OVER FIFTEEN YEARS APART: EU FISCAL AND MONETARY POLICIES COMPARED TO THE USA

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ABSTRACT
The article presents a theoretical examination of fiscal and monetary governance in the European Union and the United States, by comparing their institutional frameworks, fiscal and monetary policy regulations, and crisis-response mechanisms. This research is grounded in a comparative analysis of the EU and the United States spanning the years 2003 to 2024. The paper integrates a literature review with statistical comparisons and Ordinary Least Squares (OLS) regression, to investigate 11 macroeconomic indicators, which include tax revenue, government expenditure, public debt, the budget balance, the money supply, interest rates, inflation, unemployment, exchange rate fluctuations, and GDP per capita, adjusted for purchasing power parity. The analysis is organised into various economic phases (pre-crisis, post-2008 adjustment, pre-pandemic and post-pandemic), to discern how both cases reacted to significant economic disturbances, and what policy variables were most closely linked to growth outcomes. The results suggest that the United States has probably achieved a superior relative economic performance, due to its policy mix characterised by lower tax burdens, more rapid fiscal adjustments and broader monetary expansion. Conversely, the European Union's elevated tax levels, increased public spending and slower policy adjustments were correlated with lower GDP per capita growth and extended recovery periods. These findings were based on the results of high P-value and low R, as well as squared results of OLS regression. At the same time, considerations of autocorrelation and multicollinearity have been taken into account.
KEY WORDS: *monetary policy, budget balance, fiscal discipline, national debt, austerity*.

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Introduction

The year 2026 marks a 15-year separation period, which made US GDP unreachable for the EU, which used to take the lead prior to the year 2011. While the research field is full of debates whether it was the United States' ultimate achievement, or Europe's dragging performance, one fact remains undeniable: the European Union played its cards differently. In the modern macroeconomic environment, fiscal policy is one of the key instruments determining the sustainability of public finances, economic stability and long-term growth opportunities. Fiscal rules play an important role in shaping government budgetary policy, by limiting budget deficits and controlling government debt (Larch et al., 2023; Truger, 2020).

In the European Union (EU), the fiscal framework is based on strict, quantitatively defined rules, aimed at ensuring fiscal discipline and maintaining macroeconomic stability. In contrast, fiscal policy in the United States (US) is characterised by a more fragmented structure, and a greater degree of discretion (Johnson, 2025; Plante, 2024).

Recent academic literature (Brändle, Elsener, 2024; Park, Kim, 2024; Kholopov, 2024) increasingly highlights that the impact of fiscal rules on the economy is not straightforward. Although such rules help limit

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excessive fiscal imbalances and address time inconsistency problems, their effectiveness depends largely on the institutional context, the degree of flexibility in their application, and their ability to adapt to economic shocks. Empirical studies (Vinturis, 2022; Kinnunen et al., 2021) indicate that strict adherence to fiscal rules may constrain economic growth, particularly during periods of economic downturn.

The experience of EU countries shows that the relationship between fiscal efficiency and the sustainability of public debt is not uniform. While some countries face long-term fiscal challenges, others demonstrate a greater capacity for adjustment and more stable fiscal outcomes (Afonso, Coelho, 2024; Bušs et al., 2024). Similarly, studies focusing on the US (Abubakar et al., 2025) do not provide clear evidence that the application of fiscal rules significantly improves economic stability. In the light of these findings, recent research (Kholopov, 2024; Brändle, Elsener, 2024) emphasises the need to combine fiscal discipline with flexibility, by developing 'next-generation' fiscal rules, capable of ensuring both financial sustainability and an effective response to economic fluctuations.

This means that a comparison of fiscal models in the EU and the US is particularly relevant, in order to assess how different fiscal policy approaches (strict regulation and flexibility) affect economic outcomes and perform across different phases of the economic cycle.

Despite the widespread use of fiscal rules, the academic debate on their effectiveness in ensuring economic growth and public finance sustainability remains ongoing. This raises the following research question: is strict fiscal regulation more effective than a flexible fiscal policy approach, when evaluating economic growth, public debt and macroeconomic stability?

The aim of the study is to assess the differences between fiscal policy models in the EU and the US, and to evaluate their impact on key macroeconomic indicators, analysing their effectiveness across different stages of the economic cycle.

The paper seeks to cover such objectives:

- To evaluate European Union fiscal and monetary policies compared to the United States, comparing actions taken before and during key crises, such as the Great Recession of 2008, Eurozone debt crises, and the Covid-19 pandemic.
- To analyse changes in GDP per capita growth patterns, money supply, interest rates and debt-to-GDP ratios, as well as the budget balances of the United States and European Union member states over a 20-year period, identifying key trends and disparities between the European Union (EU) and the United States (US).
- To group and compare the efficiency of pre-crisis and post-crisis policies applied by the United States and the European Union.

Methods. Literature review of peer-reviewed publications, statistical analysis, Ordinary Least Squares (OLS) regression, and comparative analysis.

1. Literature review: fiscal rules, governance in the EU versus the US

The fiscal policy framework of the European Union is based on a rules-based system, designed to ensure fiscal discipline and the long-term sustainability of public debt. This framework is institutionalised through the Maastricht Criteria and the Stability and Growth Pact, which establish clear quantitative limits on budget deficits and government debt relative to GDP. The rationale behind these rules is to constrain excessive public spending, curb debt accumulation, and maintain macroeconomic stability in a monetary union where monetary policy is centralised, while fiscal policy remains decentralised (Larch et al., 2023; Truger, 2020).

