EUROPEAN UNION – A CASE FOR PRUDENCE WHILE MANAGING IMBALANCES: DEBT-LED ECONOMIC GROWTH

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Abstract
The paper aims to look at the EU Fiscal Framework and Governance from the viewpoints of the challenges to economic growth in a context marked by high inflation, geostrategic risks and commodities markets pressures, of the challenges stemming from the interplay between the fiscal and monetary policies when the monetary policy is constraint to tighten and of the challenges for the national authorities to deploy fiscal measures in a post-pandemic context in which the level of public debts increased substantially and constrain the fiscal space and affect the macro-financial stability. The paper takes into account the considerations and the past approaches at EU level to respond to crises with a view on the fiscal implications to achieve the financial stability, implementing legislative adjustments and working on institutional architecture development. This research takes a look at how to assess and understand the public debts sustainability and explores models and options that are possible to be taken into account by the EU leaders to strengthen the resilience of the EU fiscal framework. The paper concludes that, given the uncertainties caused by inflation, geostrategic tensions, prolonged supply chains bottlenecks, rising commodity prices and diminished fiscal space availability, all these imply expectations for further increases in new government debt instruments issuance,

at a moment when the balance sheets in the financial sector (including the central banks) are already constrained by the existing debt.

Keywords
EU Fiscal Governance; Debt-led Economic Growth; Inflation; Debt Sustainability; Stability and Growth Pact; Fiscal Policy and Monetary Policy Interactions; Sovereign-Debt Nexus.

"Over the past years, we have already strengthened our economic resilience and we must now stay on track, maintain our unity and ensure strong coordination of our fiscal policies. This is the key to maintain a stable and sustainable growth path in today's unstable geopolitical environment."

Valdis Dombrovskis (Executive Vice-President for an Economy that Works for People, European Commission)
"Fiscal Policy Guidance for 2023", (March 2, 2022)

1. THE PRE-PANDEMIC EFFORTS IN EU TOWARDS FINANCIAL STABILITY

At the end of the year 2019, a whole decade of relentless efforts of the European Union (EU) institutions and of the member states had already paid off in achieving a macro-financial stability across the EU countries, although conditions varied from one country to another. After a period of relative macroeconomic stability following the implementation of the Economic and Monetary Union and the Stability and Growth Pact (SGP), where the average annual Public Debt-to-Gross Domestic Product (GDP), the Maastricht indicator, stood around 65 per cent, following the onset of the Global Financial Crisis and the sharp economic contraction, in 2009, the average public debt level grew by

around 17 per cent, reaching 76 per cent in average, in 2009 (Eurostat 2021). It continued to grow, reaching 86.5 per cent in 2014, and slowly decreased towards 77 per cent, at the end of 2019 (Eurostat 2022), following vigorous reforms within the EU framework that involved legislative adjustments and institutional architecture development in the EU financial ecosystem.

The fiscal approach meant, mainly, a stronger coordination and cooperation among member states and also between the member states and the European Commission within the process of the European Semester, while the adoption of the Treaty for Stability, Cooperation and Governance and the "6-pack" and "2-pack" has strengthened the fiscal policies. At the same time, the European Stability Mechanism acts as a backstop for the Euro Area member states that experience fiscal imbalances, conditional of future reforms assumed, depending on the circumstances of each member state.

Moreover, due to limited fiscal space in the member states and the efforts for rebuilding it while allowing for economic growth, the monetary policy had to be loose, to allow the much-needed liquidity flows to reach in all sectors of the economies, and a relevant example is the approach adopted by the European Central Bank (ECB) between 1999 and 2018 (Hartmann and Smets 2018), even if the message had been that the monetary policy shouldn't be "the only game in town" (Draghi 2015).

In addition, the emergence of the Banking Union (BU) consolidated the European banking system, being established on three pillars – micro-prudential supervision (Single Supervision Mechanism – SSM, part of ECB), resolution of likely to fail or failing financial institutions with systemic importance (an independent Single Resolution Board – SRB and Single Resolution Mechanism – SRM) and a safety net for EU banks deposits (European Deposit Insurance Scheme – EDIS). Moreover, the European Banking Authority tasked for banking regulation has been established and a set of prudential capitalization requirements has been issued and updated (the Single Rulebook). The financial framework has been expanded also with the proposed creation of the Capital Markets Union (CMU), where two regulatory and supervisory EU authorities oversee the financial stability of the capital markets across the EU countries -

European Securities and Markets Authority (ESMA) and European Insurance and Occupational Pensions Authority (EIOPA).

The macro-financial stability function is exerted within the European Systemic Risk Board (ESRB), that reunites ECB, ESMA, EIOPA and other relevant representatives at EU level. However, although the essential purpose of reforming the EU financial architecture, processes and instruments that have been achieved, is to break the Sovereign Debt Nexus and allow for financial stability, the BU is still incomplete (missing EDIS as a risk-sharing mechanism based on Art. 122 of the TFUE – the solidarity principle, dealing with 27 different national insolvency regimes, just to name a few examples), the CMU is still incipient and the debt levels have risen in 2020 and 2021, in response to the coronavirus to support national economies and foster a fast economic recovery (Schnabel and Veron 2018).

Reaping positive results from the 2016 – 2019 period that led to a fiscal consolidation, marked by a decrease in public deficits in most of the member states and in the sovereign debts, as well as a strengthening of the financial sector, the EU had a resilient capacity to respond to economic and financial crises, although there is still space for improvements. However, a sanitary crisis at a global level couldn't have been foreseeable. The pandemic shock has been sudden, intense and with negative effects at social level and at economic and financial level at the same time.

In March 2020, the coronavirus pandemic resulted in a severe economic downturn and the European Commission decided the activation of the general escape clause of the SGP. However, the activated general escape clause does not suspend the procedures of the SGP, but allows the European Commission and the EU Council to depart from the budgetary requirements that would normally apply under the preventive and corrective arms of the SGP. The general escape clause of SGP has been extended up to the end of 2023. European Commission is assessing the status and continues the fiscal guidance under the European Semester for member states, in the process of gradually reopening the economies.

