

GLOBAL RESEARCH DYNAMICS ABOUT PUBLIC DEBT: RISING PUBLIC DEBT AND THE EUROPEAN FISCAL UNION

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Abstract: This paper aims to bring Romanian research on public debt into the international spotlight, contextualizing it within the rising global debt levels caused by recent economic crises, such as the global financial crisis and the Covid-19 pandemic. The main goal is to highlight the importance of local research, often overlooked, while analyzing public debt through both global and local lenses. The first part of the paper analyzes the intensifying effects of globalization, accelerated by the Covid-19 pandemic, and the shift in how public debt is perceived, with a growing focus on investments and budget deficits. It also examines the challenges faced by decision-makers in managing debt sustainability, particularly the tension between political priorities and fiscal realities. The second part provides an empirical analysis of recent studies on the rise of global public debt, political economy factors, and credit cycles. The third section outlines the difficulties in governing public debt in the European Union due to the absence of a fiscal union and explores the concept of an optimal monetary zone. One of the central political issues raised is the tendency of politicians, especially in advanced economies, to exploit public debt for short-term electoral gains.

Keywords: credit cycles, economic crisis, European Union, fiscal union, political economy, public debt

Rezumat: Acest studiu își propune să aducă cercetarea românească privind datoria publică în prim-planul internațional, contextualizând-o în cadrul creșterii nivelurilor globale de datorie cauzate de crizele economice recente, cum ar fi criza financiară globală și pandemia de Covid-19. Principalul obiectiv este de a sublinia importanța cercetării locale, adesea neglijată, în timp ce analizează datoria publică atât printr-o lentilă globală, cât și locală. În prima parte, lucrarea analizează efectele intensificate ale globalizării, accelerate de pandemia de Covid-19, și schimbarea modului în care este percepută datoria publică, cu un accent tot mai mare pe investiții și deficite bugetare. De asemenea, examinează provocările cu care se confruntă factorii de decizie în gestionarea sustenabilității datoriei, în special tensiunea dintre prioritățile politice și realitățile fiscale. A

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doua parte oferă o analiză empirică a studiilor recente privind creșterea datoriei publice globale, factorii economiei politice și ciclurile de credit. A treia secțiune subliniază dificultățile de guvernare a datoriei publice în Uniunea Europeană din cauza absenței unei uniuni fiscale și explorează conceptul de zonă monetară optimă. Una dintre principalele probleme politice ridicate este tendința politicianilor, în special în economiile avansate, de a exploata datoria publică pentru câștiguri electorale pe termen scurt.

Cuvinte cheie: cicluri de creditare, criză economică, Uniunea Europeană, uniunea fiscală, economie politică, datorie publică

I. Introduction: The Context of Global Research on Public Debt and the Promotion of Local Research

Creating a selective retrospective literature review that includes not only references categorized as “global” but also “local” is

a task of high complexity. Setting aside the technical difficulties related to the evolution of the concept of public debt discussed in the global specialized literature, disregarding the local dimension of research is a central issue for higher education specialists¹. Of course, there are two, if not more, main contradictory directions that debate how to conduct research: academic capitalism (also known as the new type of managerialism) and the “classical” perspective². Inevitably, the debate touches on the ethical dimension of conducting research: how ethical concerns influence the research process, how ethics intervene in the decision to approach a research paper, and how we ethically interpret a work of research. Specialists observe this heated debate and consider it to be based on a generational conflict, while others, including the author of this paper, see only the impact of global factors on local academic environments. In this regard, the generational conflict has been driven by profound social and political changes that have led to the inclusion of universities and research institutes in a more or less global network. This network is “pressured” to produce research whose quality is measured using

¹ Rosemary Deem, “Globalisation, New Managerialism, Academic Capitalism and Entrepreneurialism in Universities: is the local dimension still important?”, *Comparative Education* 37, no. 1 (2001): 7-20.

