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An effective policy mix for the EU's post-pandemic challenges

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IN-DEPTH ANALYSIS

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An effective policy mix for the EU's post-pandemic challenges



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MONETARY POLICY

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Abstract

The geopolitical and economic shocks, due to the Covid-19 pandemic and the war in Ukraine, represent a structural shift for the European Union (EU) economy. The euro area needs to deal with an ongoing inflation process and the EU needs to radically transform its production model to avoid a lasting decline. An expansionary centralised fiscal capacity, grounded on the production of public goods, and a related common industrial policy are required to allow for this structural change. In the meantime, it is necessary to bring the excessive inflation process under control. These two contrasting problems create a policy dilemma. A restrictive monetary policy backed by national fiscal actions and a temporary central fiscal initiative are inadequate to overcome this dilemma. Hence, we propose an innovative policy mix to address the problem.

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LIST OF ABBREVIATIONS

APPs	Asset Purchase Programmes
CFC	Central Fiscal Capacity
ECB	European Central Bank
EPGs	European Public Goods
EU	European Union
GDP	Gross domestic product
NATO	North Atlantic Treaty Organization
NGEU	Next Generation EU
NRRPs	National Recovery and Resilience Plans
RRF	Recovery and Resilience Facility
SGP	Stability and Growth Pact
USSR	Union of Soviet Socialist Republics

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EXECUTIVE SUMMARY

- The impact of the recent geopolitical and economic shocks implies a **structural shift** for the European Union (EU). The euro area must deal with an **ongoing inflation** process and the EU should transform its production process to improve convergence within the area and strengthen its international role.
- European institutions must therefore solve two problems that, at first sight, have contrasting policy implications: an **expansionary centralised fiscal policy** grounded on European public goods (EPGs), and a common industrial policy to achieve a structural change; and a **restrictive monetary policy backed by appropriate national fiscal actions** to bring the excessive inflation process under control. This leads to a policy dilemma that requires a solution.
- A conventional monetary strategy views excessive inflation rates as the primary short-term problem. As a result, **restrictive monetary and national fiscal policies** are currently needed, whereas an expansionary centralised fiscal capacity would tend to interfere with this restrictive policy stance. Hence, the centralised fiscal policy should be deferred to a medium to long-term horizon when inflation rate is stabilised at its 2% target.
- The solution for the policy dilemma cannot be the overcoming of the excessive inflation, first, and then the implementation of structural changes. Addressing excessive inflation is essential, but the EU should **not delay modernising its production model** while waiting for inflation to stabilise. Prompt modernisation policies are essential due to the changing global landscape and the EU's consequent high risk of becoming a follower in the transition.
- To identify a better solution, we suggest **an innovative strategy to manage the policy mix that does not mainly rely on monetary policy**. The main features of this innovative strategy emerge from a comparison with the conventional policy strategy, illustrated above.
- An innovative strategy does not deny that centralised fiscal policies can have an undesired short-term inflationary impact. However, it stresses the costs of postponing structural changes. Hence, it suggests a policy mix based on **moderately restrictive monetary and national fiscal policies and an expansionary centralised fiscal capacity** focused on the production of EPGs to increase the supply side more than the demand side.
- This innovative policy mix would decrease the recession risk and would allow the EU to reshape its production model; moreover, it would overcome the excessive inflation rates even if at the cost of postponing the inflation adjustment required to hit the European Central Bank's (ECB) target. **This short-term cost can be more than compensated by the positive 'real' outcomes.**
- This policy mix can be **effectively implemented within a supportive economic governance framework**. Hence, the interplay between this policy mix, the role of the ECB, and fiscal regulatory reform should not be underestimated.

1. INTRODUCTION

The era of great moderation has long ended, ushering in a period of repeated shocks and profound changes in which economic areas unable to positively react are at risk of losing their positions in the international markets. This risk specifically applies to the European Union (EU), which suffered a second long recession (2011-2013) after the international financial crisis ('double dip'), recorded a moderate recovery in the period 2014-2018, and was severely hit by the pandemic shock (2020-2021) after having entered a phase of stagnation (2018-2019). Unlike the pro-cyclical response to the 2007-2009 crisis, the EU's economic policy reaction to the pandemic shock was effective and allowed its member states to overcome the worst depression of the last two centuries in just a few quarters. However, the bottlenecks on the supply side, due to the persistent post-pandemic breaks in the global value chains, and the geopolitical and economic shocks triggered by the Russian invasion of Ukraine have determined structural shifts, bringing the EU to a crossroads. The EU must address the economic and social consequences of the ongoing excessive inflation and stagnation by implementing a long-term transformation. The change of its considerable but mature production model is at stake (see Buti and Messori, 2023). This change is necessary for the EU's economic and social system to avoid the decline of its role in the international markets and for the EU member states to avoid increasing divergences among them.

