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Working paper
**Debt sustainability: structural differences between Northern bloc,
Southern bloc and Eastern bloc in Europe**

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Abstract:

This article examines the current state of public debt across various blocs within the European Union (EU), particularly in light of the recent reform to the Stability Pact, enacted in April 2024. This reform strengthens the EU's capacity to enforce fiscal compliance among member states, aiming to harmonize public accounts and prevent a repeat of past sovereign debt crises. However, a single narrative on EU debt is inadequate given the distinct fiscal approaches among Northern, Southern, and Eastern European countries. The Northern bloc, including Germany and Sweden, is characterized by prudent fiscal management and robust institutional frameworks. Conversely, the Southern bloc, encompassing Greece, Italy, and France, struggles with high debt levels, often linked to expansive fiscal policies and structural economic challenges. The Eastern bloc, comprising emerging economies like Poland and Hungary, displays varied debt profiles reflective of post-communist economic reforms.

This study categorizes EU countries into these three blocs, examining their distinct debt structures, fiscal policies, and economic foundations. Utilizing data on public debt, deficit levels, and foreign exchange reserves, it highlights the structural differences between these regions. Northern economies typically exhibit strong industrial sectors and positive trade balances, while Southern economies rely more on services and tourism, making them vulnerable to economic fluctuations. The Eastern bloc, meanwhile, occupies an intermediate position, with some countries showing competitive growth and others grappling with economic fragility.

The analysis further explores the role of redistribution policies in debt accumulation, using per capita public spending data. Findings suggest that while redistribution contributes to public debt, high spending does not consistently correlate with elevated debt levels. Northern bloc countries, for instance, manage to sustain high public expenditures with relatively moderate debt increases, contrasting with the Southern bloc's reliance on debt to support similar policies. Ultimately, this article underscores the need for nuanced fiscal strategies tailored to the unique economic profiles within the EU, promoting fiscal stability while accommodating the diverse needs of its member states.

In Western economies, the subject of debt has come to the fore, particularly in the wake of the various stimulus packages that followed the COVID crisis. The culmination of these concerns was the threat of sanctions by the European Union (EU) against seven member countries¹ under the *Stability Pact*², which came into force in its new form in April 2024. This reform of the *Stability Pact* not only entails the return of clear, efficient public finance trajectories, with a focus on reducing public deficits, but also a strengthening of the European macroprudential authorities' ability to impose sanctions on member countries that fail to comply with the trajectories set for them³. This possibility of intervention at the heart of the economies of each EU member country demonstrates a quest to homogenize public accounts while avoiding a sovereign debt crisis, as Europe already experienced in the 2000s.

However, talking about Europe as a single entity when it comes to debt is unreliable. So we'll divide the European Union into three parts: the Northern bloc, the Southern bloc and the Eastern bloc.

Thus, Northern European countries are often characterized by prudent public finance management and a strong culture of economic stability, and generally have lower levels of public debt and robust institutional frameworks. Germany, the Netherlands and Sweden, for example, illustrate debt management strategies based on structural budget surpluses and conservative fiscal policies. These countries also enjoy a high level of financial credibility on international markets, enabling them to finance their debt at relatively low costs.

By contrast, southern European countries such as Greece, Italy, Spain, Portugal and France often have higher levels of public debt, reflecting structural economic challenges and more expansive fiscal policies. The sovereign debt crisis of 2010-2012 highlighted the vulnerabilities of these economies, exacerbated by inefficient tax systems and high public spending. European Union interventions and structural adjustment programs have sought to stabilize these economies, but questions remain about the long-term sustainability of their public debt.

¹ These are Belgium, France, Italy, Hungary, Malta, Poland and Slovakia.

² *Legal basis of the Stability and Growth Pact. (s. d.). Economy And Finance. https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/stability-and-growth-pact/legal-basis-stability-and-growth-pact_en*

³ These sanctions are first and foremost an imposed guideline, with debt reduction targets of 1% per year and a deficit reduction to 1.5% of GDP in periods of growth. If these targets are not met, the European Commission has the power to impose a financial penalty of 0.1% of GDP per year.