² Ibid.; Darren O’Byrne and Christopher Bond, “Back to the future: the idea of a university revisited”, *Journal of Higher Education Policy and Management* 36, no. 6 (2014): 571-584.

“impact factors” and “ranked journals.” Thus, the process of the “general marketization”³ of higher education has led to inequalities that experts and practitioners struggle to modify or adapt to. It is worth mentioning that almost all higher education systems, from South Korea to the Netherlands, are undergoing these changes, focusing on the general question: how do we promote the local dimension of research⁴? The tools used for promotion vary from institution to institution, but empowering students to conduct research that highlights the local dimension is one of the most effective tools used.

The present paper aims to bring Romanian research on public debt into the spotlight within a national and international context that is particularly favorable for studying this issue, namely that debt vulnerabilities are increasing in most countries. The last time in history when sovereign debt levels were so high was after World War II. Today, as we move beyond the effects of the global financial crisis and navigate through the aftermath of the pandemic crisis, public debt-to-GDP ratios are at levels similar to those immediately following World War II. To understand the dynamics that shape the implications of public debt for state finances, it is useful to start from the definition offered by Văcărel (2017):

“Total public debt represents the total monetary obligations of the state (government, public institutions, financial institutions, administrative-territorial units) at a given moment, resulting from internal and external loans (in local and foreign currency) contracted for short, medium, and long terms, as well as the state’s obligations to its own treasury for temporarily advanced amounts to cover budget deficits”.⁵

From an individual perspective, public debt reflects the history of states’ financial decisions, representing the total amount of the state’s debt to both external and internal creditors. This history illustrates how governments have used sovereign debt to shape economic development. This tool has been employed to provide durable public goods and to complete infrastructure projects. The present paper seeks to merge the two dimensions of research on public debt and highlight the importance of local research, often undervalued. The first part of the paper discusses specialized studies that have direct

³ Janja Komljenovic and Susan L. Robertson, “The dynamics of ‘market-making’ in higher education”, *Journal of Education Policy* 31, no. 5 (2016): 622-636.

⁴ Deem, “Globalisation, New Managerialism”, 2001.

⁵ Iulian Văcărel, „Tendințe în evoluția sistemelor fiscale ale țărilor membre OCDE, Uniunii Europene și României”, *Calitatea vieții* 18, no. 3-4 (2007): 339-381.

implications for economic policies. The second part presents the main obstacles the European Union (EU) faces in achieving a fiscal union, a necessary condition for an optimal monetary area.

II. Economic Policies and Implications for Decision-Makers in the Context of Rising Global Public Debt Levels

II.1. The Globalization Intensified by the Covid-19 Pandemic? A Determining Factor in the Paradigm Shift

The context of European globalization has imposed or offered the opportunity for institutional reforms whose main goal is to bring about profound changes in the formulation and implementation of economic policies. Moreover, the pandemic accelerated this process, having a major impact on the social factors, which until now was indirectly involved in the globalization process. As noted by the Romanian Academy team, the pandemic highlighted that globalization was not just a confrontation between states and transnational corporations, but rather had a major impact on social expectations and existence⁶. However, in the short term, the Covid-19 crisis marked a downward phase of globalization, a phase many authors refer to as de-globalization, characterized by the intensification of protectionist measures being adopted globally⁷.

At the global level, a paradigm shift is evident, not only in research papers but also in the institutional changes discussed in national forums. It is becoming increasingly clear that the details and warnings about structural deficits no longer matter, as they contradict the conclusion: investments must be made. The paths are simple in the current context: budget deficits and the

⁶ See chapter on „Resetarea ordinii economice mondiale” [Eng. trans.: “Resetting the global economic order?”] in: Napoleon Pop, Valeriu Ioan-Franc, and Andrei Marius Diamescu, *Pandemia – noua față întunecată a globalizării* [Eng. trans.: *The pandemic – the new dark face of globalization*](București: Academia Română, Institutul Național de Cercetări Economice “Costin C. Kirițescu, 2020), https://acad.ro/SARS-CoV-2/doc/d03-Resetarea_ordinei_economice_mondiale.pdf.