The fiscal policy framework of the United States differs fundamentally from the EU model, and is characterised by a fragmented institutional structure. At the federal level, fiscal rules are limited, and largely procedural in nature, whereas at the state level they are considerably more stringent. The federal government is not subject to a constitutionally mandated balanced budget requirement, making budget deficits a routine component of fiscal policy. The primary institutional principle is Congress' constitutional authority over

taxation and public expenditure ('the power of the purse'); however, this authority does not impose specific constraints on fiscal discipline.

The most important formalised federal fiscal rule is the debt ceiling, which establishes the maximum permissible level of federal debt. However, it does not directly constrain budget deficits or government expenditure; rather, it limits the borrowing necessary to finance expenditure that has already been authorised. Additional fiscal mechanisms, such as discretionary spending caps and the PAYGO principle, are generally temporary, and are frequently modified or suspended (Johnson, 2025; Abubakar et al., 2025). By contrast, fiscal discipline at the state level is substantially stricter, as most states operate under balanced-budget requirements that limit the scope for deficit-financed policies (Plante, 2024).

A comparison of these systems reveals several fundamental differences. EU fiscal governance is based on uniform, quantitative and supranational rules, aimed at controlling deficits and public debt. The United States lacks such a centralised framework; instead, it relies on procedural and politically driven constraints at the federal level, combined with decentralised fiscal discipline across the states. Consequently, the EU framework is more strongly oriented towards *ex ante* fiscal oversight, whereas the US system emphasises flexible *ex post* fiscal adjustment.

The relationship between fiscal rules, government revenue, public expenditure, budget balances and economic performance in the EU has been widely examined in the academic literature (Konc, 2025; Kosterna, 2021). Empirical evidence points to substantial heterogeneity among EU member states, in terms of both fiscal discipline and debt sustainability. Southern European countries, including Greece, Spain and Portugal, continue to face persistent challenges in maintaining sustainable debt levels, due to structural economic weaknesses and limited fiscal space (Boltho, 2020; Gonçalves et al., 2021; Afonso, Coelho, 2024). In contrast, some smaller or transition economies, such as Latvia, have demonstrated greater adaptability and more stable fiscal outcomes (Bušs et al., 2024).

It should also be noted that the literature does not provide unequivocal evidence that stricter fiscal discipline inherently leads to faster economic growth. On the contrary, some studies suggest that strict adherence to fiscal rules may constrain economic expansion, particularly during periods of economic downturn (Vinturis, 2022). This suggests that the effectiveness of a fiscal framework depends not only on compliance with fiscal rules, but also on the broader macroeconomic environment in which those rules operate.

Recent empirical research on the United States provides mixed evidence regarding the effectiveness of fiscal rules. Using the ARDL methodology, Abubakar et al. (2025) find that fiscal consolidation may slow the growth of public debt, while the mere adoption of fiscal rules does not have a statistically significant effect on debt dynamics. Earlier studies (Auerbach, 2008) similarly indicate that federal-level fiscal rules have only had a limited impact on deficit control, largely because they lack constitutional force, and often reflect political compromises. Evidence from the states, however, suggests that stringent fiscal constraints can stabilise expenditure dynamics, although under certain conditions they may amplify the effects of economic shocks (Park, Kim, 2022).

At the same time, several scholars argue that the current US fiscal framework is insufficient to ensure long-term fiscal sustainability. Smith (2025) contends that rising federal debt and fragmented fiscal federalism necessitate a stronger rules-based framework, informed by the experiences of other regions. Similarly, de Rugy and Salmon (2019) attribute US fiscal challenges to a highly politicised budgetary process, and argue that only new fiscal rules can effectively constrain persistent deficits. An even more far-reaching proposal is advanced by Poulson (2025), who advocates the adoption of constitutional 'second-generation' debt brake rules capable of reducing the long-term risks of fiscal instability and sovereign insolvency.

1.1. Literature review: fiscal rules in EU/US limitations and flexibility

Recent literature has increasingly challenged rigid rules-based fiscal governance, and moved beyond the traditional dichotomy between fiscal rules and discretionary policy. While fiscal rules help address problems of time inconsistency and deficit bias, constrain excessive public spending and promote fiscal sustainability, their effectiveness depends on the institutional environment, implementation mechanisms, and their capacity to adapt to economic shocks (Park, Kim, 2024; Brändle, Elsener, 2024; Kholopov, 2024).

In the European Union, criticism has focused primarily on the application of uniform and stringent fiscal rules in an economically heterogeneous union. Research suggests that fiscal sustainability depends not only on debt and deficit indicators, but also on the interaction between fiscal discipline, fiscal flexibility and monetary policy. Strict fiscal constraints may limit governments' ability to stabilise economic activity during periods of crisis, thereby suppressing aggregate demand and hindering economic growth (Kinnunen et al., 2021).

The literature further emphasises that excessively rigid fiscal rules may encourage procyclical policy behaviour. Vinturis (2022) and Keita and Turcu (2022) argue that strict debt and deficit limits can restrict public expenditure and investment during periods of economic distress. Consequently, increasing attention has been devoted to the development of 'next-generation' fiscal rules that balance fiscal sustainability with policy flexibility, incorporate well-defined escape clauses for crises, and rely on oversight by independent fiscal institutions (Kholopov, 2024; Brändle, Elsener, 2024). Moreover, excessively stringent fiscal discipline may shift financial pressures to lower levels of government, and increase dependence on financial markets (Christophers, 2019; Rius-Ulldemolins, Gisbert, 2019).

In US literature, greater emphasis is placed on the advantages of discretionary fiscal policy in a federal system. Abubakar et al. (2025) find that fiscal consolidation can reduce the growth of public debt effectively, whereas fiscal rules themselves are not sufficiently effective in achieving this objective. Consequently, in the US context, discretionary policy measures may, under certain circumstances, prove more effective than rigid rules-based constraints. Similarly, Limoa and Weku (2024) argue that fiscal management during periods of economic disruption should rely not only on fiscal rules but also on automatic stabilisers and discretionary policy instruments, which enable policymakers to respond flexibly to changing economic conditions.