Eastern European countries, represented by emerging economies such as Poland, Hungary and Romania, present a different picture of public debt management. These countries have undertaken significant economic reforms since their post-communist transition, with varying results in terms of public debt. While some have managed to maintain moderate debt levels thanks to robust economic growth and structural reforms, others continue to struggle with high budget deficits and fragile economic governance.

Thus, in developing this article, we will divide the blocks⁴ as follows:

Northern bloc (11)	Southern bloc (7)	Eastern bloc (9)
Sweden, Lithuania, Latvia, Estonia, Finland, Germany, Netherlands, Ireland, Belgium, Luxembourg, Denmark	Spain, Portugal, France, Italy, Malta, Cyprus, Greece	Czech Republic, Poland, Austria, Slovenia, Croatia, Hungary, Romania, Bulgaria, Slovakia

Tableau 1 - Division of Europe into three blocks

We chose to include France in the Southern bloc because its debt management and public finances are closest to those of Southern countries⁵.

Debt structuring and measurement

Firstly, we need to analyze the structures of debt creation and holding in the various countries under analysis. This analysis will enable us to determine the purposes for which debt is used in the countries of each bloc.

Since its creation in 1999, the European Economic and Monetary Union (EMU) has seen its members adopt diverse fiscal policies, with varying levels of public debt. The global financial crisis of 2008 and the ensuing European sovereign debt crisis have highlighted the structural vulnerabilities of the eurozone, making public debt management a crucial priority for European governments and institutions.

⁴ These blocks will be treated as a separate entity, and the figures will be averaged and concatenated to homogenize the data.

⁵ The trajectories of public deficits in the Southern bloc are relatively similar, and debts are very high in the countries concerned.

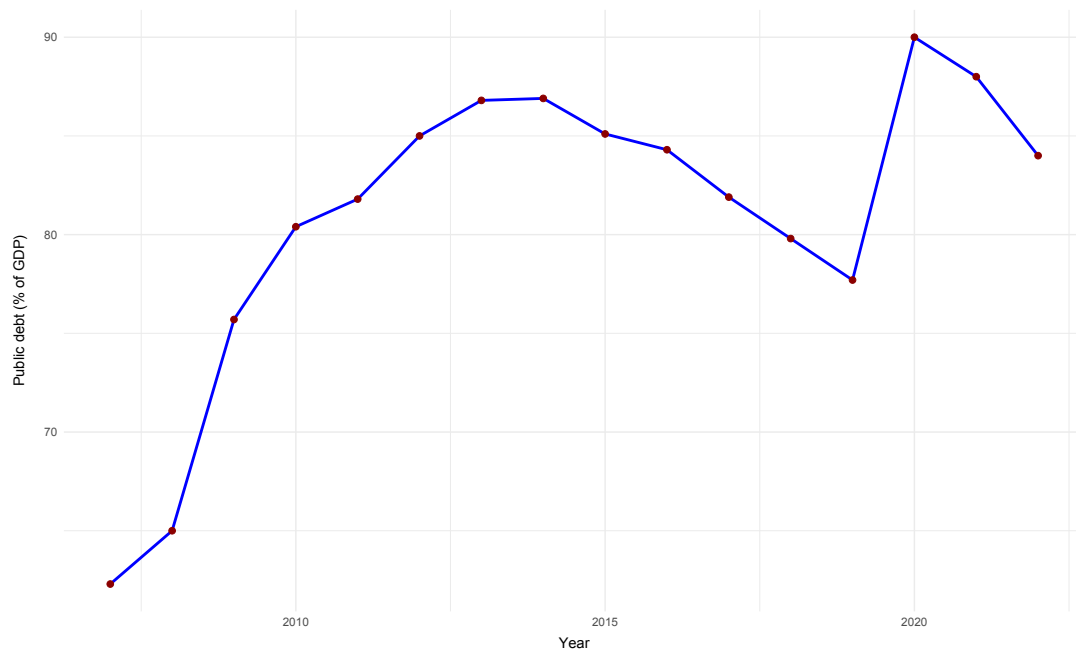


Figure 1 - Public debt in European Union of 27 (2007-2022) - Source: INSEE / Eurostat

The average debt of the 27 member countries of the European Union rose steadily until the European debt-restructuring policies of 2014, before exploding following the COVID crisis in 2019 and 2020.