⁷ Ada-Cristina Albu and Lucian-Liviu Albu, “Public debt and economic growth in Euro area countries. A wavelet approach”, *Technological and Economic Development of Economy* 27, no. 3 (2021): 602-625.

growth of external debt⁸. The paradigm shift refers to how the sustainability of public debts must be ensured. While just a few years ago, public debt was described as “a free lunch for states”, now the potential risks of this supposedly “safe” level of public debt are becoming apparent⁹. In advanced economies, the focus of policy-makers on deficits seems outdated, while emerging economies face stalled growth due to standard macroeconomic mechanisms. Despite low interest rates and the absence of deficits, for sovereign economies, public debt has steadily increased in recent decades. According to estimates by the International Monetary Fund, global public debt reached 97% of GDP in 2020, the largest increase in history. Moreover, there is a high degree of heterogeneity between countries, with a significant difference between advanced economies (about 120% of GDP) and emerging markets (about 64% of GDP). In this context, a thesis on public debt governance is a particularly interesting subject.

The policy process to ensure public debt sustainability must answer the following question in the near future: will governments find the optimal tools to adapt their social spending programs and pension systems while still meeting their debt obligations? Expanding the welfare state could create dynamics that are difficult to resolve¹⁰. The explanations for the rise in debt in advanced economies seem to have political economy reasons: politicians temporarily in power tend to exploit debt to maximize payouts to their electorate¹¹.

In general, as noted by the Romanian Academy team, it is proposed that the “reduction of public debt be done where and when necessary, since neither the budget expenditures made by individual governments, according to well-known realities by EU bureaucrats, will be permanent, so as to require funding through increased public debt”¹². The authors note that:

“it would be better for the focus to shift from annual budget deficits to the long-term sustainability of public debt, taking into account the cyclical position of the economy, as envisioned in the ‘Fiscal Compact.’ However, it is emphasized that

⁸ Pop, Ioan-Franc, and Diamescu, *Pandemia – noua față întunecată*, 2020.

⁹ Kenneth Rogoff, “Falling real interest rates, rising debt: A free lunch?”, *Journal of Policy Modeling* 42, no. 4 (2020): 778-790.

¹⁰ Ibid.; Marco Battaglini and Stephen Coate, “A dynamic theory of public spending, taxation, and debt”, *American Economic Review* 98, no. 1 (2008): 201-236.

¹¹ Rogoff, “Falling real interest rates, rising debt: A free lunch”, 2020; Pierre Yared, “Rising government debt: Causes and solutions for a decades-old trend”, *Journal of Economic Perspectives* 33, no. 2 (2019): 115-140.

¹² Pop, Ioan-Franc, and Diamescu, *Pandemia – noua față întunecată*, 2020, 45.

shifting the focus from short-term to long-term is hindered by the ‘complexity and opacity of imposed rules’¹³.

The solution lies in the need for simplifying, increasing transparency, and enhancing the effectiveness of the rules implemented, as advocated by the European Fiscal Board (EFB). The EFB has suggested implementing a single performance indicator, such as a cap on the rate of net expenditure growth over a three-year period, so that public debt reduction can occur when net expenditures for long-term investments can be deducted from their predefined values¹⁴. In the European Union (EU), the governance of public debt is an even more complex task for researchers and policymakers. The absence of a fiscal union, compounded by the economic development disparities between countries, complicates the process of designing the fiscal policy instruments necessary for an optimal monetary union.

II.2 Empirical Research on Public Debt in the Context of Global Changes

The most recent studies focus on the relationship between the temporal increase in credit within an economy¹⁵, considering key empirical elements about credit cycles. Furthermore, the rise in public debt has prompted the study of the implications and impact of political factors in shaping credit fluctuations in real economic activity. The challenge for decision-makers is mainly related to choosing the most appropriate fiscal and monetary regulatory instruments. The relationship between future economic growth and the increase in credit is studied from two perspectives: the high-risk sentiment of the creditor market and the existence of financial frictions¹⁶.