Fiscal rules remain an important instrument for ensuring the sustainability of public finances; however, their effectiveness depends on the existence of flexibility mechanisms and the broader institutional framework in which they operate. Research on the European Union tends to focus on issues of procyclicality and fiscal coordination, whereas studies on the United States emphasise the advantages of discretionary fiscal policy within a federal system. As a result, contemporary scholarship increasingly supports a hybrid approach, in which fiscal discipline is combined with sufficient flexibility to respond effectively to economic shocks.

2. Methodology

The European Union's economic slowdown compared to the United States has been analysed in terms of 11 macroeconomic factors. For the analysis of fiscal policy, factors such as tax revenue as a percentage of GDP, budget balance, and government spending compared to GDP as a percentage as well as debt to GDP were used. For monetary policy, M2 money supply, interest rates enforced by the central bank resulted in the interbank markets being used. In the first case, for the United States the Federal Funds Effective Rate was used, while the European Union ECB's actions were analysed in terms of the Deposit Facility Rate. At the same time, the interbank market in the case of the EU has been analysed in terms of Euribor one-year for the period between 2003 and 2024, while in the case of the United States, first the US one-year LIBOR was used (*until 2021), and SOFR for the period after it. The final aspect analysed was the inflation rate.

According to the United Nations Economic and Social Commission for Western Asia (2026), the budget balance is defined as 'the overall difference between government revenue and spending'. In this research, it has been analysed as a percentage of GDP, negative or positive, depending on the year and the market situation. As part of getting a more precise picture, tax revenues were analysed. Taxes can be defined (according to the European Commission, 2026) as 'compulsory, unrequited payments levied by general government'. They have been measured as a percentage of GDP, with the 20-year average for the US being close to 20%, and 30% for the European Union. Additionally, the M2 money supply has been analysed, measured in dollars and euros, depending on the selection of the United States or the European Union. According to the World Bank Group, the M2 money supply is defined as: 'money and quasi money comprise the sum of currency outside banks, demand deposits other than those of the central government, and the time, savings, and foreign currency deposits of resident sectors other than the central government'.

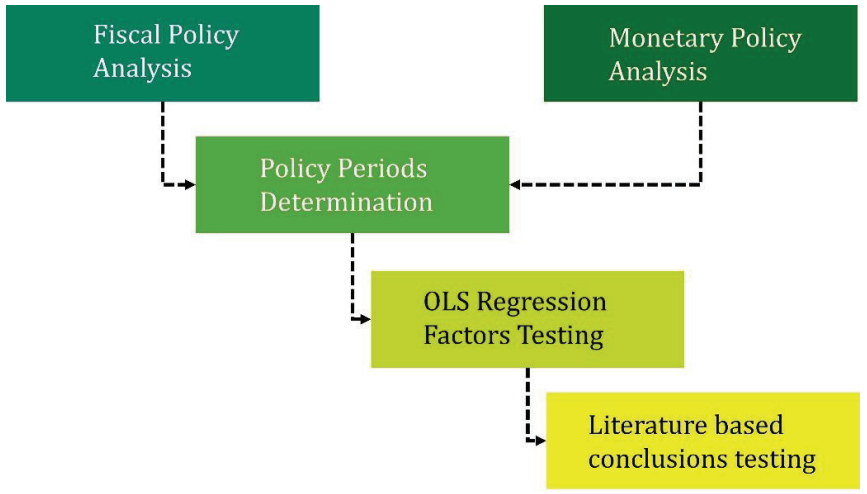


Figure 1. The steps in the research process analysis, from data collection to testing

Source: The author, 2025.

As general economic parameters, GDP per capita adjusted for Purchasing Power Parity (PPP) was used (measured in dollars for both the US and the EU), as well as EURUSD ForEx channel and unemployment. According to Eurostat (2026) 'the unemployment rate is the number of people unemployed as a percentage of the labour force.' The use of unemployment has been introduced on the heavy pro-social protection politics of the European Union, while ForEx analysis was aimed at measuring the financial strength of the euro currency.

The process of data analysis started with data accumulation time period separation. Following the ideas of Grounded Theory, the research had no pre-determined hypothesis, which is why the periods before 2008 (pre-crisis), between 2008 and 2014 (early after-crisis), 2014–2019 (pre-pandemic) and 2019–2024 (after the pandemic) were based on patterns visible from the data analysis. With these four periods, US and EU policies were analysed, which required an additional literature review for unexplainable situations purely from the statistics (e.g. the low growth of the M2 money supply in the EU after 2014).

Once data was gathered, a potential issue of time trends in collected data was studied. While the connection of the listed factors to one another is undeniable, no purely linear connection has been found, with some variation happening often enough not to be able to establish a clear cycle pattern. Afterwards, the process of regression testing began. For this research, the Ordinary Least Squares (OLS) regression method was chosen. During the process, each of 11 factors was assessed, as a potential variable for the other. The goal of the assessment was to determine: (1) if each factor has had a visible influence on another in the case of the United States and the European Union; and (2) if this relation has been strong. The research was carried out with a time limitation of 20 years between 2003 and 2024. The programs used for OLS regression analysis included Microsoft Excel with Add-on plugins. During the process of comparison, indicators with exceptional P-values ($P>0.05$) were outlined, eliminating them from the comparison. This step involved taking all of the 11 factors and checking their degree of correlation. After carrying out the analysis stage by stage, it was decided that only four factors have a strong connection from both monetary and fiscal standpoints. These included: the M2 money supply (1) as a monetary policy factor and tax revenue (2), government spending as a percentage of GDP, and (3) the budget balance (4) (*for the US) as critical factors.