However, intra-European countries are already marked by differences between North and South. Structural differences in the economies of Northern, Southern and Eastern European countries largely explain the differences in levels of public debt. Northern European economies are often more industrial and export-oriented, with positive trade balances reflecting strong international competitiveness and a solid manufacturing base. In contrast, southern European countries are more dependent on the service and tourism sectors, making them more vulnerable to global economic fluctuations. These countries often have negative trade balances and less diversified economic structures, limiting their resilience in times of crisis. In addition, Southern countries generally have lower economic growth rates and higher unemployment rates, hampering their ability to generate sufficient fiscal revenues to reduce debt.

Eastern European countries, on the other hand, present an intermediate profile between these two extremes. While some Eastern economies, such as Poland and the Czech Republic, have developed competitive industrial sectors and enjoy robust economic growth, others, such as Romania and Bulgaria, are still in a transition phase, with more fragile economies and greater dependence on foreign investment. Eastern European countries often have more balanced trade balances than their southern counterparts, but their ability to generate sufficient fiscal revenues

to stabilize public debt varies considerably, depending on their success in implementing structural reforms and economic governance.

I. Public spending at different levels of control

Public spending is of strategic importance for European countries, particularly in the context of the Stability Pact, which does not allow EU member states to spend without matching tax revenues.

As a result, several country profiles are emerging in Europe, with relatively similar spending trajectories but more heterogeneous spending levels.



Figure 2 - Public deficit/surplus by bloc - Source : Eurostat

Figure 2 highlights these differences between blocks. As mentioned above, public spending trajectories are similar up to 2022, with a phase of falling public deficits from 2012 to 2019, followed by a phase of exploding deficits in 2020, and then significant falls in deficits in 2021 and 2022, as public policies linked to COVID come to an end. However, we can see a difference in trajectory between the Northern and Eastern blocks and the Southern block. The first two are

beginning to increase their public deficits, while the southern bloc is returning to a level that is sustainable under the *Stability Pact*⁶.

However, it's when we look at public deficit levels that the differences are greatest. Indeed, over the period studied, 2012-2023, the Northern bloc is the only country to have a deficit level well below the other two blocs, with the North even managing the feat of being in surplus three years in a row from 2017 to 2019. This measure is all the more striking given that 11 countries are part of this statistical grouping, which favors statistical disparities. In fact, in 2012, the Northern bloc had an average public deficit of 2.52 points of GDP, while Ireland posted a deficit of 8.5 points of GDP. Luxembourg, on the other hand, had a surplus of 0.5 points of GDP, yet overall, the Northern bloc is homogeneous, with an average standard deviation between deficits of 1.8 points of GDP. The Southern and Eastern blocks are also homogeneous, with average standard deviations of 2.6 GDP points for the Southern block and 1.8 GDP points for the Eastern block. These low standard deviations demonstrate relatively similar intra-block structures and provide partial validation of the hypothesis of different economic trajectories for different regional blocks in Europe.

II. Different debt structures

The European blocs are not, as we have already mentioned, heterogeneous. So we need to study the debt structures of the three blocs. To do this, we will use not only the amount of debt, but also the structure of financial instruments and the foreign exchange reserves of each bloc to identify differences between them.

⁶ The Stability Pact calls for a public deficit level below 3%. In the case of our country blocs, even though the Southern bloc is indicated as returning to the threshold of acceptability, three Southern bloc countries are under threat from macroprudential institutions (see footnote 1).

