unemployment

1) Zika et al. identify risks for unemployment due to the energy crisis (Zika et al., 2022). The contribution rate is 2.4%; from 1 January 2023, the contribution rate will be back at 2.6%, and the Federal Agency plans to retain reserves of 2 billion euros from 2023 – these would not be sufficient if the energy crisis increases unemployment as estimated by the IAB. In this case, the Federal Agency will require a loan or grant that is attributed to public finances. The contribution rate for unemployment insurance should therefore be discussed politically.

2) The lever is to reduce unemployment and hidden unemployment to reduce shortfalls in taxes and social security contributions. Indeed, the cost savings of reducing unemployment are becoming more and more difficult. Reducing the unemployment rate to 0% is theoretically possible but rather unlikely. Nevertheless, there are still starting points here, e.g. reducing the unemployment of particular groups of people, e.g. women after family periods or long-term unemployed women.

3) Risk management is necessary to avoid unemployment. Active labour promotion develops anti-cyclically and stabilises the economy and the labour market (Hausner et al., 2021). That also includes the instrument of short-time work. However, the short-time allowance does not help in all crises (Weber et al., 2022). Another solution must be considered here, such as training and further education.

Related to the overall system

1) Compliance with the debt brake is necessary after overcoming the crises, while at the same time, the composition of German government spending must be tested (Werding et al., 2020).

A system comparison with another European country Czech Republic, which has low unemployment, shows that the conditions for unemployment to support the unemployed differ in both the amount and duration of financial support: after the labour market is characterised by a shortage of skilled workers and peaks in vacancies, the duration of unemployment benefits should be put to the test.

2) A comparison of the data from Eurostat "Government expenditure by function 2020 (% of total or GDP) shows that Germany has a higher share for social function than the EU or the Czech Republic, which means that the share is lower, e.g. for environmental protection, which is a risk for the Green Deal.

3) by far, the most significant cost factor is pensions and essential security expenditure in old age – which approaches are available were not examined.

Conclusion

The state sets the framework conditions for the democratic coexistence of citizens and provides subsistence services. The development of unemployment explains the gross debt of the state of Germany. Further efforts are needed to ensure the stability of public finances. Compliance with the debt brake is necessary after overcoming the crises, while at the same time, the composition of German government spending must be put to the test (Werding et al., 2020). The recommendations on reducing unemployment and on the unemployment system can be a starting point for political discussion.

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