This structural challenge implies that the EU policymakers are facing a dilemma in the short term. On the one hand, if the European Central Bank (ECB) takes full responsibility for bringing the excessive inflation rate under control in the euro area, freezing aggregate demand through restrictive monetary policies backed by national fiscal restrictions will be unavoidable.¹ On the other hand, to cope with the needed structural changes, it is urgent to implement fiscal policies that support innovations and the restructuring of the EU production model. The apparent conflict between the battle against inflation and the supply of new monetary resources for an economic transformation cannot be solved by postponing the modernisation of the EU economic model and waiting for the stabilisation of inflation rates to the 2% target. In a progressing world, the choice to wait would imply that the EU economy is transitioning from a leading to a follower position. Hence, designing a policy mix apt to meet the EU specificities becomes necessary. This policy mix should be able to combine a gradual but effective reduction of excessive inflation, on the one hand, and an economically innovative and 'green' transition based on an expansionary central fiscal capacity (CFC) and a new European industrial policy, on the other hand.

Our paper aims to clarify the complexity of this policy mix, showing that it can be effective to combine fiscal and monetary policies characterised by different stances. Specifically, the reduction of excessive inflation rates in the euro area can be harmonised with financial support to innovations and restructuring of production activities, if two conditions are met. First, it is necessary that the CFC has a more significant expansionary impact on aggregate supply than on aggregate demand. Second, monetary policy should become moderately restrictive, and the national fiscal policies gradually adjust their main imbalances. The implementation of this policy mix represents, however, a challenge.

The ECB is concerned that the combined stances of the fiscal policies hinder the effectiveness of monetary policy in curbing excessive inflation in the euro area because of their possible expansionary

¹ These national fiscal restrictions are not only aimed at supporting the monetary policy stance but, at least in the EU countries with high public debt, they are also imposed by the phase-out of the previous safety net for the allocation of public bonds in the financial markets. This safety net was, in fact, based on the ECB's asset purchase programmes (APPs).

effects on aggregate demand.² This position is understandable, but it is partial because it neglects the origins of the current euro area inflation process: a negative supply shock due to bottlenecks in the availability of raw materials and other crucial inputs of production. A restrictive monetary policy that is left alone can control this inflation process through its standard action: a reduction in aggregate demand to match the constrained aggregate supply. This impact has an unpleasant side-effect in the EU, that is it dramatically increases the probability of a recession. Conversely, as recently stressed by Draghi (2023) and recognised by ECB President Christine Lagarde herself (2023b), an expansionary CFC acting on the supply side more than on the demand side should supplement and partly replace the monetary policy's restrictive measures, thus mitigating the recession risks. In the meantime, such a European fiscal policy should support innovative changes in the EU production model.

Lagarde's original concerns should not be overlooked. However, if it is recognised that policy coordination does not require uniform policy stances, it will follow that a compelling policy mix can utilise different tools in different ways to achieve multiple objectives. In the case under examination, an expansionary CFC and the related new EU industrial policy can promote innovation, green transition, and labour productivity; moreover, these policies can help restrictive monetary and national fiscal policies to contrast excessive inflation rates and make national public debts sustainable. Hence, a heterogeneous policy mix can reduce economic instability and enhance sustainable long-term development.

The rest of the paper elaborates on the last statements. Section 2 examines the shifts in the EU's recent policy mix. Section 3 provides a concise theoretical outline of our approach. Section 4 focuses on the policy conditions that ensure sustainability within a restricted fiscal scope for implementing the transformation of the EU production model. Section 5 concludes the paper.

² In this respect, the President of the ECB (see for instance: Lagarde, 2022) has reiterated that: "Euro-area member states should back the ECB's monetary policy by adjusting their increased public balance disequilibria."

2. RECENT EVOLUTION OF THE EU POLICY MIX

The pandemic shock has caused a break in the EU's combination of monetary and fiscal policies. In the previous period (2011-2018), monetary policy in the euro area was the only tool to contrast the economic recession (2011-2013), overcome the risk of deflation (2013-2014), and support a moderate expansion (2015-18). Throughout the entire 2011-2018 period national fiscal policies were restrictive or neutral, mainly due to the severe and pro-cyclical revision of the Stability and Growth Pact (SGP) at the recession's peak in the euro area (2011-2013). Moreover, after the Commission's initiative to introduce some flexibility in the new SGP (mid-January 2015), the stances of the national fiscal policies followed divergent paths and became even more distortionary. Euro area countries characterised by a high public debt to Gross Domestic Product (GDP) ratio, such as Italy and France, implemented expansionary fiscal policies centred on current spending, whereas countries with a low public debt to GDP ratio (such as Germany) continued implementing restrictive fiscal policies. The result was an ineffective policy mix that stimulated the ECB to play a substitute role for fiscal policies. In El Erian's brilliant expression, monetary policy became "the only game in town."

It could be maintained that, in taking such actions, the ECB exceeded the boundaries of monetary policy and adopted quasi-fiscal measures. This interpretation would be inconsistent with the *ex-post* legitimisation of the Outright Monetary Transaction and the Asset Purchase Programmes (APPs) by the European Court of Justice. Nonetheless, even if the ECB acted within its mandate, it should be acknowledged that monetary policy became the only anti-cyclical policy tool due to an ineffective policy mix implemented in the EU, and specifically in the euro area, from 2011 to 2019 (see Bartsch *et al.*, 2021; and Buti and Messori, 2021a).