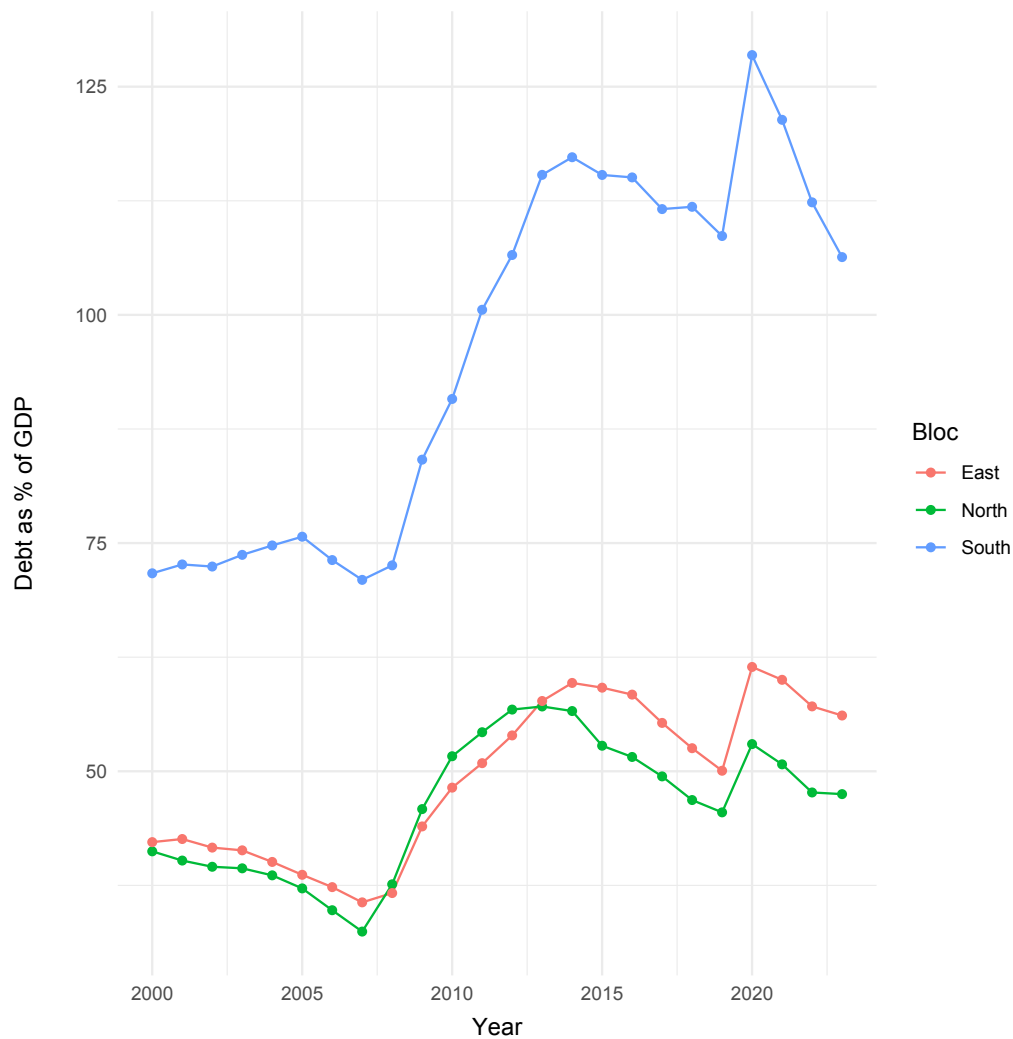


Figure 3 : Public debt as a % of GDP by Bloc - Source: Eurostat

Figure 3 above illustrates public debt levels as a percentage of GDP for the three blocks (North, East and South) from 2000 to 2023. Public debt as a percentage of GDP for the Northern block has risen overall over time, with particularly notable growth from 2008 onwards and then stabilizing over the 2015-2023 period. The Eastern bloc showed a relatively stable trend in public debt levels as a percentage of GDP, with moderate fluctuations, however, debt levels increased slightly after 2008, with a general upward trend until 2014, before experiencing a period of stabilization and a slight decline in 2023. The Southern bloc, meanwhile, has seen a significant increase in public debt levels as a percentage of GDP since 2000, with a particularly marked rise from 2008 onwards. After peaking around 2014, debt levels fluctuated, reaching a second peak around 2020 before declining slightly in 2023.