The risk of making Ordinary Least Squares (OLS) regression with variables potentially having autocorrelation and multicollinearity was considered. However, a visual assessment of the results plotted on a graph did not show an immediate problem. At the same time, for the future continuation of the research analysis, the Durbin-Watson test was considered for an autocorrelation first-order check, while the Variance Inflation Factor (VIF) is expected to serve as a multicollinearity checking tool. The current research provides preliminary results navigating the future direction of further research towards testing the current findings.

3. Research results

While a comparison of United States policy can start from very different aspects, few things differ between the US and the EU as much as their *fiscal policies*. Historically, the United States' taxation system has been more favourable towards both its citizens and businesses. This is illustrated by the much lower tax revenues in the US, accounting for only 30.4% (*compared to GDP) on average (2003–2024). In the EU for the same period, it was 40.4%. These figures do not reveal another two important aspects, which had a prominent influence on the crisis management: the source of taxes and their seasonality.

A notable distinction in social security and consumption taxes can be observed when comparing the tax systems of the United States and the European Union (Michel, 2024). On average, taxpayers in the European Union are required to contribute twice as much towards social security. This necessity appears unavoidable, as 'social protection' has constituted the largest expenditure category in the EU for over two decades, accounting for more than 20% of total spending. This issue is often linked to the ageing population, and has simultaneously demonstrated shortcomings in three areas: foreign direct investment (FDI) policy, migration policy, and healthcare privatisation initiatives. It is important to note that social security taxes impact primarily employed individuals, which is why the second-largest tax category in the European Union is Value Added Tax (VAT), which stands at an impressive 12.3%, three times higher than in the United States. It is essential to highlight the fact that the United States does not implement a universal Value Added Tax; thus, the consumption tax illustrated in Figure 3 represents an average of sales tax, incorporating both federal and state taxes across all 50 states (Michel, 2022). Finally, while higher corporate taxes in the EU result in only one tax category surpassing that of the United States, which is the lower property tax collection, it is unfortunate that the passive ownership of villas in Italy or Spain has had a minimal impact on the growth of Europe's GDP per capita in comparison with its overseas counterparts.

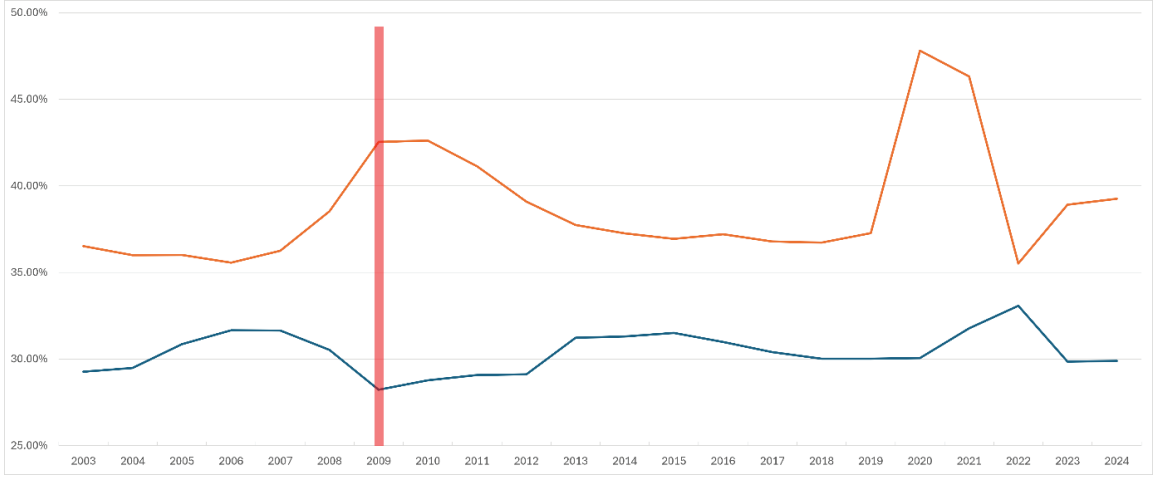


Figure 2. Tax revenue (blue) versus government spending (orange) compared to GDP in the United States, 2003–2024

Source: Federal Reserve Bank of St Louis (FRED), 2025.

Seasonality represents another crucial distinction to consider. On examining the graphs depicted in Figure 2, it becomes evident that the European Union has stayed quite strong on not cutting taxes as much as was done by the United States. Even in the face of global economic shocks, such as the Great Recession and Covid-19, or more localised crises like the Eurozone debt crisis and the war in Ukraine, there is little or no alteration in the tax obligations of EU citizens and businesses (Trading View, 2025). In contrast, the United States has embraced a practice of reducing tax collection (FRED, 2025). A detailed analysis indicates that the United States successfully increased its tax revenues by 8.5% from 2003 to 2006, followed by a decline of 11% until 2009

(FRED, 2025). Although taxes began to rise again after this period, the US did not reach the same tax revenue level of 30.53% as in 2008 until 2013, providing the public with a five-year recovery period. In contrast, the European Union's strategy for public and business support has been significantly different, allowing only a 2.5% reduction in tax revenues at its peak (E). Technically, the EU returned to the tax revenue levels of 2007 only in 2015, which is two years later than in the US. However, when examining the average tax revenue from 2008 to 2014, it is recorded at 39.87%, suggesting that the EU allowed merely a 1.8% 'discount' on taxes during that period. Since 2015, EU tax policy has remained unchanged, while businesses operating in and with the United States benefited from tax reductions between 2016 and 2019. Another critical element of fiscal policy is government spending, which in the EU has been characterised by extensive discussions of austerity that began around 2009 (Becker, 2015). From the perspective of tax collection, the EU achieved success by surpassing 2006 returns as early as 2015. This peak was only lost following the challenging year of 2022, indicating that the EU managed to continue exerting pressure on businesses and households even during the pandemic. Nevertheless, government spending has been the subject of much broader debate.