The EU's response to the pandemic shock led to a new policy mix. This shock resulted in a temporary yet dramatic break of many macroeconomic activities, leading – in the first half of 2020 – to the worst depression of the past two centuries. Consequently, the search for economic stability and recovery required a mix of expansionary policy tools in the EU and euro area, both at centralised and national levels. The ECB's monetary policy became ultra-expansionary by strengthening the APPs through emergency programmes and increasing the amount of liquidity pumped into the economic system through the banking channels. These monetary initiatives built a safety net for the allocation of public bonds in the financial markets, thus allowing for expansionary national fiscal policies even in euro area countries with high public debt stocks. The result was a massive transfer of public resources to households and firms to offset the fall in income and widespread bankruptcy in 'real' and financial activities. Moreover, in the summer of 2020, temporary centralised fiscal policies were agreed by EU leaders, notably Next Generation EU (NGEU) and—mainly—its principal economic programme: the Recovery and Resilience Facility (RRF).

The implementation of the RRF via the National Recovery and Resilience Plans (NRRPs) began in the second half of 2021 and will continue until mid-2026. Let us assume that the NRRPs meet their quantitative and qualitative targets. Thus, centralised fiscal policies will remain expansionary over the next three years, especially for EU countries with more significant NRRPs in terms of their fund allocations, such as Italy. Moreover, in February 2022, another dramatic exogenous shock hit the EU: Russia invaded Ukraine. The unexpected war at the eastern borders of the EU, the consequent energy crisis, and the dramatic acceleration of the technological and geopolitical conflicts between the United States and China have required substantial public transfers to households and firms.

In the same period, the euro area recorded an acceleration of the inflationary process that had already started at the beginning of 2021 and of the excessive inflation rates that became persistent since July

2021.³ The average headline inflation rate soared above 10% in October 2022 and remains significantly over 2% even in September 2023. Given its primary objective and target, the ECB was constrained to curb excessive and persistent inflation rates by implementing a restrictive monetary policy. The monetary tightening in the euro area started in March 2022, intensified from July 2022 to April 2023, and is still currently being pursued (September 2023). This restrictive monetary stance has also led to a gradual reduction in the safety net provided by the ECB to national fiscal policies by a reduction of its balance sheet.

The previous description shows that, from March 2022 to September 2023, the ECB's monetary policy tightening and its gradually restrictive impact on national fiscal policies have been – at least – partially counterbalanced by an expansionary CFC due to the progressive implementation of NRRPs, and by new national fiscal transfers to households and firms due to the war emergency and its medium-term impact. The evidence in the euro area shows that core inflation has still not been significantly reduced in several member states. In contrast, since the last quarter of 2022, Germany and other euro area countries have been experiencing a recession or stagnation (see Eurostat, 2023). The most credible forecast is that, despite the short-lived resurgence of traditional services (notably tourism), either stagnation or recession will affect the remaining part of the euro area in the second half of this year and the early part of 2024 (see European Commission, 2023). Hence, the economic perspectives in the euro area are gloomy: a persistent excessive inflation rate and a recession that is a high risk of stagflation.

At first sight, this situation implies that economic policy faces an unsolvable puzzle. If left alone to bring the excessive inflation under control, the ECB must continue the implementation of a restrictive monetary policy. On the contrary, fiscal policies should strengthen their expansionary stance to reduce the probability of a recession or persistent stagnation in the EU. Hence, taken separately, monetary policy and fiscal policies interfere with each other. Thus, there is a high probability that both these policies become ineffective in the achievement of their specific goals, worsening the serious problems characterising the EU economy.

This dramatic puzzle could have a positive solution if a compelling policy mix were adopted. It appears as a dead end only because European institutions have failed to learn the lessons from the policy response to the pandemic shock. However, this methodological lesson should not be oversimplified in two ways. First, it does not imply that the interplay between monetary and fiscal policies should always be expansionary regardless of the economic cycle's phase. Second, as we mentioned above, it does not mean that a compelling policy mix necessitates a uniform stance across various policy tools. The methodological break, which allowed an appropriate policy response to the pandemic shock, conveys a more instructive and complex message: an effective policy mix should integrate various policy tools targeting different goals and promoting sustainable economic development over the medium to long term.

To assess the implementation of this methodology, a preliminary analysis of the macroeconomic situation and its main determinants is required. In the case of the euro area, the excessive inflationary process was triggered by supply bottlenecks coming from the breaks in the global value chains due to the pandemic shock (e.g., Canofari *et al.*, 2022). When the peak of the pandemic was overcome, and aggregate demand recorded a partial rebound thanks to the availability of generous public transfers at the beginning of 2021, the supply constraints led to increases in EU prices. Then, the Russian invasion of Ukraine exacerbated supply shortages in several strategic sectors (typically energy, food, and raw materials for innovative productions). Hence, even if some of the global value chain disruptions were

³ Here, we take for granted that the ECB cannot redefine its quantitative target (an inflation rate equal to 2%) for its primary objective of price stability. A discussion on the recent redefinition of this target is offered in Benigno *et al.* (2023a).

gradually reabsorbed and inflation spread throughout the euro area economy (recall the current downward stickiness of the core inflation), it remains true that excessive inflation originates from a negative gap between aggregate supply and aggregate demand triggered by binding constraints in the former.