Whether creditors have, do not have, or believe they lack the financial resources for loans, remains uncertain in the specialized literature. For this reason, rational theories of credit growth provide a foundation for some of the most familiar forms of regulatory intervention (fixed bank capital requirements over time). However, more recently, the development of creditor sentiment-based theories suggests that there are time variations in credit market conditions

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Jeremy C. Stein, “Can policy tame the credit cycle?”, *IMF Economic Review* 69, no. 1 (2021): 5-22.

¹⁶ Stein, “Can policy tame the credit cycle”, 2021; Carmen M. Reinhart, Vincent R. Reinhart, and Kenneth S. Rogoff, “Public debt overhangs: advanced-economy episodes since 1800”, *Journal of Economic Perspectives* 26, no. 3 (2012): 69-86.

and that more proactive policies might be needed to support an emerging credit boom¹⁷. Whether this research direction will lead to the application of more contextually adapted macro-prudential policies remains to be seen. Moreover, studies highlight the importance of private debt structure and its response to monetary shocks.

However, a shift in the structure of private debt is noted: the share of bank loans in total corporate debt has declined since the early 1990s, while the share of bonds has increased. Thus, firms opt for the lower cost of bonds rather than the flexibility of bank loans. Empirically, firms financed through intermediation, bank loans, are more sensitive to the effects of monetary policies¹⁸. Furthermore, for firms that choose the flexibility of bonds, there is a noted reduction in the transmission of monetary shocks to investments¹⁹. Whether this method of corporate financing will be preferred in the future remains to be seen, as decision-makers must decide on the issuance costs, maturity, and interest rates to ensure high levels of economic growth.

Additionally, monitoring firms' foreign exchange exposure is becoming increasingly important for responsible institutions in emerging, not advanced, economies²⁰. Therefore, a shift is observed in standard international macroeconomic theory, which postulates that a small open economy should allow the exchange rate to bear the burden of economic adjustment when financial conditions change in the rest of the world. When external demand decreases due to monetary policy, appreciation in the rest of the world and depreciation in the emerging economy contribute to shifting external demand from the rest of the world to the goods of the emerging economy²¹. This channel is known as the expenditure-switching channel in the well-known Mundell-Fleming model and highlights the value of flexible exchange rates.

Decision-makers in emerging economies argue that flexible exchange rates do not help but rather harm their economies. Exchange rate volatility negatively affects economic activity through the impact of currency fluctuations

¹⁷ Stein, “Can policy tame the credit cycle”, 2021.

¹⁸ Nicolas Crouzet, “Credit disintermediation and monetary policy”, *IMF Economic Review* 69, no. 1 (2021): 23-89.

¹⁹ Ibid.

²⁰ Crouzet, “Credit disintermediation and monetary policy”, 2021; Stein, “Can policy tame the credit cycle”, 2021; Ilhyock Shim, Şebnem Kalemli-Özcan, and Xiaoxi Liu, “Exchange rate fluctuations and firm leverage”, IMF Working Paper, WP/20/283 (2020), <https://www.imf.org/en/Publications/WP/Issues/2020/12/11/Exchange-Rate-Fluctuations-and-Firm-Leverage-49881>.

²¹ Shim, Kalemli-Özcan, and Liu, “Exchange rate fluctuations and firm leverage”, 2020.

on external debt. In an economy where external debt is held in foreign currency, exchange rate depreciations will lead to higher debt burdens as the value of foreign-currency debt increases while the value of local-currency assets diminishes²². Therefore, monitoring companies' balance sheets becomes important: when firms suffer from foreign exchange valuation losses and foreign exchange financing strains, national authorities are often expected to intervene to provide foreign currency liquidity to these firms, either directly or indirectly through their banks, to minimize the negative impact on growth²³. However, in the event of a crisis, it is difficult to create safety nets for firms' external debt, particularly in emerging economies. Instead, macro-prudential policies could prevent the accumulation of foreign currency debt during periods of economic growth.