These variations reflect the different economic dynamics and fiscal policies adopted by each bloc over the years. The notable increases around 2008 and 2020 coincide with the global

economic crises, underlining the impact of economic shocks on public debt levels. However, the pattern of debt recourse varies considerably from one bloc to another.

Over the period 2008-2015, the Southern and Eastern blocs increased their debts by 58.9% and 61.3% respectively, while the North limited its debt increase to 40.3%.

As a result, the South has had a higher debt burden than the other blocs. Southern bloc countries have been particularly hard hit by economic crises, notably the 2008 financial crisis and the European sovereign debt crisis. These events led to deep recessions and declines in public revenues, increasing the need to borrow to finance budget deficits. In addition, the fiscal policies adopted by Southern bloc countries have often involved higher levels of public spending, often without adequate fiscal compensation, or frequently difficult to implement without the risk of capital flight⁷. This has led to chronic budget deficits, requiring debt financing. Finally, the implementation of structural reforms has been slower and less effective in some Southern bloc countries, limiting their ability to stimulate economic growth and generate the revenues needed to reduce debt.

In 2023, the debt of each bloc will be as follows:

Blocks	Debt values (<i>in millions of euros</i>)
Northern Block	4 509 032.50
Southern Block	8 191 219
Eastern Block	1 375 295.6

On the subject of debt, we need to take into account the standard deviations within each bloc, as we do for public deficits. Indeed, the average standard deviation of the Northern bloc is 27.7 points of GDP, that of the South 33 points of GDP, while the standard deviation of the Eastern bloc is 19.5 points of GDP. The Eastern bloc therefore appears to be the most homogenous in Europe in terms of debt levels, facilitating a similar structure between countries.

⁷ In the context of public policies focused on public spending, it is necessary to offset increases in expenditure with tax revenues to reduce the level of deficit. However, some countries in the Southern bloc already have high levels of taxation, making it impossible to optimize tax revenues.