It is well known that the ECB's mandate is to pursue price stability, and that monetary policy can directly influence only the demand side. In other words, an anti-inflationary monetary policy must reduce aggregate demand. However, this strategy is not compliant with the new methodology of the policy mix defined as a response to the pandemic. In this last perspective, price stability should not be pursued by worsening production stability and compromising medium-term economic development. In the case of the current euro area inflation process, a more effective possibility, compliant with the new methodology of the pandemic policy mix, could be exploited. We are referring to a combination of policies able to produce a positive supply counter-shock and harmonise aggregate demand with the consequent less constrained and less stagnating aggregate supply.

In principle, designing such an appropriate combination of policies is easy. A positive supply counter-shock should be based on a CFC aimed at expanding the EU activities through the production of European Public Goods (EPGs) without immediately supporting the corresponding aggregate demand. EPGs must be financed and produced at the EU level (Buti *et al.*, 2023). The recourse to a subset of EPGs, such as the production and utilisation of centralised energy storages in partial substitution of the national race to buying up new flows of energy (as happened in the summer of 2022), would weaken the EU's supply bottlenecks even in the short run.

From a more general point of view, the same result would apply to the outcomes of a new EU industrial policy aimed at supporting the green transition and innovative trajectories in digital and artificial intelligence. In this setting, even national initiatives financed by the RRF could contribute to overcome supply bottlenecks at least in the medium term. Moreover, national fiscal policies could gradually adjust the disequilibria in the public balance sheets without increasing the risk of recession. However, it is worth emphasising that a positive supply shock created by centralised fiscal policies could suffer from severe lags. A subset of EPGs can support the supply side more than the demand side in the short term; however, the production of other EPGs can have a short-term inflationary impact because innovations require restructuring processes that support aggregate demand and decrease "old" activities in the short term, thus increasing aggregate supply and labour productivity only in the medium term.

The difficulties in the practical implementation of an effective policy mix could be mitigated if this set of policies were able to anchor at least short-term inflation expectations to the medium-term target thanks to its announced and credible medium-term impact on the supply side.⁴ In any case, appropriate EPGs and a new centralised industrial policy can build a policy mix in the current phase of the euro area aimed at controlling the excessive inflation rate without putting all the burden on monetary policy and hindering medium-term sustainable growth. Combining an efficient and expansionary CFC that supports the net expansion of the supply side, a monetary policy with a moderately restrictive stance, and national fiscal policies aimed at gradually adjusting the main public imbalances could decrease inflation rates without causing stagflation or recession in the EU economy.

The appropriate methodology of this new policy mix could be specified by describing the different subsets of EPGs and the strong relations between EPGs and the EU's industrial policy.⁵ Here, we do not

⁴ See Section 4.3.

⁵ Let us just mention that the EU might not be able to bridge the technological gaps with the other main international players solely through public and private investments and R&D incentives, partially financed at a central level. Centralised efforts, based on market signals (see below), to establish global businesses in high-tech activities are also essential; and this is the duty of an effective European industrial policy.

follow these complex paths, which would be only indirectly related to the main topic of this paper. It is sufficient to stress two further points that strengthen the interaction between EPGs and centralised industrial policy as crucial components of the new policy mix apt to implement the transformation of the EU production model.

1. The EU's main economic disequilibria (including an excessive inflation rate) are structural and depend on the obsolescence of the EU production model, characterised by an export-oriented manufacturing sector and widespread low-quality services confined to ancillary duties. The EU's medium-to-long term economic growth cannot be based on the current specialisation in mature technologies and driven by the external demand. The production of appropriate EPGs and the implementation of an efficient centralised industrial policy are required to change this old production model through green and technological transitions. These innovative improvements are necessary for the EU to reduce its gaps with the United States and China in the digital sector and artificial intelligence, but also to keep the EU's comparative advantages in terms of regulation and low environmental impact.
2. The allocation of European industrial policy resources should result from a complex and dynamic combination of centralised options, market signals, and widespread guidance. Consequently, the production of EPGs and a centralised industrial policy could also play a role of guidance for corporate innovations and reorganisations, facilitating the creation of transnational companies in the EU's single market. The existence of genuinely European productions would weaken nationalistic debris and facilitate the balance between such signals and centralised options.⁶

It is worth underlining that the change in the EU production model cannot be postponed. If the EU delayed the modernisation of its production model, it would become a follower rather than a leader in the new economic landscape, in which other economic areas have initiated their radical transformations.

⁶ In this perspective, a centralised industrial policy includes initiatives to improve competition in the EU markets. The lack of robust evidence weakens the statement that the current excessive inflation rates in the euro area are mainly due to widespread increases in firms' profit margins. However, we believe that more competition would contribute to overcoming some of the supply constraints and to limiting price increases. This topic will be partially addressed in Section 4.3.