As is illustrated in Figures 4 and 3, both the United States and the European Union pursued an expansionary fiscal policy at the onset of the Great Recession. Both entities attempted to reduce government expenditure, while simultaneously increasing national debt. However, discussions surrounding austerity have been more prevalent in the EU, and the actual cuts to government spending occurred at a significantly slower rate compared to the United States. It is important to note that none of the countries mentioned have returned to their 2008 levels of government spending, with the exception of the United States achieving this for one year in 2022. In contrast, the US managed to revert to its 2008 government spending levels in six years, whereas the EU, which reached its peak government spending in 2008, only returned to that level after a decade. This stark difference can be attributed to the much faster rate of debt accumulation in the US, as is shown in Figure 2. Nevertheless, it is crucial to consider how this debt was utilised. A comparison of government spending levels between 2007 and 2019 reveals that while US spending increased by 2.8%, the Eurozone's spending, despite austerity measures, rose by 2.5%, and the EU as a whole saw an increase of 1.7%. Consequently, it is evident that the US allocated a significant portion of its debt to facilitate lower taxation, whereas the EU maintained its emphasis on public spending.

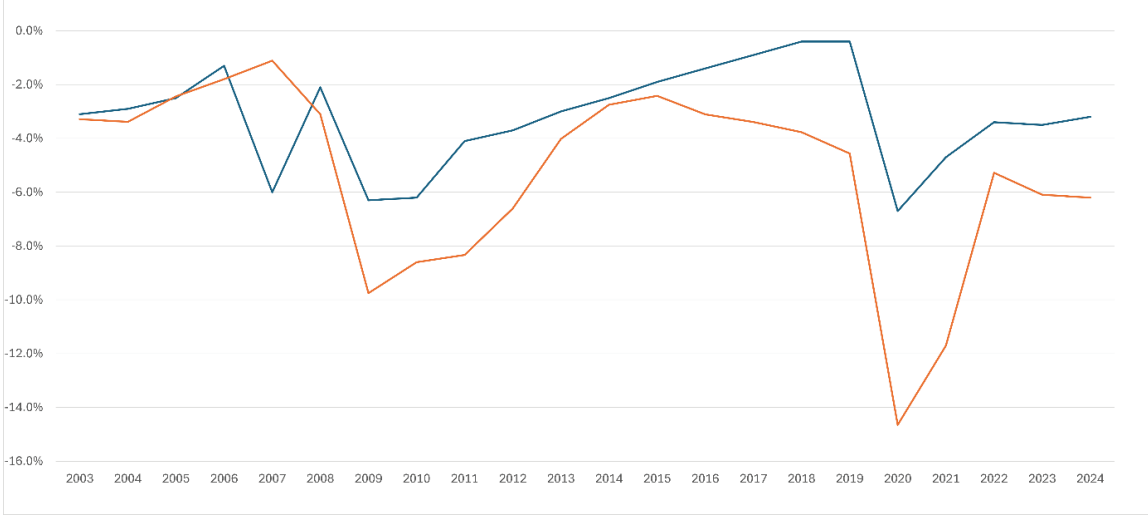


Figure 3. Budget balance differences between the EU (blue) and the United States (orange), 2003–2024

Source: Federal Reserve Bank of St Louis (FRED, 2025); Eurostat (2025).

After the pandemic, both United States and European Union fiscal policies ended up being very similar. Both cases have seen an increase in tax revenues in the first two or three years, which ended sooner in the case of the EU due to the Russian invasion of Ukraine in 2022. At the same time, both have increased government spending, but the EU managed to outpace the competitor, growing spending in 2019–2024 by

5.4%, compared to the US's 5.3%. An aspect worth pointing out in the case of the EU, however, is full consistency with an old principle of dealing with crises, where tax revenues cannot go down. It is clear that even in 2020 and 2021, the EU only kept taxes growing, while the reason for their fall in 2022 and 2023 is more likely to be the unexpected loss of profits due to the war, rather than any variation in supply side economics, especially considering that 2024 made profits go up again. At the same time, both the EU and the US kept debt to GDP rising and hitting any ceilings from before. At the same time, the United States has shown more daring attempts at repaying the new debt, managing to 'drop' 32% of the debt taken out in 2020 by 2024. The EU has traditionally been less efficient, achieving only 18.8%. However, neither have so far managed to show consistency in these measures, which is why any predictions of the speed of this new debt crisis resolution are premature. Another reason for this can be found in monetary policy, which included some risky actions by both the European Union and the United States.