Turning to the potential risks of public debt, the literature has also examined the role of collective action clauses in resolving sovereign debt crises. Collective action clauses in contracts can help avoid the “holdout problem”: the risk that creditors will refuse to participate in debt restructuring²⁴. This “holdout problem” became evident in Argentina's sovereign restructurings in 2005. The magnitude of creditors' losses is among the best predictors of participation rates at the bond level. This dynamic is driven by the variation in losses within a restructuring, while the total loss is not as significant. Moreover, as mentioned in the literature, there is no “safe” level of public debt, even in the context of negative interest rates. However, it is noted that there have been periods in history when interest rates were negative, but these were followed by several episodes of state defaults. Marginal government borrowing costs (rather than average costs) often rise sharply just before default²⁵. For these reasons, in the medium term, we could witness a series of episodes including public debt restructurings and even defaults.

The relationship between economic growth and various types of debt is increasingly examined in the literature, as not all debts are the same, and the

²² Shim, Kalemli-Özcan, and Liu, “Exchange rate fluctuations and firm leverage”, 2020; Gheorghe Zaman and George Georgescu, “Current and long run challenges of Romania's external debt sustainability”, *Procedia Economics and Finance* 32 (2015): 4-10.

²³ Shim, Kalemli-Özcan, and Liu, “Exchange rate fluctuations and firm leverage”, 2020.

²⁴ Chuck Fang, Julian Schumacher, and Christoph Trebesch, “Restructuring sovereign bonds: holdouts, haircuts and the effectiveness of CACs”, *IMF Economic Review* 69 (2021): 155-196.

²⁵ Paolo Mauro and Jing Zhou, “ $r-g < 0$: Can We Sleep More Soundly?”, *IMF Economic Review* 69 (2021): 197-229.

relationship between debt and output is not uniform across countries²⁶. Studies show that debt expansions have different correlations depending on the sector taking on the debt (households, businesses, or governments), and the relationship between them is closely tied to the method of financing: internal or external. It has been shown that due to shocks associated with a permanent component of total productivity growth, public debt tends to rise after a production shock, and following a debt shock, output tends to decline²⁷. These results lead to further study of the relationships between public debt, private debt, and output²⁸.

In Romania, Zaman and Georgescu (2015) highlight the excessive levels of external debt and their long-term impact, critically considering the debt-to-GDP ratio. The authors conclude that due to inefficiency, external loans do not achieve the expected results of economic development. However, it seems that this dynamic is specific to positive and non-normative economic theory, and the inclusion of private debt in various econometric models is not helpful. The savings-investment relationship in the private sector is ambiguous—a large private debt may mean either significant investments that will later generate GDP or poor management that is penalized by the market²⁹. Furthermore, Romanian research has drawn attention to sectors that show vulnerability to external debt³⁰.

Returning to macroeconomic fundamentals, specifically the relationship between economic growth and public debt, Albu and Albu (2020) confirm the presence of strong heterogeneity between European countries. Their results show that this relationship becomes more relevant over longer time scales, particularly over periods longer than 1-2 years³¹. In this situation, the phase difference between these two variables shows that public debt and economic growth are correlated, with public debt influencing growth levels in most Eurozone countries. The study mentions that the results are consistent with classical debt theory, which posits that debt can stimulate demand and output in

²⁶ Rogoff, “Falling real interest rates, rising debt: A free lunch”, 2020.; Yun Jung Kim and Jing Zhang, “The relationship between debt and output”, *IMF Economic Review* 69, no. 1 (2021): 230-257.

²⁷ Kim and Zhang, “The relationship between debt and output”, 2021.

²⁸ Ibid.

²⁹ Emil Dinga, “On the Logic of Praxiological Paradigms”, *Management of Sustainable Development* 12, no. 2 (2020): 25-30.

³⁰ Zaman and Georgescu, “Current and long run challenges of Romania’s external debt”, 2015.