At the same time, more costs are involved to tackle down the coronavirus pandemic and some advanced economies of the EU are also part of G20 and global initiatives to provide support to other countries in need, resulting eventually in debt growth. Concerted multilateral efforts to ensure adequate international liquidity for constrained economies and faster implementation of the G20 Common Framework for Debt Treatment to restructure unsustainable debt, would help limit divergences across countries (Gopinath 2021).

2. RATIONALE FOR THE LINKAGES BETWEEN THE SOVEREIGN DEBT AND THE CURRENT POLICY ISSUES

Unlike in the context of the Global Financial Crisis (GFC) after 2008, when deteriorating asset quality of banks' portfolios and the tightening of the financial markets financing conditions led to public finance support to the aid of the financial private sector led to a pressure on the sovereign debts and subsequently to an effort for reforming the EU frame to restore macro-financial stability, at the beginning of 2020, the European financial system was in a strong position to be a part of the response to the current crisis of medical nature, but with strong impact on the economies, the financial systems and at social level. Both the fiscal response and the monetary response have been resolute to support the vulnerable categories of workers, entrepreneurs and companies, to preserve labour capacities in the economies, the income sources and levels, as well as to allow for a fast recovery and continued growth.

The economic and monetary union has been founded on the principle of monetary dominance (Schnabel 2020), but the sovereign debt nexus and the unconventional monetary policy measures that have been adopted, mainly the implementation of quantitative easing programs that inflated the central banks' balance sheets gave way to the perspectives of fiscal dominance consequences (Bank for International Settlements 2012) and to affecting central banks' monetary policy independence (Heinemann and Kemper 2021). The interplay between fiscal and monetary policy is not a new subject. However, the current

context of both supply side and demand side shock at the same time required that public sector intervention be immediate, to offset the negative effects and the volatility on financial markets. Persistently high volatility of inflation can amplify the uncertainty regarding the expectations in regards to future prices and this translates to volatile risk premia for long-term financing contracts. In turn, this evolution can determine an increase in costs related to hedging operations against inflation risks. Furthermore, the phenomenon of inflation has redistributive effects in an economy upon wealth and capital accumulation. Thus, inflation volatility can impede growth even if inflation on average remains restrained (Rother 2004).

Fiscal policy measures can influence the aggregate demand, leading to changes in Gross Domestic Product (GDP) and the prices in an economy, even if the change in prices might be temporary (Krugman 2021) or more persistent (Summers 2021). Furthermore, the changes in income level affect the future prices evolution via the expectations channel and the consumption. The economic theory postulates that in the long term, the monetary policies might be able to offset the short-term inflationary impact of discretionary fiscal policies, but this impact could translate in short term volatility of prices (Rother 2004).

The literature on debt led economic growth and the demand for sovereign debt analyses also the sustainability of sovereign debt and the sovereign's capacity for repayment. Modigliani (1961), Diamond (1965) and Phelps and Shell (1969) suggested that the fiscal policies which increase the outstanding debt over time, actually shift capital accumulation from regular savers to large private wealth, investors who acquire the bonds while for repayment, taxes could be increased as source for repayment. At the same time, Tobin (1965) postulates that government debt serves for the money creation, as banks pledge the sovereign debt financial instruments as collateral for borrowing, leading to capital gains on the sovereign debts (Eaton 1981). Thus, the interplay between the fiscal policy and monetary policy can be very strong, and in the pandemic context, the pro-cyclical stance of both policies to restart the economic activities and foster the recovery has proven to be quite intense on the short term.

Fiscal measures have been conducive in an effective way at jumpstarting inflation, in a context when monetary measures' efficiency have proven to be

weak when interest rates are persistently low at around the zero lower bound (ZLB), yet it remains to be seen whether the effects of fiscal support on inflation is temporary or more persistent (Bivens 2021). However, even if temporary, higher global inflation may complicate the near-term policy choices of economies that still rely on expansionary support measures to ensure a durable recovery (Ha, Kose and Ohnsorge 2021). The resurgence of the pandemic and the latest variant, Omicron, have sharply increased uncertainty around global economic prospects. This comes as several countries grapple with inflation well above their monetary policy targets (Adrian and Gopinath 2021). In addition, the increase in inflation has onset renewed discussions in academia about the normalizing the monetary policy, the impact of tightening interest rates upon the larger sovereign debts, the shift to fiscal dominance over the monetary dominance and the risks for a sovereign debt nexus.
According to the ECB's Financial Stability Review from November 2021:

"*The ongoing economic recovery has also helped debt-to-GDP ratios to stabilise. The transition from blanket fiscal support to more targeted measures, coupled with the gradual exit from support schemes, has reduced strains on public finances. The positive role that fiscal (and monetary) policies have had in limiting lasting damage to corporates and banks has in turn limited negative feedback to governments via the sovereign-bank-corporate nexus. That said, if financing costs were to rise and economic growth were to fall short of expectations, this could put sovereign debt dynamics on an unfavourable trajectory, in particular in higher-debt countries, and contribute to some reassessment of sovereign risk by market participants going forward*".

In November 2020, the ECB's Financial Stability Review stated:

"*Rising sovereign debt in the wake of the pandemic has renewed concerns about the euro area sovereign-bank nexus – a major amplifier in the euro area sovereign debt crisis. [...] the pandemic and the fiscal measures to support the economy that followed are likely to prompt an increase in sovereign debt, and in turn in the exposures between governments and their banking systems. In addition, the sovereign-bank nexus may*

develop also via indirect channels, including banks' exposure to the state of the domestic economy; whereby direct holdings can amplify these indirect effects."

In the EA, in February 2022, the inflation rate reached 5.9 per cent YoY, while for EU, the inflation rate stood at 6.2 per cent for the same time horizon (Eurostat, 2022), the highest value at that point since the common eurocurrency has been launched. This value hides a wide differential, from 4.2 in France and Malta to 14 per cent in Lithuania. Many economists assert whether this generalized increase in prices across EA, the EU and at global level can be deemed as transitory or it is persistent, with more permanent effects in the economies on the long run (Goodhard and Pradhan 2021). Taking into account the robust rise in the commodity prices internationally, reflected by S&P GSCI which reached its highest value in the last decade (on March 8, 2022 it exceeded 822 points), especially for fossil fuels (in principal oil, gas, and derivate products) and the deep backwardation of commodities markets, the impact in inflation has been strong with persistent, long-term effects (Currie 2022). The relevant explanations pertain mainly to supply chains bottlenecks, loose government support and accommodative monetary policy measures that allowed for a fast-rising demand-led economic recovery in 2021 (Andre, Haaland, Roth and Wohlfart 2021).