3. ONE DISEASE AND TWO REMEDIES: A SIMPLE GRAPHICAL ILLUSTRATION

The considerations developed in the previous section suggest that a compelling EU policy mix, based on a CFC and—mainly—on the production of EPGs, can support a transition to a new EU production model through green investments and digital innovations and, at the same time, bring the euro area's excessive and persistent inflation rates under control (see Buti and Messori, 2022b and 2023). Various economists have criticised this statement (e.g., Schnabel 2023). Hence, further specification is needed to fill the possible gap between our previous theoretical outline and its efficient implementation.

This section illustrates some issues concerning the current phase in the euro area and the EU at large, as depicted above. Specifically, we analyse the feasible alternative 'policy mix' allowing the transition to innovative production changes in the context of high inflation rates (see also: Buti and Messori, 2022a). To simplify the matter, we consider two contrasting policy strategies:

1. A conventional or **standard strategy** views excessive inflation rates as the primary short-term problem. Hence, the current euro-area economic phase requires a strong demand contraction led by restrictive fiscal and monetary policies. An expansionary CFC to support supply should be deferred to a medium-to-long term horizon when excessive inflation is expected to be brought under control.
2. An **innovative strategy** instead does not defer the expansionary CFC to support supply to a medium-to-long term horizon and calls for less restrictive fiscal and monetary policies in the short run. Combining a moderately restrictive monetary policy, consequent national fiscal policies and an expansionary CFC can smooth the inflationary process and decrease the recession risk at the cost of suffering a temporary increase in inflation rates.

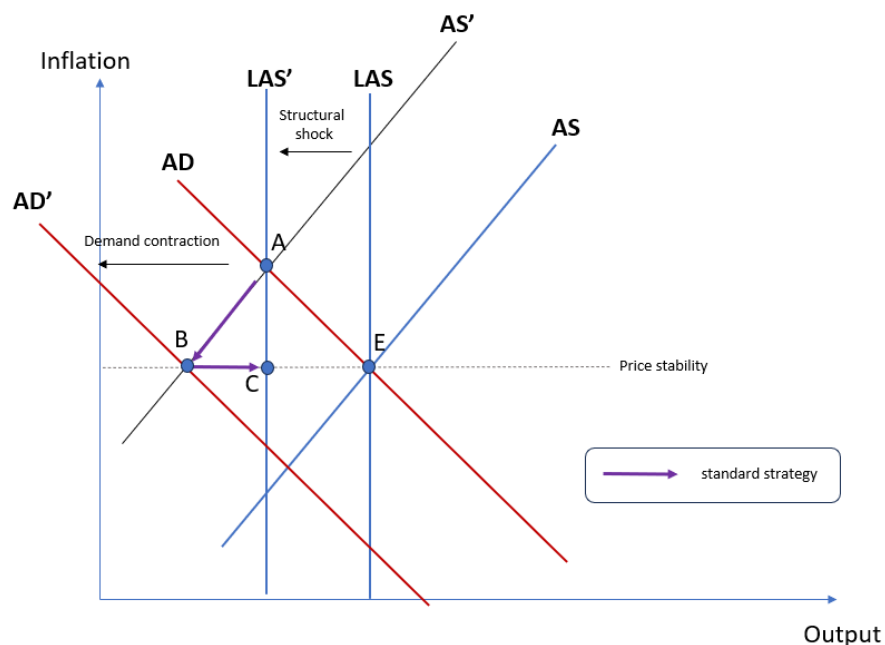
In the following, we elaborate on the two strategies. It is worth noting that the standard strategy emphasises that expansionary centralised fiscal policies, aimed at supporting the supply more than the demand side, achieve the opposite result. In the short term, these policies imply a production restructuring and a decrease in the economic activity, thus increasing the negative gaps between aggregate supply and aggregate demand and strengthening inflationary pressure. The innovative strategy maintains, instead, that expansionary centralised fiscal policies can achieve the desired result even in the short term. If supply-side fiscal policies were immediately effective, they would lead to a costless reduction of inflation.⁷ The considerations, developed in Section 2, state that our preferred strategy is the innovative one. However, the relative effectiveness of these two strategies can be better appreciated if we exclude the case where the short-term counter-supply effects of the EPGs are positive. Hence, in what follows, we maintain that the reallocation due to the production of EPGs can reduce the aggregate supply in the short term, leading to an undesired short-term inflationary increase.

The comparison of the two distinct strategies can be analysed using a simple Aggregate Demand–Aggregate Supply (AD-AS) representation. Figure 1 shows the impact of the standard disinflationary approach, while Figure 2 depicts the impact of the innovative strategy. In both figures, we assume a structural and permanent negative supply shock, which shifts Long-run Aggregate Supply (LAS) and the short-term Aggregate Supply (AS) leftwards, moving the equilibrium of the economy from point E to point A. The permanent supply shock combines geopolitical and economic changes. The latter include the irreversible components of the energy crisis triggered by Russia's aggression and the structural impact of the pandemic crisis on global value chains.

⁷ This is the benchmark case analysed by Buti and Messori (2022a).