³¹ Albu and Albu, “Public debt and economic growth”, 2021.

the short term, while long-term debt can contribute to a reduction in output and growth rates.

III. Towards Full Economic Integration: The Need for the Formation of a European Fiscal Union

III.1. Dysfunctionalities of the Monetary Zone

The governance of public debt in the EU is an extremely complex task given the absence of a fiscal union. The main objective of the EU, essential for the optimal functioning of the union and for which it was established, is the creation of a single market regarding the free movement of capital, labor, services, and people. However, without the creation of this single market – an essential condition outlined in the literature by Mundell (1961)³² and complemented by a fiscal and even political union – the optimal monetary union is not possible.

The concept of an optimal monetary zone was developed based on the debate between the advantages of using fixed exchange rates and flexible exchange rates. Mundell (1961) defined the optimal monetary zone as one that uses a single currency, where exchange rates are fixed³³. He made a distinction between a single monetary zone and monetary systems with fixed but adjustable exchange rates between currencies. The main problem related to optimal monetary zones is the handling of asymmetric shocks. In this situation, it is considered that an optimal monetary zone must have three mechanisms to mitigate the effects of asymmetric shocks:

- flexibility of prices and wages;
- internal mobility of capital and labor;
- a centralized fiscal policy.

The main model for optimal monetary zones offered by the literature is that of the United States, but its history is not without obstacles and political disputes regarding changes in policies and institutions. From 1788 to 1930, when interregional fiscal transfers and deposit insurance instruments were implemented, political leaders were caught in debates that exacerbated economic

³² Robert A. Mundell, “A theory of optimum currency areas”, *The American Economic Review* 51, no. 4 (1961): 657-665.

³³ Ibid.

turmoil and contributed to monetary policy errors³⁴. Interestingly, political disputes were more intense when a region was particularly affected by a shock in stemming from the financial markets or agriculture. However, each crisis led to progress, and similar to what has happened in the EU in the past two years, institutional changes were adopted to resolve banking crises in different regions³⁵.

Nevertheless, conducting fiscal policy in a financially integrated union is difficult in the presence of financial frictions. The presence of financial frictions creates a bottleneck between the return on investment and the interest rate across the union, resulting in excessive externalization³⁶. From the perspective of any state, the opportunity cost of its public spending is equal to the union's interest rate. From the perspective of the union as a whole, the opportunity cost of public spending is the return on private investment it excludes. Since the interest rate is lower than the return on capital, public spending is inefficiently high³⁷. Thus, it could be difficult to counterbalance this externality by designing fiscal rules that account for the preferences of all states within a union. How the high deficits and public debts in the EU will be managed remains to be seen.

Recently, we have witnessed a shift in perspective regarding the Mundellian criterion, which implicitly assumes a commitment to monetary policy and supports the idea that countries with similar shocks should form unions. Recent studies develop models suggesting that, without this commitment to monetary policy, a new possibility arises: countries with different shocks, especially those suffering from issues of time inconsistency, can also form unions to their benefit³⁸. Moreover, the performance of flexible exchange rate systems compared to fixed exchange rate systems in monetary unions has been evaluated, concluding that this depends on the commitment of the monetary authority³⁹. In stark contrast to traditional optimal currency zone theory, by trading off flexibility in trade adjustment, the monetary authority

³⁴ Hugh Rockoff, “How long did it take the United States to become an optimal currency area?”, Historical Working Paper 0124, National Bureau of Economic Research, April 2000, <https://www.nber.org/papers/h0124>.

³⁵ Ibid.

³⁶ Fernando Broner, Alberto Martin, and Jaume Ventura, “On public spending and economic unions”, *National Bureau of Economic Research*, Working Paper 27831, 2020, <https://www.nber.org/papers/w27831>.

³⁷ Ibid.

³⁸ Anusha Chari, “Capital market risks in emerging markets”, *NBER Reporter*, no. 3 (2020): 12-15.