3. CURRENT CHALLENGES FOR THE FISCAL POLICIES

The EA budget deficit increased from 0.6 per cent of GDP in 2019 to 7.2 per cent of GDP in 2020 while in the EU, the average budget deficit increased from 0.5 per cent of GDP to 6.9 per cent of GDP for the same period of time. The fiscal deficits and the contraction in GDP led to an increase in the EA debt ratio from 85.9 per cent of GDP in 2019 to 97.3 per cent of GDP in 2020, while at EU level, in 2020, the debt-to GDP ratio increased from 77.2 per cent of GDP to 90.1 per cent (Eurostat 2021). The deterioration in fiscal balances partly reflects the operation of automatic stabilisers in the EU economies (Haroutunian, Osterloh and

Slawinska 2021). By comparison to the GFC in 2009, the support package of the fiscal policy has been of around 1.5 per cent of GDP (European Commission, 2010).

In the volatile geopolitical context in the first half of 2022, the European Commission evaluated and announced on May 23, 2022 that the general escape clause under the Stability and Growth Pact shall be kept into force until 2023 it shall be reinstated from 2024 (European Commission 2022). Thus, the suspended fiscal rules under SGP, that supported the economic during the COVID-19 pandemic shall be prolonged during the geostrategic situation in Ukraine, favouring an expansionary fiscal stance (European Commission 2022).

Initially, in February 2020, European Commission has initiated a review process of the SGP, but was soon put on hold after the coronavirus pandemic outbroke. On October 19, 2021, the process of reviewing SGP has been restarted, but Russia's invasion in Ukraine on February 24, 2022, triggered severe effects in Ukraine and reverberated in the EU economies. As of March 2022, European Commission takes into account whether fiscal rules related to government borrowing should be kept suspended in 2023. European Commission had presented the most recent economic outlook on February 10, 2022, however the developments between Russia and Ukraine gave way to increased uncertainties, new risks that skewed the balance downwards. European Commission's revised economic outlooks are to be presented in May, 2022 and discussions regarding changes to SGP should be based on thorough economic assessments. Under current SGP, governments need to reduce the public debt by at least 1/20th of the excess above 60% of GDP, every year, until the limit is reached (the "*corrective arm*" of SGP). Under the review process of SGP, all the stakeholders aim to build a consensus on the economic governance framework.

The 2022 European Semester Spring Package for 2022 released by the European Commission is providing guidance to member states, while the Spring Economic Forecast projections for 2022 (European Commission 2022) expects the economic growth to continue this year and well into 2023. At the same time, the "REPowerEU" Plan should decrease and phase out the dependence on the imports and usage of hydrocarbures (European Commission 2022) in a shift to support the "EU Green Deal" and the "Fit for 55" package. Nonetheless, the

funding for greening the EU economies should be disbursed via NextGeneration EU Program and in line with the National Plans for Recovery and Resilience.

On March 2, 2022, European Commission has published its most recent fiscal guidance for member states, on the conduct of fiscal policy in 2023 to foster stability and convergence. The key messages are pertaining to continued strong coordination of economic and fiscal policies, and for fiscal policies to be adapted in reaction to rapidly changing circumstances. Governments are advised to resort to a neutral fiscal stance and strengthen the reaction function for a fast response should the Ukraine crisis determine economic challenges for the member states. From European Commission's perspective in 2023, highly indebted countries should attempt to tighten the fiscal policy, whilst the countries with low public debt and available fiscal space should favour investments, notably to make the transition to digital and green economies, leveraging the benefits of Recovery and Resilience Fund and other funding under Next Generation EU. According to most recent Eurostat data from April 2022, the highest ratios of government debt-to-GDP at the end of the fourth quarter of 2021 were recorded in Greece (193.3 %), Italy (150.8 %), Portugal (127.4 %), Spain (118.4 %), France (112.9 %), Belgium (108.2 %) and Cyprus (103.6 %), and the lowest in Estonia (18.1%), Luxembourg (24.4%) and Bulgaria (25.1%).

As of May 2022, under the Article 126 (3) of the TFEU, the European Commission issued a report on compliance with the deficit and debt criteria of the Treaty for 18 member states, while under the 2022 in-depth reviews, an analysis of fiscal imbalances for 12 countries has been conducted. It shows that 7 member states (Germany, Spain, France, the Netherlands, Portugal, Romania, and Sweden) continue to experience imbalances, while 3 member states (Greece, Italy, and Cyprus) continue to experience excessive imbalances - both the fiscal deficit and the debt-to-GDP ratios are above the limits (European Commission 2022).

Earlier, EU commissioner Paolo Gentiloni stated on March 2, 2022: "The powerful fiscal support provided during the pandemic has led to higher debt levels […] These challenges make it all the more essential to have a transparent and effective fiscal framework".

However, taking into account the past approach in the context of the global financial crisis of 2008-2009 and the crisis of the sovereign-debt nexus in 2011-2015, fiscal policy had a lesser role in downturns when it is most needed, while at the same time, prior to the 2008, the fiscal policies had a more pronounced relaxed stance in booming times, while the fiscal buffers should have been strengthened and automatic stabilizers should be enforced (Demertzis 2022).