Let us start by exploring the disinflationary strategy illustrated in Figure 1. In point A, the economy experiences high inflation. The standard strategy attributes priority importance to price stability. Hence, in the short term, it implements a stringent monetary policy and constrains domestic fiscal policies to adjust their main imbalances, keeping any potential CFC unchanged. The consequent severe restriction in the policy stance leads to a downward shift in the aggregate demand (from AD to AD'). This policy mix swiftly brings prices back under control but at the cost of exacerbating the recession (point B).

Figure 1: The standard strategy



Source: Authors' elaboration.

These textbook effects have been extensively studied and examined in concrete cases. Following a painful disinflation phase, the economy gradually returns to its long-term equilibrium (point C). However, in point B, the primary goal (price stability) of the conventional strategy has been met. Hence, it becomes possible to start the long-term implementation of a supply-side counter-shock via an expansionary CFC to ease economic recovery. In our previous reading of the EU's economic problems, the medium-term delay is enough to make the CFC ineffective in boosting the long-run aggregate supply determined by the structural shock. The economy is trapped at point C, which remains on the left of the original long-term equilibrium (point E).⁸ In this perspective, the EU economy risks being constrained in a follower role compared to areas that have already transitioned to a new production model.

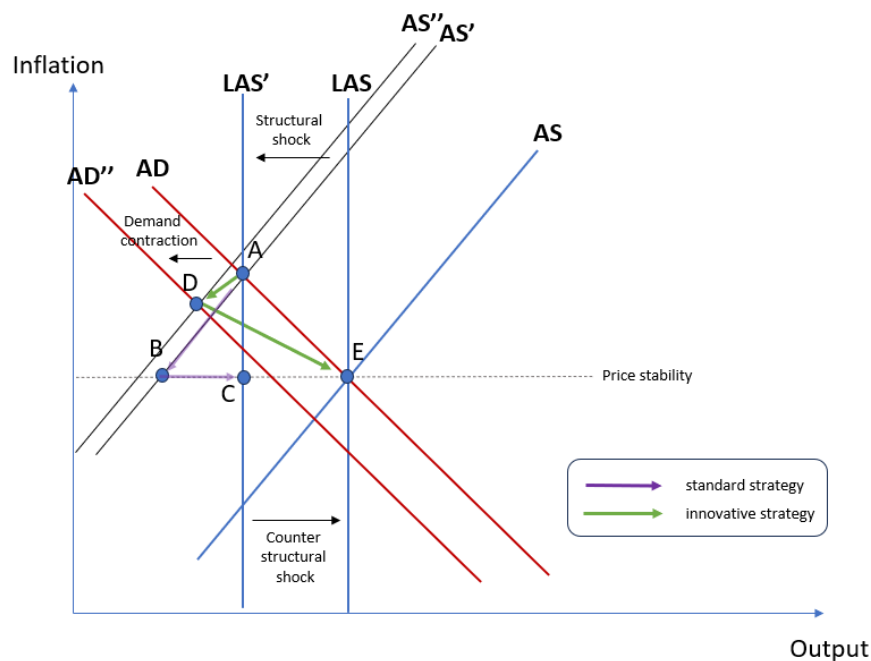
We now look at the innovative strategy, represented by Figure 2. This strategy responds to the initial negative supply-side shock by implementing an expansionary CFC based on the production of EPGs as well as on restrictions of the monetary policy and of the related national fiscal policies that are more moderate than those associated with the standard strategy. These initiatives have two consequences:

⁸ Although delayed, the medium-term beginning of a supply counter-shock could determine a downward shift of AS' crossing a demand curve between AD and AD' at the right of point C. However, this more realistic but complex representation would not substantially change our interpretation.

1. The original leftward shift in the aggregate supply (from AS to AS') is worsened by a further short-term leftward shift to AS'' due to the cost of implementing sectorial reallocations to produce EPGs;
2. The downward shift in the aggregate demand is such that AD'' is moderate compared to the previous case (AD' in Figure 1).

Thus, the innovative policy mix leads to a short-term economic equilibrium represented by point D (in Figure 2), which remains on the right of point B in Figure 1.⁹ This means that point D attenuates the recession with respect to the conventional strategy; however, D will be incompatible with price stability, even if it mitigates the inflation rate relative to point A thanks to the restrictions of monetary and national fiscal policies.

Figure 2: The innovative strategy



Source: Authors' elaboration.

As long as the production of EPGs proves effective in enhancing a positive counter-shock in the aggregate supply, there is a medium-term rightward shift of AS'' and the LAS' shifts to LAS. Moreover, the aggregate demand gradually returns to its long-term equilibrium. Hence, if the counter-shock were sufficiently important for absorbing the initial structural shock through the implementation of restructured productions, the innovative policy mix would move the economic equilibrium to the right until reaching point E of Figure 2. At this point, the new production model meets its long-term equilibrium.¹⁰

⁹ To ease the comparison, point B – as determined in Figure 1 – is reported in Figure 2.