³⁹ Ibid.

improves its ability to manage private sector expectations. The greater the incidence of asymmetric shocks and/or the higher the degree of price rigidity, the greater the benefit of monetary unions. Thus, even if the monetary authority could fully commit over time, flexible exchange rates implement an efficient allocation of resources, albeit with constraints. On the other hand, if the monetary authority commits to implementing different monetary policy measures at different times, the results may also vary: a monetary union always dominates flexible exchange rates⁴⁰. From the author's perspective, it remains to be seen whether the results of these recent studies will lead to the implementation of the idea of a “multi-speed Europe”, which could be based on several unions of geographically distributed states.

It is also worth mentioning that there have been numerous changes in perception regarding the governance of an optimal monetary zone. Indeed, studies have shown that adherence to the Maastricht criteria has increased the level of divergence within the Eurozone⁴¹. The most discussed criteria are those related to deficits and public debt, elements that seem to be entering a new stage of assessment, as despite near-zero and even negative interest rates and the absence of deficits, public debt has steadily increased globally⁴². The first signs of changes in these indicators have been officially adopted by the President of France, who, following an analysis by the Economic Analysis Council, supported a change in the methodology related to the public debt criterion in the Maastricht Treaty. The analysis proposes that each government set a medium-term debt target, whose relevance would be assessed by an independent fiscal institution of the member state and by the EU. Setting this target should be explicitly based on assessments of the maximum primary balance and the risks to the interest rate-growth differential ($r - g$) to ensure a sustainable level of debt⁴³.

⁴⁰ Dominik Groll and Tommaso Monacelli, “The inherent benefit of monetary unions”, *Journal of Monetary Economics* 111 (2020): 63-79.

⁴¹ Jörg Bibow, “How the Maastricht regime fosters divergence as well as instability”. In *Aspects of modern monetary and macroeconomic policies*, ed. Philip Arestis, Eckhard Hein, and Edwin Le Heron (London: Palgrave Macmillan, 2007), 197-222; Paul De Grauwe and Pasquale Foresti, “Fiscal rules, financial stability and optimal currency areas”, *Economics Letters* 145 (2016): 278-281.

⁴² Rogoff, “Falling real interest rates, rising debt: A free lunch”, 2020.

⁴³ Elizabeth C. Martin and Rachel E. Dwyer, “Financial stress, race, and student debt during the great recession”, *Social Currents* 8, no. 5 (2021): 424-445.

III.2. Romania in the Context of Full Economic Integration

The current political developments at the European level, including the proposal to appoint a EU finance minister, prompt a general examination of the viability of the Monetary Union. Without referring to the historical events that led to the creation of the Eurozone, we must focus on the following objectives of economic integration: a fiscal union, a banking union, and a political union. So far, small steps have been taken toward each of these objectives (mainly the financing of National Recovery and Resilience Plans through joint public debt). It remains to be seen whether the pandemic situation has accelerated these processes or, on the contrary, increased member states' resistance to change. The steps toward full integration of member states have been taken at a slow pace, as established by the Treaty on the Functioning of the European Union (TFEU). The Commission's decision to finance pandemic-related spending through joint debt (bypassing Article 310 of the TFEU) has raised questions about the legal basis for this measure. The funds from NextGeneration EU, which will finance National Recovery and Resilience Plans for the next seven years, still have unspecified means of repayment. It remains to be seen whether the pandemic represents an opportunity for reform and the creation of a new treaty or if member states will prefer compromise solutions through administrative maneuvers.

In Romania, the increase in total public debt is inevitable and certainly advisable, at least in the post-Covid-19 transition period and the short term. Most likely, a reduction in the growth rate will be necessary in the medium term⁴⁴. Public debt to cover the budget deficit or to pay for maturing public debt should increase, especially through domestic public debt, as is the case in Japan. There are also interesting studies that analyze Romania's public debt over the past one hundred years, considering three distinct historical periods (interwar, under the communist regime, and the transition to a market economy), which, despite essential system differences, are characterized by the same paradigm⁴⁵. The study finds that before 1990, Romania has often had an excessive level of debt, exacerbated by the heavy financial and political consequences of the two

⁴⁴ Dinga, "On the Logic of Praxiological Paradigms", 2020.