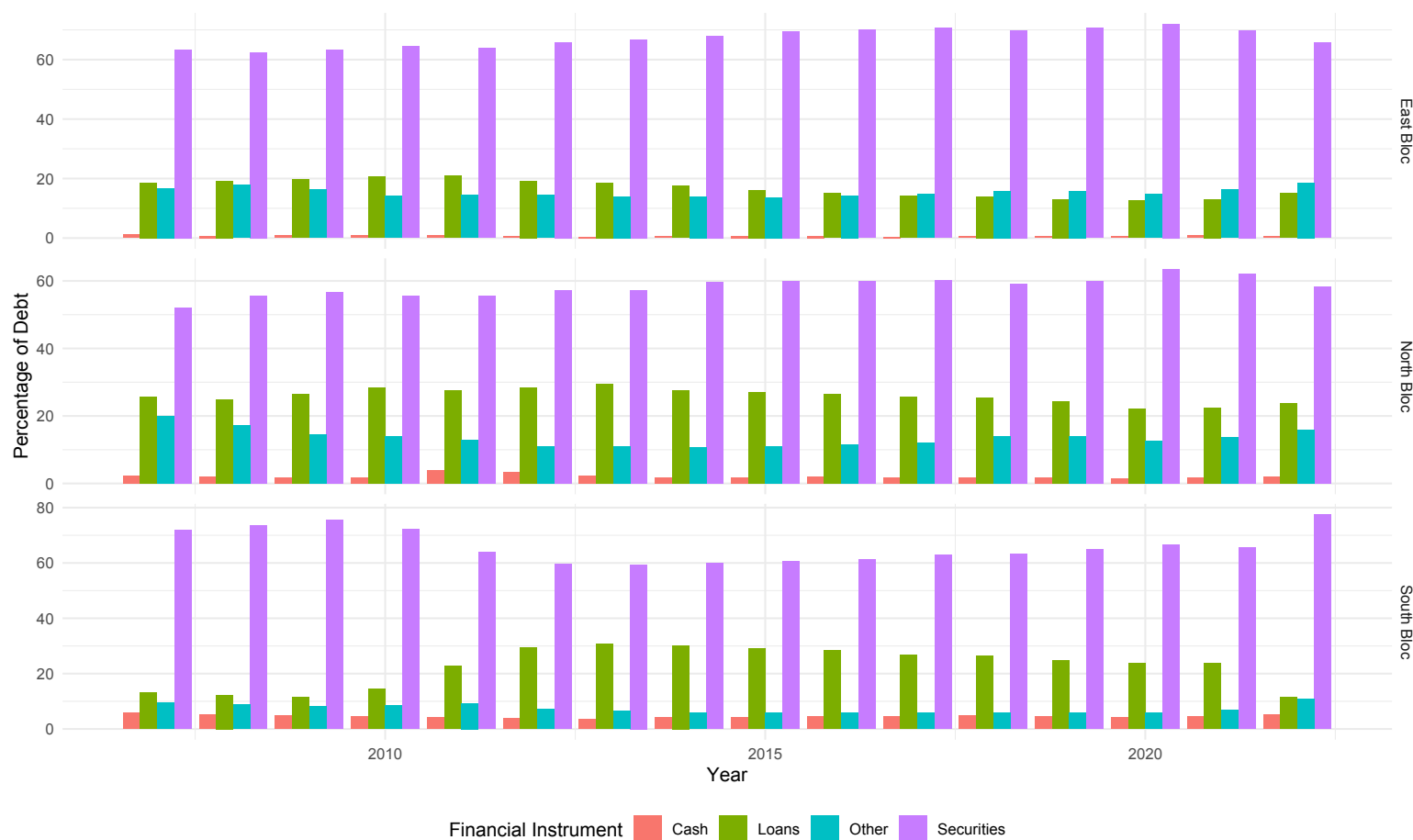


Figure 4 - Debt structure by financial instruments - Source : OCDE

Figure 4 shows the breakdown of the various financial instruments in the debt of the three blocks over the period 2007-2022. Debt securities account for the majority of debt in all blocks, while the proportion of other categories varies by block and by year.

In the North block, the share of debt securities remains high, while loans and other financial assets/liabilities fluctuate slightly. Cash and deposits remain relatively low.

For the East Block, debt securities also dominate, but there is a significantly lower proportion of loans and other financial assets/liabilities compared with the North Block. Cash and deposits are even less significant.

As far as the South Block is concerned, although debt securities still make up a significant proportion of debt, there is a more balanced presence between credits and other financial assets/liabilities compared with the other two blocks. Cash and deposits are also higher than in the North and East Blocks.

In detail, the debt structure in financial instruments of the different blocs is relatively different, albeit slight from one year to the next. These slight differences can be explained by the overriding macroeconomic factors in the countries of each bloc. Indeed, the best-rated countries can afford to issue larger amounts of debt at lower interest rates. This is one of the reasons why the share of receivables in debt is lower than in the Northern bloc, which has a better reputation in world financial circles.