¹⁰ It is worth noting that the new long-term equilibrium could be also met at the right or the left of point E. The long-term equilibrium of the innovative policy strategy would be in a point at the right of E, if the production of EPGs and the related industrial policy led to an innovative production model characterised by higher labour productivity with positive medium-term impact on the aggregate demand. However, this same equilibrium could also be in a point at the left of E because the positive supply counter-shock was not able to fully compensate the initial structural shock despite productivity improvements. In Figure 2, for the sake of simplicity, we assume a perfect compensation (enhanced productivity included).

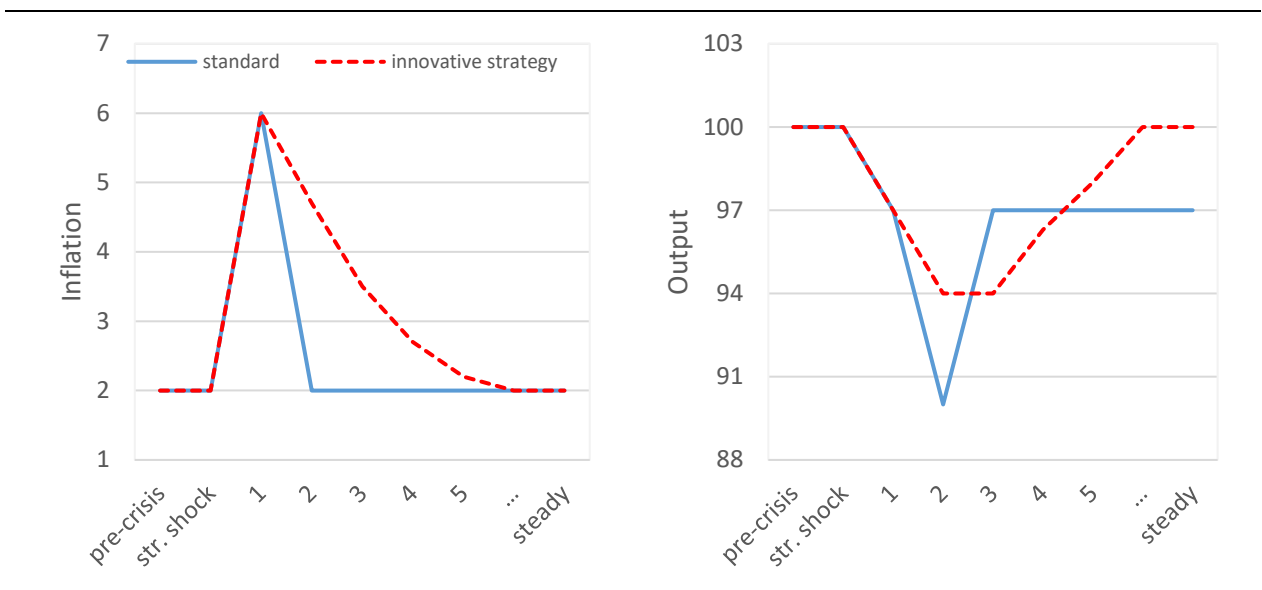
At least two caveats regarding the innovative strategy deserve close attention.

First, the fiscal policies associated with CFC must be thoughtfully designed and efficiently executed, because they should contend with the concurrent innovations implemented in other international areas. The challenge lies in ensuring that the related policy mix is effective with respect to the EU's internal goals as well as to the evolution of international competitiveness.

Second, national fiscal policymakers should avoid the temptation of utilising an appropriate CFC to hide the expansion of their domestic fiscal policies. Maintaining an efficient relation between these two levels of fiscal policies is crucial. The production of EPGs is envisaged as an instrument to drive innovation and structural changes, while domestic fiscal policies are critical to pursuing fiscal sustainability. The innovative policy mix will be effective if there is a balance between the stances of the different policies. As our analysis points out, the current phase of the EU economy requires that the stance of the national fiscal policies (mainly, in countries with high public debt) is harmonised with that of the monetary policy, so that the pressure on sovereign debts is not exacerbated and the expected impact of the ECB policy is not distorted.

The preceding pedagogical illustration of the two policy strategies is static and could be extended by considering the different dynamics implied. Without going into complex analytical details, we offer a rough comparison of the dynamic impacts that characterise the conventional and the innovative strategy, respectively, using Figure 3. Panel (a) of this figure illustrates the evolving trend of the inflation process that derives from each of the two strategies. Panel (b) compares, instead, the different results with respect to output. The conventional approach leads to a more rapid decline in the inflation rate, which reaches its target in the short-to-medium term; however, the cost of this adjustment is a more severe recession and a recovery that is quite rapid but largely insufficient to reach the original long-term equilibrium path. The innovative strategy implies that the average inflation rate takes more time to stabilise, and the economy takes more time to reach its long-term equilibrium; however, the short-term economic recession is milder, and the long-term equilibrium path matches the original potential output.

Figure 3: Dynamic comparison between the two strategies



Source: Authors' elaboration.

Note: The figure is clearly evocative to drive the reader into the adjustment dynamics. The word 'steady' stands for the long-run equilibrium in Figures 1 and 2, i.e., the steady state.