A brief outline of the sovereign-bank nexus explains why the ECB's monetary policy remained "the only game in town" to support economic recovery in the EA. In a financial crisis, the banking system is confronted to asset quality deterioration and erosion of guarantees eligible for the lender of the last resort. At the same time, the banks are a large creditor to the sovereign state, holding public debt instruments in the balance sheet. In a financial crisis, the banks are constraint to tighten lending, review the asset quality, prevent misallocation of capital and the economy receives less loans, affecting liquidity and payments between companies, triggering a downturn. Less jobs and restructurings mean lower tax revenues for the sovereign government, that might resort to austerity and to issuing debt to finance gaps in the budget. This constraint usually leads to a deterioration in financing conditions for the sovereign, i.e. leading to a depreciation in previously issued debt (also held by banks), spiraling the negative impact on banks and on the economy. Breaking this cycle requires a tango of fiscal and monetary approach, that work to advance a robust fiscal governance, a strong monetary frame and a cooperation between the two to allow for public debt alleviation, for a stable financial system and for economic growth on the long term. The current context, however, led the EU countries to take on more debt whose sustainability comes into question and political compromise on changing the fiscal rules might weaken the soundness of public finances on the long-run.

4. CONSIDERATIONS ON THE DEBT-LED ECONOMIC GROWTH AND POSSIBLE APPROACHES

On April 23, 2020, EU first discussed the establishment of an EU recovery to respond and address the negative effects triggered by the coronavirus crisis. The European Commission suggested a new program of EU funds in addition to the Multiannual Financial Framework for 2021-2027 EU budget. The Recovery and Resilience strategic funding has been presented by the European Commission on May 27, 2020 and on July 21, 2020, EU leaders agreed on a EUR 750 billion program ”Next Generation EU”, supplementary to the EUR 1,074 billion long-term EU budget for 2021-2027. Most of the funds should support the economic recovery while orienting around 2/3 of the investments to a new growth paradigm shifting the economies towards the digital and green transitions for resilience and sustainability. To these amounts, another EUR 540 billion is already allocated as safety net to counter distress (for workers, for businesses and for member states). Therefore, the overall recovery package at EU level amounts to EUR 2,364.3 billion, representing the largest budgetary and budgetary-like expenditures in the history of the EU (EU Council 2021).

In addition to the supra-national effort, the EU member states allocated between April 2020 and October 2021 2,157 billion in fiscal measures (IMF, 2021), but the financial amount of various measures have been significantly revised over time. The overall fiscal support of EU and EU member states governments proved effective to smoothen the social and economic impact of the COVID-19. However, the structure of direct fiscal spending, of tax deferrals and guarantees varied among countries depending on the available fiscal space. Consequently, in 2020 the general government deficit-to-GDP and public debt-to-GDP ratios recorded the largest historical increases. The EU member states adopted more than 1,000 budgetary measures during 2020 and 2021, in the efforts to respond to the pandemic. The fiscal measures adopted by EU governments have been around 5% of GDP in 2020 and 4% of GDP in 2021 (European Fiscal Monitor 2021).

The differences in fiscal support among the EU member states reflected the discretionary measures taken during the crisis and the various automatic stabilisers deployed, that weakened the fiscal position and lead to a deterioration of the fiscal balance, narrowing the fiscal space available for responding to future imbalances in the economies. Let's consider the countries with a system that ensures a higher protection for unemployment, where a larger short-term increase in unemployment will determine an automatic fiscal stimulus deployed as a larger public spending, without having to take any further action. Assuming that the overall deterioration in the fiscal balance is similar among these countries, the decomposition of stimulus in automatic and discretionary measure "reveals significant differences and will influence the economic growth depending on the effectiveness of the measures, rather than their size" (Leandro 2020). The EU Single Market and the level of integration of EU member states is based on a strong coordination capacity of implementing the measures adopted by governments, taking into account the fact that a fiscal stimulus in one country determines beneficial externalities in other EU economies (Dabla-Norris, Dallari and Poghosyan 2017).

The implementation of the EU's Recovery and Resilience Fund (RRF) represents an opportunity for EU countries to address the needed structural reforms, benefiting from the temporary suspension of SGP. Nonetheless, the moment is seen as an occasion for reform or review of the EU fiscal rules, especially under the terms of the pace of fiscal consolidation being resilient in the context of higher government debt ratios, to solve the underlying problem of debt sustainability (Larch, Malzubris and Santacroce 2021).

National budgets came under stress as central banks started a process of monetary tightening, with the risks of a de-balanced interplay between the fiscal and monetary policy (ECB 2021). In case the fiscal expansion might not be sustained by future national budgets, this will lead to rolling over higher and persistent fiscal deficits of EU states, while the repayment capacity and the debt sustainability might be questioned by international investors on financial markets. Anchoring the inflation that is supported by past fiscal stimulus to the economies, by demand-driven commodity prices growth and by the geostrategic uncertainties is a challenge for central banks. The monetary policymakers might

decide raising interest rates earlier than anticipated and to a higher extent than estimated, as well as scaling down asset purchase programs sooner and in a more resolute manner. The consequence might be that future debt becomes more expensive and existing sovereign bonds portfolios depreciate in value, triggering a potential sovereign bank nexus in the financial systems, even for the central banks, with an impact also on their role as lender of the last resort. Therefore, scaling down fiscal stimulus and tightening monetary policies should be done gradually and predictably. Estimates point out that an increase in monetary policy rates of 5% would greatly increase the costs for the sovereign debt. However, if the increase of monetary policy rates is modest, significantly less than the inflation rate, then the economic growth is affected by a "higher for longer" inflation (Cochrane 2021).

The divergent economic growth between advanced economies globally and the emerging markets is further reflected in the most recent estimates released in April 2022, while the economic growth is slowing down to 3.6% this year (-0.8 pp compared to previous estimates), while inflation is projected at 5.7% in advanced economies and 8.7% in emerging markets, given the challenges to prevent humanitarian crisis, to prevent further economic fragmentation, to maintain global liquidity, to manage debt distress, to tackle climate change, and to fight the COVID-19 (IMF 2022). The linkages of EU to the international environment are strong and macroeconomic imbalances will reverberate in the EU economies further into the future, as the interdependencies between EU and the main trading partners will imply spillover effects into the EU via the various economic and financial channels.