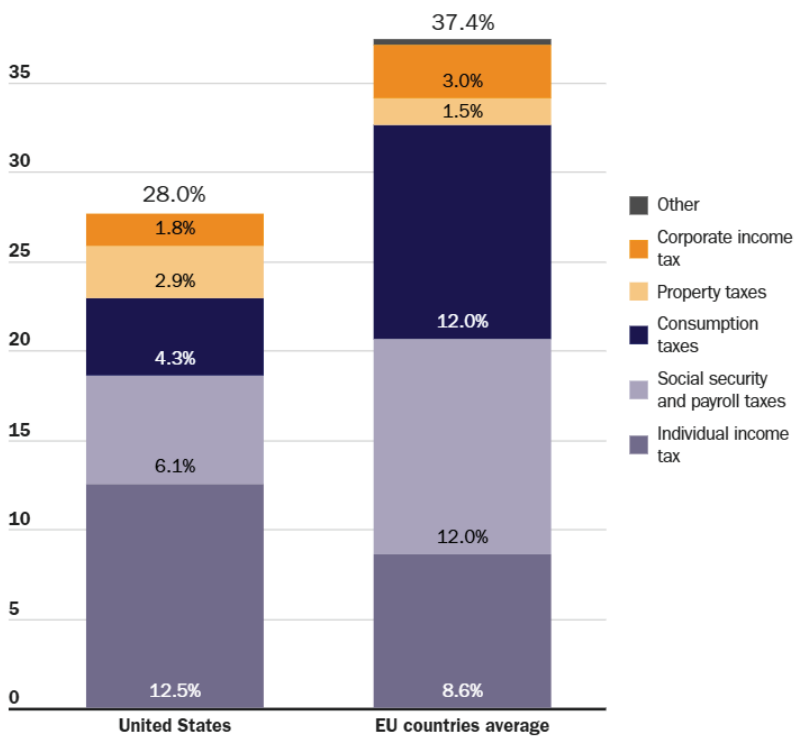


Figure 4. Tax sources of average European Union countries and the United States, 2022

Source: OECD (2022).

At first glance, the monetary policies of the US and the EU, as depicted in Figure 5, may appear quite similar. However, this assessment holds true only if one overlooks the underlying cause of the Great Recession in the US, which stemmed from the rapid reduction of interest rates in response to fears in 2001. An attempt to curb the increased money supply, which had been directed towards the real estate sector, was made through a swift reversal of interest rates, beginning in 2004. This shift is evident in the graph, and elucidates why the EU's response seemed 'delayed'. Concurrently, following the onset of the crisis, both the EU and the US seemingly adopted a similar strategy of reducing interest rates to unprecedented lows, even entering negative territory. Nevertheless, while the Federal Reserve and the European Central Bank could manage the rates they offered to banks, they were unable to control the actual growth rate of the M2 money supply, which experienced a significant decline in its growth rate post-2008. The initial two years of the crisis exhibited a sluggish money supply growth of approximately 4%, but after 2011 the US managed to maintain a stable lead until 2022. Between

2008 and 2019, the US M2 dollar supply increased by 87%, whereas the EU only achieved a growth of 57% (FRED, 2025). On examining Figure 4, we can observe a shift in patterns that curtailed the euro supply after 2011 (Statista, 2025). It is noteworthy that 2011 marked the completion of the Basel III regulation, which was set to take effect in 2013. Renowned for its toughness, this regulation has probably hindered European Union companies and investors in competing with American enterprises. The ECB is unlikely not to have known of its own policy's potentially negative effects, since in 2016 it published a report on financial structures (p. 3) outlining the trend whereby '[banking institutions] market concentration has been on an increasing path', outlining a fall of credit institutions by close to 20% comparing 2015 to 2008. In a more straightforward manner, this phenomenon is referred to as the centralisation of banks, where competition ultimately results in increased borrowing costs, diminished competition, and reduced supply. Indeed, the risk analysis conducted by the ECB has probably been accurate, as the number of credit institutions in the EU continues to decline to this day (beginning in 2009), with a notable acceleration in the rate of decline observed in 2014, the year following the official implementation of Basel III (-5.6% annual decrease compared to 2.3% before, as reported by Statista, 2025). Another consequence of this policy has been a heightened willingness among borrowers to assume greater risks, as highlighted in 2021 by Jing Wen, a PhD researcher at Columbia Business School.

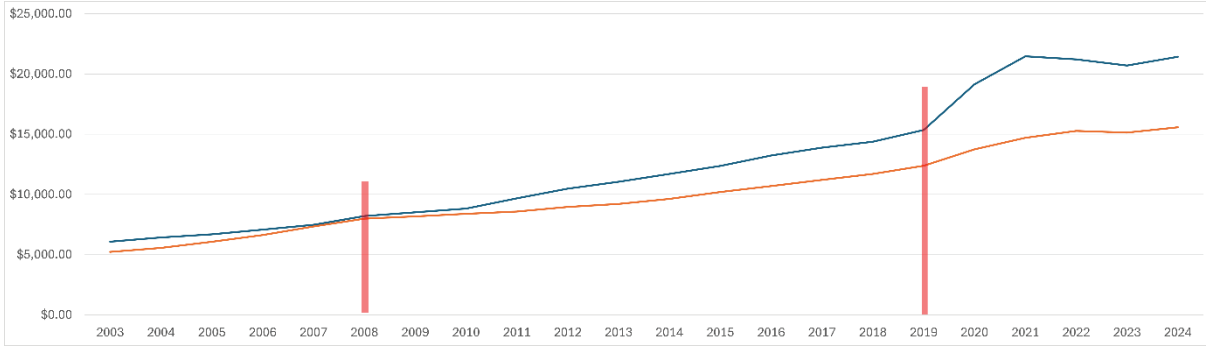


Figure 5. The money supply (M2) of the US dollar versus the euro, 2003–2024

Source: Statista (2025); Federal Reserve Bank of St Louis (FRED, 2025).

Another element that has set EU monetary policy apart is the adoption of negative interest rates. While theoretically advantageous in boosting demand, the decision of the European Central Bank (ECB) to lower the Deposit Facility Rate below zero did not produce the expected results. On one hand, it effectively increased the M2 money supply, aligning it with the growth rate of the US after 2015 in a consistent manner. Furthermore, it allowed member states in the European Union to lower their borrowing costs. On the other hand, this policy negatively impacted the already fragile state of European banks, which were forced to either pursue riskier investments in Europe, or move their funds outside the EU entirely. The implementation of negative rates also coincided with the Greek crisis, which the EU chose to tackle with substantial financial assistance. As a result, the euro faced an unprecedented depreciation of 13% against the dollar (from $1.33 to $1.11), a decline that has had potentially lasting effects that are still visible today. An additional argument against negative rates can be seen in the actual productivity growth, as is indicated by GDP per capita adjusted for purchasing power parity (PPP). During the timeframe from 2012 to 2014, this policy led to a recession that could be described as self-inflicted. The period following 2014, extending up to the beginning of the pandemic, probably necessitated closer collaboration between EU banks and their American counterparts, where interest rates were on the rise.