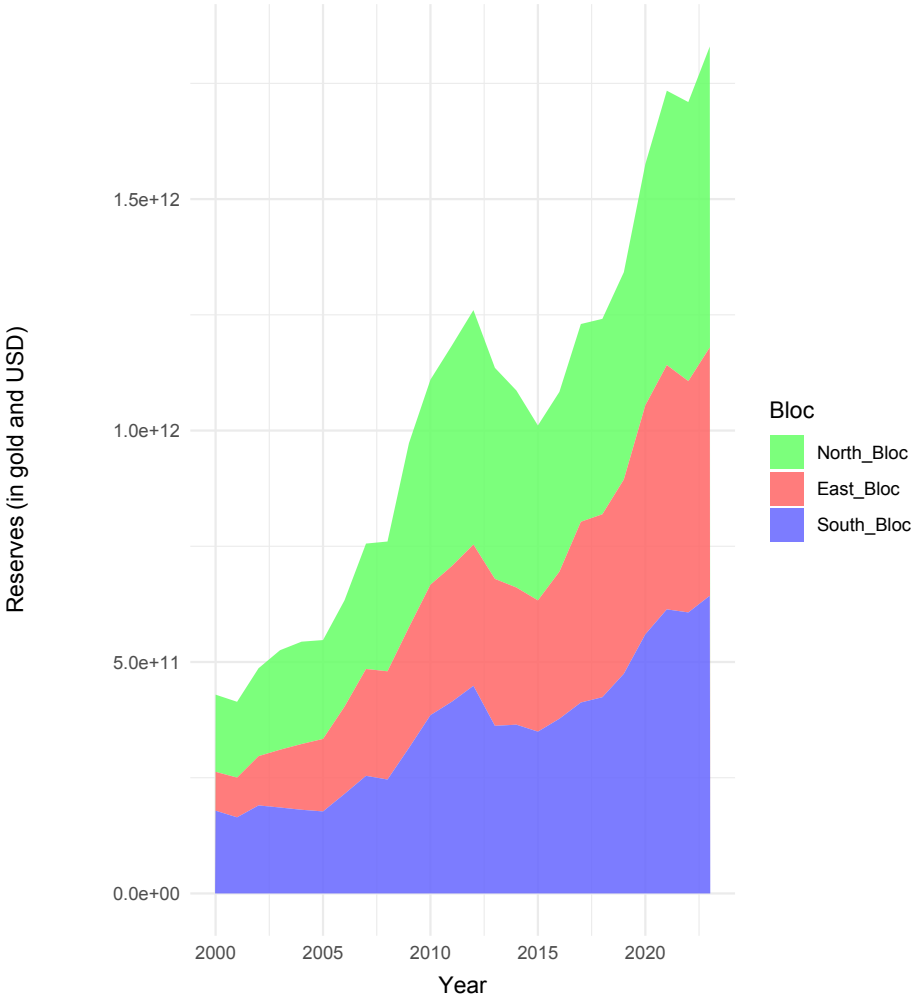


Figure 5 - Foreign exchange reserves by bloc - Sources: IMF / World bank

Figure 5 highlights each block's foreign exchange reserves in gold and USD. Foreign exchange reserves can have a major impact on debt measurement and structuring. They are used to finance balance-of-payments deficits, enabling imports to be settled, external debts to be repaid and external economic shocks to be dealt with. This is particularly the case for the Southern bloc, which has a weak balance of payments due to its industrial and productive fabric being deserted in favor of the Eastern bloc and certain Southern bloc countries.

During financial or economic crises, foreign exchange reserves can be used to stabilize the economy, by providing the foreign currency needed to support the national currency and economic activities. This is what was used for the financial crisis of 2008, which began with the COVID crisis. The sovereign debt crisis will also have had a considerable impact on the economies of the South, which will have had to increase their foreign exchange reserves considerably to cope.

The Eastern bloc, for its part, will have followed the same path of increasing its foreign exchange reserves, particularly when we correlate the economic crises and the return of intra-European industries and orders to the Eastern economies.

III. Do redistribution policies generate large debts?

Redistribution policies are often targeted as the primary factor in increasing public deficits and, by extension, public debts. However, to do this, we need to analyze the reality of per capita distribution in order to understand the trajectories of each bloc.