For the EU economies, under such circumstances, is therefore essential to absorb the EU funds available through the Next Generation EU and the regular EU funds as fast and fully as possible, in order to channel the capital into growth-enhancing investment projects for an eco-oriented and digitally competitive economy. EU member states should ensure, in line with the National Plans for Recovery and Resilience conditionalities – milestones and targets, that the medium-term fiscal policies are designed in a way that ensures public debt sustainability. Although countries should gradually diminish the fiscal support to foster the consolidation of the recovery and the continuation of economic

growth, the governments should approach the scaling down of the debt levels, as it is essential that EU member states resort to credible fiscal consolidation strategies in the medium term, as the accumulation of fiscal buffers during phases of economic growth builds capacity to address the negative effects during downturns triggered by exogenous events (Blanchard 2021).

The general consensus among economists is that secular stagnation is marked by a decline in neutral interest rates (i.e., the rates consistent with full employment) reflects a long-term weakness in private demand as the premises favour a strong saving process detrimental to investment, boosting demand for safe assets, given the risk-adversity orientation (Hansen, 1939 and Summers 2014).

Neutral rates interplay with the fiscal policy measures. During the phases of fiscal expansion aggregate demand increases, leading to higher levels for the neutral rates r* and eventually to an increase in real interest rates on the markets. Given the strong fiscal expansion in 2021, fiscal and monetary policymakers assess that "$r^*<g$" has important implications for debt dynamics (Mauro and Zhou, 2020), contrary to the previously observed "$r^*>g$" (Pickety, 2014). The equation $r^*-g< 0$ implies for countries that fiscal space is created, although governments can borrow more. Simply speaking, when the return on capital is less than the economic growth, although debt is increasing, the economy is increasing at a faster pace and the fiscal burden is actually decreasing. At such times, countries might have primary deficits and maintain debt-to-GDP ratio constant, or even decrease this ratio (Crowe, Haas, Millot, Rawdanowicz and Turban 2022). A neutral interest rate on a downward long-term trend means that the effective lower bound will tighten and will constrain more and more the central banks' capacity to diminish the monetary policy rates to offset the decreasing demand, leading to a decline in economic activity and employment.

Debt sustainability depends on the evolution of primary budget balances, on the real interest rates, and economic growth rate, but also on the fiscal governance and fiscal strategy (Gottschalk 2014). The simple fiscal rules enshrined in the Maastricht Treaty (public debt ratio less than 60% of GDP and budget deficit ratio less than 3% of GDP) provide an anchor to run sustainable fiscal policies. However, this fiscal conformity could hinder economic growth by limiting

public investments, affecting job creation in the economies and triggering wage adjustments, leading to a larger output gap and determining higher costs to finance the national budgets. Furthermore, whether public investments might be financed more by debt issuance or by raising taxes should depend both on how much the fiscal strategy increases future fiscal revenues and on macro-economic stabilization objectives. Debt issued on longer maturities allows governments to mitigate the effects of temporary increases in real interest rates, as well as to have an extended to adjust to permanent increases in interest rates. Therefore, a debt consolidation by rolling over short term government bonds being replaced with long term government bonds allows for decreasing fiscal pressure, while lower for longer interest rates, in a context when r*<g, allow for more fiscal space available. Under Covid-19 pressures, governments resorted to a major fiscal expansion having the leading role to increase the demand and restart economic growth, while the monetary policies slowly started to increase the interest rates to the neutral rate, in this process resulting an uplift in inflation, that proved higher than expected for many policymakers, investors and economists. Recent projections by Eurosystem and ECB staff have substantially underestimated the surge in inflation, largely due to exceptional developments such as unprecedented energy price dynamics and supply bottlenecks. (ECB 2022) The upward revision to 6% (from 3% previously forecasted) for 2022 mainly reflects higher expected energy and food price inflation (ECB, Lane 2022).

5. CHOICES TO FINANCE THE FISCAL BUDGETS

Fiscal governance, conformity to rules and convergence ensured via sound procedures for budgetary executions ensure sound public finances and a long-term view oriented towards sustainability and inclusive growth. Government budgetary revenues and expenditures have effects on the allocation and distribution of resources within the economy. (Gaspar 2022)

In a context marked prominently by high inflationary pressures due to global commodities supply-side shocks (especially for fossil fuels and agri-food

products) and expansionary fiscal policies, a consistent and coherent approach to strengthen the fiscal frameworks and strategies should aim for convergent measures, taking into account subsidies and transfers to society and the budgetary impact of sanctions against Russia. The 6th sanctions package adopted by the EU against Russia covering 90% of fossil fuels imports from this state and the "RePowerEU" plan (European Commission, 2022) could impact the 27 member states budgets via the energy prices channel, given the current EU dependency and the plan to phase out the import of oil and natural gas from Russia by 2030.

The implications of the geostrategic situation in Ukraine have a direct impact on the EU fiscal policies of member states, from the viewpoint of offsetting the negative social effects. It is paramount to determine the fiscal space available for resorting to subsidizing fuel prices, implement direct transfers to population or issue regulations related to pricing. Subsequently is to determine the source of financing for such measures, i.e., raise taxes and consolidate fiscal revenues or issue debt instruments and enlarge the fiscal stress (Blanchard and Pisani-Ferry, 2022). Thus, the choices for governments are either to record future primary budget surpluses by raising taxes and diminishing social transfers and budgetary expenditures or to record an increase in debt in the future favoured by lower for longer interest rates, i.e., a discounted financing rate compared to the market rates for financing the private sector (Reis 2022). On the other hand, the monetary policy is constrained by inflation to further tightening, which could strain the debt finance of budgetary expenditures and could lead to financial assets quality deterioration and premises for sovereign-debt nexus risks (Schnabel 2018). The interplay between the fiscal and the monetary policies needs to be carefully taken into account when calibrating the measures (ECB 2021; IMF 2021 and BIS 2021). Generally speaking, the inflation (price instability) is one side of the macroeconomic balance and tightening the monetary policy too strongly in the quest to accomplish the central banks' primordial objective of price stability could affect the financing conditions for the public and private debt, resulting in financial instability and systemic risks (Vileroy de Galhau 2021). Therefore, when discussing about the EU fiscal framework, all

stakeholders should have a voice for the proposed reforms of the EU fiscal framework.