The onset of the pandemic revealed the vulnerabilities of the ECB's prolonged low-interest rate strategy, as it became evident that demand could no longer be stimulated by such rates. Consequently, the GDP growth rates of the EU were impacted more than twice as severely as those of the United States during the initial years of the Covid-19 crisis. In response, significantly increased government expenditure, coupled with a

historically high debt-to-GDP ratio of 90%, resulted in an 11% rise in the EU's money supply, which in turn propelled inflation to 8.8%. Nevertheless, the European Union also received unexpected assistance from the United States, which implemented an extraordinary package of financial aid, unprecedented since the events of 9/11, leading to a 25% increase in the M2 supply in a single year (2020), according to Statista (2025). This influx of liquidity contributed to the appreciation of the euro for an additional two years, until it faced another decline in 2022, coinciding with the onset of the war in Ukraine.

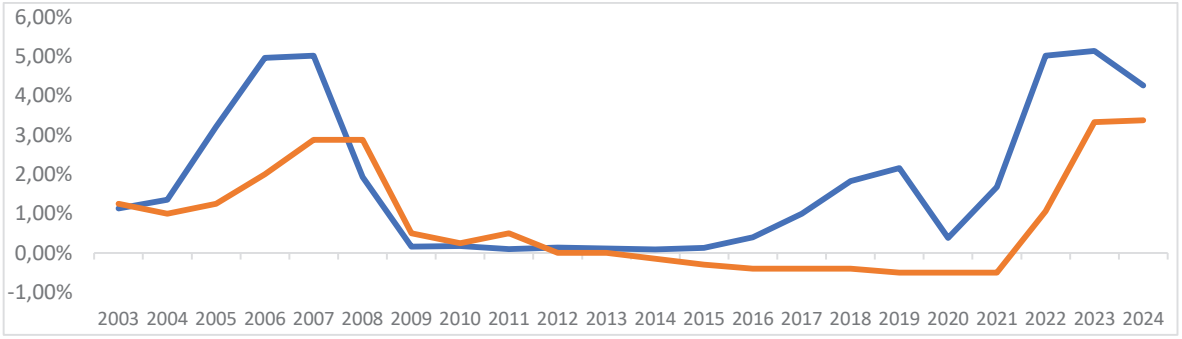


Figure 6. The Federal Funds Effective Rate versus the ECB's Deposit Facility Rate, 2003–2024

Source: Federal Reserve Bank of St Louis (2025); European Central Bank Eurosystem (2025).

The use of Ordinary Least Squares (OLS) regression analysis on 11 indicators has shown that the most important factors for economic growth in the case of the European Union and the United States have been quite similar, with only minor differences. As is illustrated in Table 1, the European Union's GDP has been probably heavily (*and negatively) influenced by tax revenues and government spending, while showing consistent growth when the M2 money supply has been growing. In the case of the United States, lower tax revenues and a wider money supply have also been part of a growing GDP, but the budget balance played a more pivotal role. Overall, regression has shown the potential problem of the European Union with likely inefficient (*compared to the United States) government spending, and the potential benefit of lower government spending, which has probably had a more net negative rather than net positive effect on European Union economies. At the same time, the need for a stronger budget balance has shown the dangers of increasing debt, which, as regression shows, is one of the sources of lower GDP.

Table 1. The most influential of 11 factors affecting GDP per capita (PPP) in the EU and the US

EU RESULTS		*Coefficients*	*Standard Error*	*P-value*	*Regression Statistics*						USA RESULTS
	Intercept	88125.3342	10003.9429	6.05356E-08	Multiple R	0.994316		*Coefficients*	*Standard Error*	*P-value*	
	Goverment Spending	-64086.3354	6014.28447	3.33172E-09	R Square	0.988664	Intercept	79762.4885	16593.34	0.000141	
	M2 Supply	1.21663914	0.03663017	1.32378E-17	*Regression Statistics*		Budget Balance	103266.5564	20474.52	8.45E-05	
	Tax Revenue	-52782.8014	21043.937	0.02192996	Multiple R	0.98584	Tax Revenue	-170459.207	55312.16	0.006431	
					R Square	0.97188	M2 Supply	2.775263087	0.130219	3.21E-14	

Source: The author, 2025.

As an addition to the data provided in Table 1, it is important to mention the consistency of the R value not only through Multiple and Square Rs, but adjusted values as well. In the case of the European Union, adjusted R has shown to be 0.986774401845186, while in case of the United States it has been counted as 0.967193120087986.

When evaluating the outcomes of both fiscal and monetary policies collectively, it is essential to consider the final element: unemployment. Although it exhibits a low correlation with GDP, as is demonstrated by the OLS regression analysis conducted in this study, unemployment remains a significant factor in the central bank's policy framework in the context of welfare economics. The economic growth experienced from 2003 to 2007 was beneficial to both the EU and the US. Nevertheless, the EU's unemployment situation during the Great Recession has shown a much higher level of issue. Unemployment in the EU surged to 9.2% in 2009, and hovered around the 10% mark until 2016 (Eurostat, 2025). Conversely, employment in the United States began to increase after 2011, reaching a rate of 5.3%, which was nearly half that of the EU at that time. Furthermore, the pandemic exposed a surprisingly weak relationship between employment and GDP figures; despite a mere 6% rise in unemployment in the EU (which was more than double the increase in the US), GDP per capita in the EU fell 4.5 times more than in the US. This highlights a further challenge for the EU, where even higher than before employment does not have radically higher productivity (when compared to pre-2008 using GDP per capita as a metric).