⁴⁵ George Georgescu, "History paradigms: the public debt of Romania in the last 100 years", *Munich Personal RePEc Archive*, MPRA Paper no. 82219 (October 2017), https://mpra.ub.uni-muenchen.de/82219/1/MPRA_paper_82219.pdf.

World Wars, and later by the costs of transition and the effects of the global crisis, which affected the country's macroeconomic situation⁴⁶.

Regarding the economic effects of Romania's economic integration into the Eurozone, although premature, the experience of scenario writing is key to understanding the implications of integration, and certain conceptual aspects related to the scenario development process itself deserve attention⁴⁷. In this regard, the Dobrescu model (2002) can be used. The Dobrescu model is a large and highly complex model, whose defining characteristic is that it considers the hypothesis that a certain essential endogenous variable represents the target variable of the entire system. The expected value of this variable for the analysis period is estimated separately⁴⁸. Consequently, the macromodel admits an objective function consisting of the difference between the model's outcome for the target variable and its expected value. The Dobrescu model is composed of three blocks:

- output and absorption (real output, domestic absorption, net exports, prices);
- factors of production and labor income (fixed funds, employment, labor productivity, labor income);
- financial and monetary variables (revenues and expenditures of the general consolidated budget, broad money supply, money multiplier, velocity of money circulation, public debt, and total external debt).

IV. Conclusions

Romanian research in the field of public finance, particularly public debt, remains focused on continuing the tradition of fundamental research. As many researchers have noted the risks of high public debt levels assumed to be “safe”, Romanian studies highlight the risks of bankruptcy and potential losses of sovereign attributes⁴⁹. In a historical context, the authors question what factors

⁴⁶ Ibid.

⁴⁷ Constantin Ciupagea, “Economic functions of informal activities in Romania”, in *The Social Impact of Informal Economies in Eastern Europe*, ed. Rainer Neef and Manuela Stănculescu (Oxon and New York: Routledge, 2018), 188-210.

⁴⁸ Emilian Dobrescu, „Estimări de macromodel pentru elaborarea „Programului economic de Preaderare-versiunea 2002””, *Romanian Journal of Economic Forecast*, Supplement 1 (2002).

⁴⁹ Luminița Chivu et al., ed., *Economic Dynamics and Sustainable Development – Resources, Factors, Structures and Policies. Proceedings ESPERA 2016 (Part I and Part II)* (Berlin: Peter Lang, 2019).

might prevent the outbreak of a world conflict if that were the only way to resolve the issue of sovereign debts. Even though the significance of fundamental research is high, research in Romania must follow concrete directions and prioritize utility. In this regard, it is recommended to apply and further develop the Dobrescu model, which could contribute to new research directions on the endogenous formation of economic unions⁵⁰. In this context, we also note the works of Georgescu (2017) and Zaman and Georgescu (2015), which draw attention to pragmatic elements, concluding that due to inefficiency, external loans do not lead to sustainable economic development⁵¹.

Furthermore, focusing on the needs of central and local administrations in conducting foundational studies that underpin the implementation of any public policy project / intervention is essential. Every strategy, action plan, program, and project must be based on studies that reflect the needs of local communities. The methodologies required for these studies have a medium level of complexity, but their utility for Romania's development is immeasurable. Overall, adapting Romanian research to international norms and standards is necessary. Otherwise, in a 10-15 year time horizon, we may witness a significant process of human resource reduction in research. This process, as is the case in many social fields, will be based on inequality.

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⁵⁰ Broner, Martin, and Ventura, "On public spending and economic unions", 2020.

⁵¹ Georgescu, "History paradigms: the public debt of Romania in the last 100 years", 2017; Zaman and Georgescu, "Current and long run challenges of Romania's external debt", 2015.

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