6. VIEWPOINTS OF THE INTERNATIONAL FINANCIAL INSTITUTIONS REGARDING PUBLIC DEBT SUSTAINABILITY

The debt sustainability analysis requires a long-term view and a cumulative set of factors of monetary and fiscal nature intertwined. Over the past 20 years however, the central banks independence consolidated and the public spending under the constraint of fiscal rules led to a more predictable business environment and a downward trend of interest rates globally. The monetary framework relied on a clear institutional architecture with clear mandates for central banks and fiscal authorities, on inflation-targeting regimes and on yield curves management, that decreased the cost of debt financing and strengthened the systemic financial stability. Such an environment, where the general equilibrium interest rate r^* is less than the economic growth g ($r^* < g$) determines an extension of space for debt financing and debt taking without increasing the pressure on the debt service repayment. Such an environment is marked by liquidity and a loose monetary policy. When external shocks such as the pandemic of coronavirus in 2020 and the geostrategic situation in Ukraine in 2022 triggered supply-side disturbances, inflation accelerated and the monetary policies started to constrain the supportive stance, therefore the public debt sustainability question in a context when many countries record historic high volumes of sovereign debt.

Debt sustainability is an elusive concept. Debt sustainability involves the ability of the borrowers to repay the financial obligation at maturity, in the present as well as in the future (IMF 2020 and World Bank 2020), but it actually implies an analysis regarding the probability of the default risk materialization under existing and estimated government policies over time in a context when the dynamics of debt-to-GDP ratio is on an ascendent trend. This dynamic is

dependent on three variables – the evolution of the primary budget balance, the real interest rate (nominal interest rate affected by the inflation rate) and the real rate of economic growth. Under such hypothesis, for the EU, the general rules related to fiscal policy deems the debt as sustainable when the budgetary deficit is below 3% of GDP and the public debt is below 60%, however the Maastricht Treaty is most relevant for the period of time it has been negotiated among the EU leaders at that time. Under the global financial crisis and afterwards, these rules ensure the debt sustainability at the cost of fiscal policy constraints, even when it should be more accommodative and the consequence has been that the fiscal policies consolidation proved to be too strong and delayed the recovery (Blanchard 2022).
Today, weaker growth prospects (IMF 2022 and World Bank 2022), a more limited fiscal space (IMF 2022) and higher debt refinancing risks under a greater macroeconomic volatility affect the fiscal strength and the central banks' balance sheets increasing the risks for the "doom loop".
Based on past experiences, the following assertion reflects how the ratings have an impact on the financial system and on the economy of a country:

"*a common feature of debt crises has been a sudden jump in debt levels, often driven by large exchange rate depreciations in countries with foreign currency debt, and governments' assumption of so-called contingent liabilities amassed by state-owned enterprises, subnational governments, banks, or corporations. Because these crises are associated with lower growth, higher inflation, and setbacks in the fight against poverty and other development goals, protracted defaults are damaging to the economic and social fabric of the debtor country*" (Pazarbasioglu and Reinhart 2022).

Given the current complexities of the financial systems globally, as well as for the EU countries, the French president and the Italian prime minister (Macron and Draghi 2021) appealed publicly for reforming the EU fiscal rules:
"*we will need a framework that is credible, transparent and capable of contributing to our collective ambition for a stronger, more sustainable and fairer Europe. There is no doubt that we must bring down our levels of indebtedness. But we cannot expect to do*

this through higher taxes or unsustainable cuts in social spending, nor can we choke off growth through unviable fiscal adjustment".

The European Commission has launched a public consultation on the future of the EU economic governance "*on how to ensure sustainable public finances, prevent and correct macroeconomic imbalances, simplify existing rules, and improve their transparency, ownership and enforcement*", including the fiscal rules (European Commission 2021) and proposals have been submitted for discussion.

In the past, authorities resorted to various degrees of temporarily countercyclical fiscal policies to lower the debt pressures via conventional tools, such as advancing investments to stimulate economic growth, reforming the recurrent expenditures framework to consolidate payment obligations or raising taxes on wealth and properties, or via heterodox ways that included inflation, debt restructuring or currency devaluation. Any combination of such measures had social, economic and political costs (Kose, Ohnsorge, Reinhart and Rogoff, 2021). Given the increasing financing needs of governments and the private sector, the fiscal constraints and rising inflation, a public debt resolution framework emerges as an important concept, when the economic environment is marked by a fragmented base of creditors, various degrees of debt transparency and issues related to public debt reporting (Kose, Nagle, Ohnsorge and Sugawara 2021).

The proposal to reconciliate the financial market discipline of the fiscal policies in the EU with the need to raise funding while keeping the debt sustainability is not new. In fact, under an incomplete Banking Union and an incipient Capital Markets Union, as well as the fragmentation of countries in the Euro Area and outside the Euro Area, a question has been raised in the "7+7" report on how to harmonize the interests in an optimal way to strike a balance between the risk-sharing European frame and the motivation for reforming the economic governance of the EU (Benassy-Quere et al. 2018).

The general escape clause activation under SGP has deferred several times and for several years the compliance of fiscal authorities with the EU fiscal rules, however it should be re-enacted. Meanwhile, to my view, the EU countries should attempt to change the concept of "one rule fit for all" to "one frame that

works for all". Discussions should include indicators such as public investments-to-GDP, a simpler structural view of the budgets oriented towards non-debt generating capital flows to support the economic growth and debt-service-to-fiscal-income ratio dynamics that should allow for fiscal buffers and automatic stabilizers in a countercyclical approach. At the same time, independent fiscal councils' role should be strengthened, in addition to European Commission's role in the European Semester and a dispute / litigation body at supra-national level should arbitrage the various fiscal-related disputes concerning the member states. Strictly related to the SGP need for reforming, my view is that given the debt-to-GDP ratio well above the Maastricht limit for many member states, it is clear that the SGP's preventive arm proved to be a weak instrument. Although some later reforms have been addressing the shortcomings of the SGP, it is evident that there is a need to enhance the corrective arm of SGP as well, while also reforming the EU fiscal framework. The call for reform has been triggered by a wide range of stakeholders, including academia and institutions (European Commission 2017; European Fiscal Board 2017; Eyraud, Debrun and Hodge 2018; Darvas, Martin and Ragot 2018; Feld, Schmidt, Schnabel and Wieland 2018), however no consensus on the various views has been achieved.