Conclusion

Fiscal rules form an important foundation for shaping fiscal policy, as they help limit budget deficits, control government debt, and support macroeconomic stability. However, theoretical analysis shows that the effectiveness of these rules is not uniform, and depends not only on their formal design, but also on the implementation environment, institutional context and degree of flexibility. Although fiscal discipline can contribute to reducing fiscal imbalances and strengthening long-term financial sustainability, the overly strict adherence to rules may limit a government's ability to respond to economic shocks, encourage procyclical fiscal policy, and negatively affect economic growth, especially during periods of economic downturn.

The analysis of fiscal policy models in the EU and the US reveals fundamental structural differences and distinct approaches to fiscal policy formation. The EU's fiscal model is based on centralised, rule-based governance, with clearly defined quantitative targets, focusing on *ex ante* fiscal control and the enforcement of fiscal discipline. However, its effectiveness is constrained by economic heterogeneity across member states, and limited flexibility during crisis periods. In contrast, the fiscal system of the US is more fragmented, and relies to a greater extent on discretionary decision-making, where fiscal outcomes are shaped by political processes, and formal fiscal rules tend to be weaker and often temporary. As a result, the EU model is more oriented toward *ex ante* fiscal control, while the US system emphasises *ex post* adjustment, and a more flexible response to economic developments.

Neither strict rule-based fiscal policy nor a fully discretionary approach provides an optimal solution for ensuring both macroeconomic stability and the sustainability of public finances. The most effective fiscal framework should combine fiscal discipline with sufficient flexibility, allowing governments to adjust to economic cycles and unexpected shocks. From this perspective, public institutions are encouraged to improve fiscal rules by incorporating clearly defined flexibility mechanisms, such as escape clauses during periods of economic crisis, strengthening the role of independent fiscal institutions, and ensuring consistent but adaptable rule implementation. It is also important to enhance coordination between fiscal and monetary policy, and to consider differences in national economic structures, particularly in multi-level economic systems such as the EU.

AI declaration

This article is the joint work of the co-authors. One of the authors prepared the initial draft of the introduction, the theoretical background, and part of the conclusions in Lithuanian, as an original scholarly contribution. For the preparation of the English version of these sections, the artificial intelligence-based tool Microsoft 365 Copilot was used as a supportive instrument for translation and language editing, in order to ensure terminological consistency and linguistic clarity.

The co-author contributed directly in English, without the use of any AI tools.

No AI tools were used for the research design, data analysis, interpretation of results, or the development of scientific arguments. Both authors critically reviewed and approved the final version of the manuscript, and take full responsibility for its content, including all interpretations and conclusions.

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DAUGIAU NEI 15-OS METŲ SKIRTUMAS: ES IR JAV FISKALINĖS BEI PINIGŲ POLITIKOS PALYGINIMAS

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Santrauka

2026-ieji žymi 15-os metų laikotarpį, per kurį ES rodikliai nebeprilygo JAV BVP – nors iki 2011 m. pirmavo būtent ES. Nors mokslo bendruomenė vis dar diskutuoja, ar tai buvo išskirtinis JAV pasiekimas, ar lėta Europos pažanga, vienas faktas išlieka neginčijamas: Europos Sąjunga pasirinko kitą veiksmų strategiją. Nepaisant plataus fiskalinių taisyklių taikymo, vis dar vyksta akademinės diskusijos dėl jų veiksmingumo užtikrinant ekonomikos augimą ir viešųjų finansų tvarumą. Tai kelia tyrimo klausimą, ar vertinant ekonomikos augimą, viešąją skolą ir makroekonominį stabilumą griežtas fiskalinis reguliavimas yra veiksmingesnis už lankstų požiūrį į fiskalinę politiką?

Lyginamasis tyrimas atskleidė, kad institucinis lankstumas ir gebėjimas reaguoti į pokyčius vykdant fiskalinį bei pinigų politikos valdymą yra esminiai ekonominio atsparumo ir augimo veiksniai. JAV sistema, pasižyminti lankstesnėmis fiskalinėmis taisyklėmis ir skatinamąja pinigų politika, sudarė sąlygas greičiau atsigauti po ekonominių sukrėtimų. Ir priešingai – griežtesni ES fiskaliniai apribojimai ir pavėluoti politikos pakeitimai ribojo jos augimo potencialą, ypač krizių laikotarpiais. Šie rezultatai atskleidžia, kad pažangiose ekonomikose siekiant optimizuoti makroekonominius rodiklius ypač svarbūs yra lankstūs politikos mechanizmai bei fiskalinės ir pinigų politikos derinimas. Atlikta analizė pabrėžia, kaip svarbu, kad vyriausybė gebėtų operatyviai koreguoti fiskalinę politiką ir pinigų politikos priemones, reaguodama į kintančias ekonomines sąlygas. Jungtinėse Valstijose lankstesnė mokesčių ir išlaidų politika bei ryžtingi centrinio banko veiksmai leido veiksmingai reaguoti į tokius iššūkius kaip 2008 m. finansų krizė ir COVID-19 pandemija. Tuo tarpu Europos Sąjungoje griežtesnė fiskalinė sistema ir lėtesnis politikos naujovių diegimas lėmė lėtesnį ekonomikos atsigavimą bei BVP vienam gyventojui augimą.

RAKTINIAI ŽODŽIAI: *pinigų politika, biudžeto balansas, fiskalinė drausmė, valstybės skola, taupymo politika.*

JEL KLASIFIKACIJA: E62, H62, H63, F36.

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