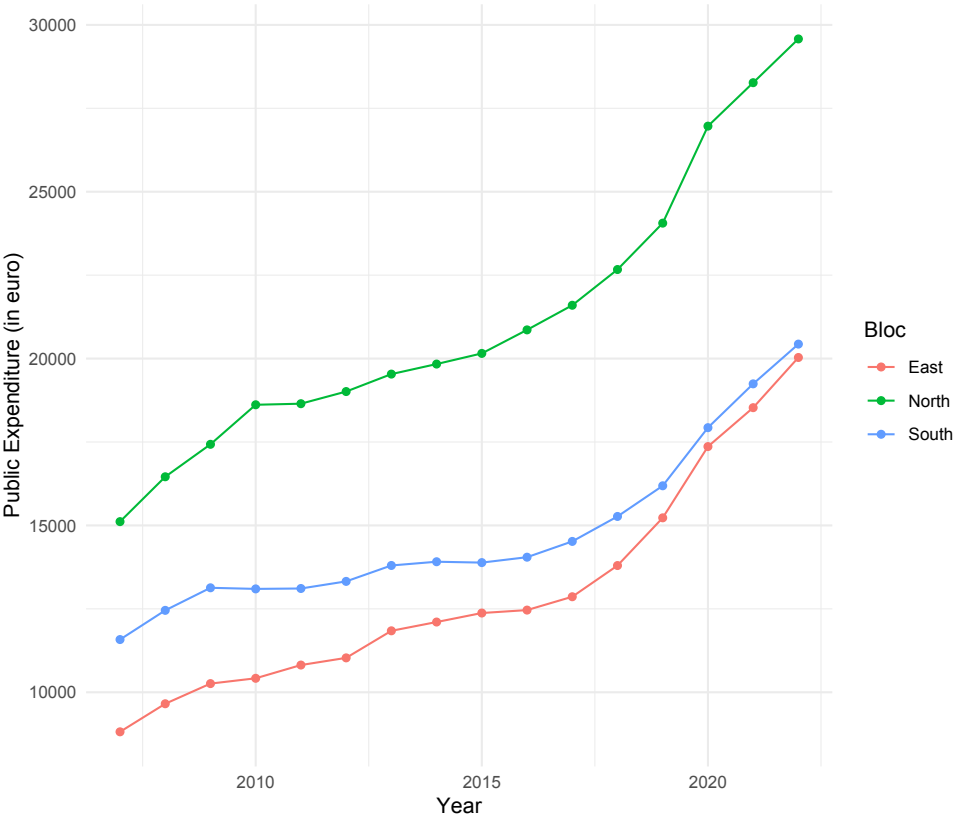


Figure 6 : Public expenditure per capita by bloc - Source : Eurostat

The graph above illustrates public spending per capita for the North, East and South blocks of Europe over a given period. It highlights the trends in public spending in each block, and enables us to compare their evolution.

Public spending per capita in the Northern bloc shows a steady and progressive increase over time. This bloc, often characterized by more stable and prosperous economies, has relatively high and steadily rising levels of public spending, reflecting generous redistribution policies and significant investment in public services, due in particular to flexicurity public policies.⁸

Public spending per capita in the East Block is more moderate than in the North and South Blocks. This block shows slower growth in public spending, which can be attributed to developing economies with limited budgetary resources. Despite this slower growth, public spending is gradually increasing, indicating a constant effort to improve public services and redistribution.

The Southern Block shows a similar upward trend to the Northern Block, but with more marked fluctuations. Public spending per capita is rising significantly, especially in recent periods. This increase is notably linked to more intense redistribution efforts and public policies aimed at stimulating the economy and reducing inequalities, which are very significant in Southern economies.

Redistribution policies play a crucial role in the accumulation of public debt when we correlate the curves of debt and public spending per capita. An increase in public spending, especially in the health, education and social services sectors, often leads to increased indebtedness, particularly if this spending is not offset by sufficient tax revenues, as mentioned above. However, it is important to note that there is no direct correlation between high public debt and high public spending per capita. For example, Northern Bloc countries, despite their high per capita public spending, do not necessarily show higher debt levels than other blocs, or even a very low level compared to the Southern Bloc, which has other developed economies. On the other hand, fluctuations in public spending in the Southern Bloc can be attributed to specific policy responses to economic crises, such as the sovereign debt crisis or the COVID-19 pandemic, rather than to a consistent trend of high public spending.

⁸ Flexicurity is an employment policy mainly associated with Scandinavian countries, combining labor market flexibility for employers with job security and increased social support for workers, aimed at balancing economic and social needs.

Long-term investment in infrastructure and public services, while beneficial for economic development, also initially increases public debt. In conclusion, redistributive policies and public spending play a major role in the accumulation of public debt, but per capita levels of public spending are not necessarily correlated with high levels of public debt. The trends observed in the different European blocs reflect varying approaches to redistribution and public finance management, thus influencing their debt levels.

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