7. OPTIONS FOR CHANGES TO THE EU FISCAL FRAMEWORK

My assumptions are that the fiscal policies shall be kept at national level and that debt sustainability should prevail over the debt constraints approach, however the EU fiscal framework should continue to be rules-based, but with a more detailed view on implementation rather than on actual figures to comply with. Given the 27 particular economic conditions, the long-term view and the budgetary pressures under the transition to net-zero emissions economies should strengthen the debt sustainability framework on long term horizons, with a view for the next 30 years. One prerequisite of the debt sustainability is

that the general government budget should be net-neutral, or balanced per economic cycle, which should translate in a compliance with the medium-term structural deficit rule (maximum 0.5% of GDP for countries that exceed the long-term debt limit of 60% of GDP and maximum 1% for the countries with the debt-to-GDP ratio maximum 60% of GDP). However, fiscal imbalances take years to be scaled down and the current EU guide on the implementation of SGP (European Commission 2019) still needs improvements.

Options for reform include capping the expenditures based on the economic growth dynamics (Feld, Schmidt, Schnabel and Wieland 2018), reviewing the percentages deemed "fiscal rules" to various new levels (Regling 2022) and by various means including Maastricht Treaty amendments and country-specific rules (Martin, Pisani-Ferry and Ragot 2021). Some economists even argue for a supplementary strategic orientation within the Ecofin, as a body for determining the overall fiscal stance for Euro Area, approving or rejecting the member states' debt targets and expenditure ceilings, while enhancing the backstop role for the European Stability Mechanism and strengthening the regulatory fiscal framework. (Martin, Pisani-Ferry and Ragot 2021).

Still, under Article 123 and Article 125 (TFEU), debt monetization is prohibited, to safeguard the central bank's independence and prevent pressures from states with weak fiscal situation to ask for using the monetary policy in order to prevent a default on the state's sovereign debt. In a non-optimal monetary union, the fiscal policies can correct prices divergence (including wages, as price of labour) and orientate the allocation of capital. However, in practice, debt management is permitted for central banks on the secondary financial market and central banks can use their balance sheets to purchase financial assets, including sovereign debt instruments in accordance with their risk policies, to ensure financial stability and price stability (including the prices for the sovereign debt – the yields curve).

One problem for the central banks' balance sheets exposures is that these financial instruments are rated to reflect risks associated, by the rating agencies. These specialized agencies and their risk models have come under scrutiny over various financial crises in the past (Bank for International Settlements, 2003). A notable impact was, for instance, the downgrade decision of S&P, on June 13,

2012 regarding nine Euro Area countries, that affected the European Central Bank's balance sheet in relation to its Long-Term Refinancing Operations (ECB 2013), as stated by the ECB:

"*the Eurosystem credit assessment framework (ECAF) defines the procedures, rules and techniques which ensure that the Eurosystem's requirement for high credit standards is met for all eligible assets. The details of the ECAF have been published in Title V of Guideline of the ECB of 19 December 2014 on the implementation of the Eurosystem monetary policy framework (recast) (ECB/2014/60). The ECAF builds on credit assessment information from three sources, with external credit assessment institutions (ECAIs) being one of them. ECAIs refer to credit rating agencies (CRAs) that issue and/or endorse credit assessments about entities and debt instruments in the form of credit ratings*".

The EU fiscal framework after the COVID-19 pandemic has been supplemented with a new dimension – an insurance for exceptional events, that has come under the form of EU funds in addition to the EU budget – the creation of Next Generation EU program, providing loans and grants conditional on the National Plans for Resilience and Recovery. These plans might actually support a revision of the EU fiscal frame, an overhaul on a supranational debt framework and a progress in deepening and completing the economic and monetary union. Any adjustments in the EU fiscal framework should take into account the projected economic growth over the business cycle, a countercyclical approach of the fiscal stance and the secular trend of lower interest rates (Summers 2014) in an economic context marked by subdued economic growth, significantly below potential growth rate. Such an environment allowed a debt-led economic growth for EU countries, and the accumulation of significant debt levels. Scaling down the debt-to-GDP ratios with 1/20 of the difference between the actual debt level and the 60% level would take years of fiscal tightness, raising the risks for economic slowdown or even recessions, in a context when also the monetary policy is confronted with the challenges posed by rising inflation. An orderly transition to financial stability is preferable to a disorderly correction triggered

by markets. That is why it is essential to agree on rules and amend the existing rules framework to allow for a predictable return towards sustainability of sovereign debts.

To my view, the long-term debt growth and management for EU countries could fall under several constraints: prevent excessive debt growth while at the same time benefit from favourable conditions (when they are present in the financial markets) allowing also for debt consolidation and refinancing; in addition address the divergences between the countries running budget surpluses versus countries with budget deficits and mitigate the shortcomings of the late response in the case of the Excessive Deficit Procedure; and in dynamics, link debt evolution to economic performance measured by the GDP.

Debt dynamics over time could be seen on a trajectory that prevents its excessive growth, via a formula of the following outline, similar to other comparable views in the academia (Scheuermeyer, 2021):

$$\text{Debt Growth (YoY)} = \{[(y_t - g_t)/(1+g_t)]*D_{t-1} - GGB_{t-1}\} / GDP_{t-1} < g_t$$

where:

t = the current year

y_t = average yields for the sovereign member state

g_t = economic growth rate for the sovereign member state

D_{t-1} = debt level for the sovereign member state at the end of the previous year

GGB_{t-1} = general government budgetary balance for the sovereign member state at the end of the previous year

GDP_{t-1} = Gross Domestic Product for the sovereign member state at the end of the previous year

To my view, the debt-to-GDP limit should be kept at 60%, although there is a risk for the member states to agree on raising this level to reflect "a new normal" where most of the countries are indebted above this threshold, since this is the current reality anyway, while GGB should be determined nationally, based on independent reviews from the fiscal boards already existing, and subject to the

validation by the European Commission, as a part of the European Semester Process and assessments.

Considering the above-mentioned aspects, on a positive view, when the yields curve is lower than the rate of economic growth and the country has a balanced or even a positive general government budgetary balance, taking on more debt for public investments can be done while the debt burden actually decreases. On a negative view, if the country records a general government deficit, the Debt Growth increases and should be capped by the European Commission, based on the calculations of the national fiscal board. In a worst case, in addition to the budget deficit, should inflation rise, the yields curve will mimic and reflect the tightening monetary policy, rising in relation with the inflation and the financing conditions on markets. Therefore, the debt growth is constrained automatically by a tighter financial market and a higher budget deficit, limiting future debt growth.

Such an approach would not require changes to the Maastricht Treaty and would build on the reformed framework of SGP. Although the fiscal criteria are expressed in Article 126 of the TFEU, the actual values of 3% and 60% are specified in the Protocol 12 annexed to TFEU. Furthermore, the preventive arm and the corrective arm of SGP, as well as the process related to the Commission procedures are laid out in the secondary legislation of the EU (Directives and Regulations). This proposal to limit debt growth and allow for fiscal space be built over time would still rely on the Excessive Deficit Procedure for breaches of the budget deficit rule, it would provide an anchoring of debt growth on medium term and it would limit the excessive budgetary expenditures. Moreover, in exceptional circumstances, it would still be possible to trigger the general escape clause under SGP. However, a plethora of additional fiscal measures and tools should be required to build a resilient and robust frame for sound fiscal policies in EU. At the end of 2021, the Centre for Economic Policy Research did a comprehensive analysis from the legal perspective of what options could be explored and what legal consequences would be for the EU fiscal Framework (Maduro, Martin, Piris, Pisani-Ferry, Reichlin, Steinbach and Weder di Mauro 2021)

Keeping specific numerical fiscal objectives for the budget deficit and the public debt has its benefits. The member states are already accustomed to these numbers, calibrate the fiscal policies taking guidance from the European Commission and those anchors represent a politically accepted sustainable debt dynamics. In practice, given the lack of accountability for breaching the fiscal rules by member states, my take is that it is not a question of percentages and about establishing what are the limits for debt sustainability, but it is a question of enforcing the infringement process and its consequences on member states, in order to constrain the public authorities to be accountable for the EU membership commitments. This strengthening of infringement should also come together with flexibility for the best approach to the member states specific situation breaching EU fiscal framework.

A more complicated approach would entail creating a European Debt Agency and a split of the debt-to-GDP into a slow adjusting part and another fast-adjusting part (in excess of 60%) that should be decreased. The rate of decrease for the components should be different, over a 10-year time horizon. The formula proposed by some researchers is $(d_{t+10} - d_t)/10$ = beta $(d_{Ft} - d^*)$ + gamma x d_{St}, where beta and gamma are the speeds of debt components adjustments and beta > gamma in relation to d^* - the long-term debt target (D'Amico, Giavazzi, Guerrieri, Lorenzoni and Weymuller, 2022). However, the proposal suggests the creation of yet another agency to the already complex EU institutional architecture and it seems to give a lesser role for the investments and asset-led economic growth raising GDP over the long-term.

From a central bank's perspective, new research on reforming the EU fiscal frame builds on the European Fiscal Board's proposal, on a two-tier system that links the debt anchor with the expenditure rule, maintaining the current SGP and the 60% debt-to-GDP, but replacing the GDP deflator with the 2% ECB's inflation target and adjusting the speed of debt reduction from 1/20 (5%) with a 3% speed adjustment (Haroutunian, Hauptmeier, Leiner-Killinger and Muggenthaler 2022). To my view, it implies a less constraining requirement for national fiscal authorities and could delay the necessary decrease of the debt burden.

8. FURTHER CONSIDERATIONS RELATED TO THE HIGH DEBT ENVIRONMENT IN EU

Considering the geostrategic uncertainties currently unfolding, the EU member state governments are confronted with an immediate need to increase public spending significantly for defence capabilities, for new energy infrastructures, for compensating / subsidizing the energy costs for households and businesses, as well as with absorbing the costs with the refugees. These needs imply expectations for further increases in new government debt instruments issuance, at a moment when the balance sheets in the financial sector (including the central banks) are already constrained by the existing debt. In addition to the fiscal pressures, inflation also exacerbates the economic strains, rising the costs with financing, as the monetary policy is compelled to rise the interest rates.

Furthermore, prolonged supply chains bottlenecks, rising commodity prices and diminished fiscal space availability build an upward pressure on the equilibrium real interest rate, volatility in output growth, and a likely surge in risk premia in some countries, which could lead to financial fragmentation. The European Commission is discussing an economic package with three pillars: the repurposing of loans issued under the Next Generation EU pandemic-recovery fund, issuance of new debt to raise money for loans in case of energy-price spikes and new guidance on a fast-track approval of state subsidies (Reichlin 2022)

However, there is no quick fix, nor a miraculous solution to long term indebtness. Regardless of the models to address the debt imbalances, the strategies under discussion, the proposed reforms for the EU fiscal framework, debt reduction is eventually dependent on national authorities' commitment to fiscal conformity, on the cooperation between the fiscal and monetary authorities to overcome shocks to the economy in the long-run and to accountability for balancing the present financing needs with the future burden on the next generation.

NOTES

1. The opinions expressed in this paper reflect the personal viewpoint of the author and do not involve the institutions with which the author is affiliated.
2. The purpose of this article is to analyse public data and information. All this information is available from public sources in a complete form and according to specified methodology and can be accessed and seen in the sources indicated for reference. Therefore, it is not in the scope of the article to reproduce tables and charts, but to use the relevant data to answer to questions about causes, effects, time, locations, impacts, costs, responsibilities, actions, benefits.
3. This article focuses on a very specific subject (the aspects related to possible reforms of the EU economic framework and governance) and takes into account a multi-disciplinary approach (financial, economic, political as in policies, etc). Being a broad topic, it needs future observation, analysis and in-depth survey on all coordinates. It remains open for further development.

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