Figure 3 offers qualitative indications with a more precise quantitative assessment expected from the models.¹¹ Nonetheless, this figure is sufficient to highlight that the two policy strategies have different trajectories that lead to different results. The comparison of these respective results is not easy to do. How can we compare the cost of a slower recovery to that of a deeper recession? How can we compare the cost of a more persistent excessive inflation to that of long-term growth below the potential? Different EU policymakers do not share a common preference ordering relative to the pros and cons of economic growth, recession, excess inflation, and so on.

Here, we do not directly address these questions, which need – as a preliminary step – quantifications based on a common unit of measure. However, two points should be made. The first is that the quantifications should consider the different horizons (short and long term) of the relative economic and social variables. The second is that the quantifications should consider the different risks involved in the two policy strategies. On the one hand, the standard strategy has a more predictable impact, whereas the innovative one has higher risks; on the other hand, the innovative strategy can allocate a significant part of these risks to the EU, whereas the standard one is based on more traditional tools.

Our analysis cannot state that one of the two strategies dominates the other in the EU. However, an uncontroversial hierarchy between the two strategies arises if we adopt a specific perspective. The deep recession and low potential growth do not ease changes in the EU production model. If the ECB is left alone in facing an excessive inflation rate in the short term, its increase in policy interest rates and its reduction of liquidity supply will make the financing of public and private investments as well as the green and digital transitions more costly and their implementation more difficult (Lane, 2023). These constraints will become even more binding if two additional aspects relating to expectations are considered. First, the restructuring of production processes and innovative choices, required by the transitions, become riskier in a recessionary setting due to worsening expectations. Second, as stressed above (see Section 2), the policy mix designed by the innovative strategy can strengthen the anchorage of inflation expectations to the medium-term target thanks to its announced and credible medium-term impact on the supply side. Hence, in our setting, the innovative policy strategy dominates the conventional one.

¹¹ In the next section, we will offer additional qualitative considerations. A quantitative assessment is, however, beyond the scope of the present paper.

4. THE FISCAL NEEDS: SHOULD THE EU WAIT FOR ITS TRANSITION?

4.1. Towards a new EU production model

The euro area has experienced a significant slowdown in productivity growth since the international financial and ‘real’ crises (2007-2009).¹² The underlying causes of this sluggish performance can be traced back to different factors, some with long-standing structural roots. Here, referring to a few main determinants linked to the euro area’s policy mix will suffice.

Unlike the expansionary policy reaction in the United States, the European institutions responded to the 2007-2009 crisis by adopting a swinging monetary policy and strengthening the central fiscal rules. The aim was to constrain those EU member states with a high public debt-to-GDP ratio and harmful imbalances in their current accounts to adjust their internal and external disequilibria. To pursue these goals, the euro area’s weakest member states had to implement restrictive, and hence pro-cyclical, fiscal policies implying a dramatic compression of wages and internal aggregate demand. On the one hand, this policy mix led to sovereign debt and banking crises in the euro area, which flowed into a new economic recession (2011-2013) and a high risk of deflation (2013-2014).¹³ On the other hand, this policy improved the area’s short-term competitiveness in international markets without increasing long-term labour productivity.¹⁴ Then, from mid-2015 to the end of 2018, the euro area recorded a weak recovery due to an unconventional and expansionary monetary policy and a more flexible definition of central fiscal rules (see Rostagno *et al.*, 2021). In any case, even in that last period the monetary policy remained the main responsible for the anti-cyclical initiatives. Hence, differently from the United States and China, euro area economies were unable to lead critical innovative trajectories, and their productivity dynamics continued unsurprisingly to be weak.

The new expansionary policies implemented in response to the pandemic crisis in the spring of 2020 resulted in further exceptional monetary and fiscal measures, including a temporary CFC. This new policy mix was able to confine the worst depression of the last two centuries to the first half of 2020. However, due to the binding supply bottlenecks and the need to support the income of firms and households hit by the economic lockdown, it did not aim at relaunching the EU medium to long-term economic growth. This relaunch became the main objective of the EU policy mix since mid-2021, when the NGEU started the implementation phase through its main programme (the RRF) and the related NRRPs.

The three pillars of the RRF (the green and digital transitions and social inclusion) showed that the EU economy had a relatively strong position in terms of environmental impact and social welfare but was suffering technological gaps with the United States and China (see Buti and Messori, 2021b, Figures 3 and 4, and Table 1). These gaps were so significant that they hindered the reproduction of the strong points. Energy-intensive and export-driven productions have characterised the EU economy model centred on solid but mature technologies in its most competitive sector, i.e., manufacturing. The services sector has become large but with broad pockets of inefficiency and an ancillary position with respect to industry. The consequent lack of innovation in the EU economy has increased its risk of falling

¹² The decline in productivity dynamics is evident across various measurements, including output per work hour (a proxy of Marginal Labour Productivity) and Total Factor Productivity.

¹³ The ‘doom-loop’ between banking and the sovereign debt crisis in the euro area has been analysed by several authors (for instance: De Grauwe and Ji, 2013; Sapir *et al.*, 2014). An assessment of the risk of deflation is offered by Canofari and Messori (2015).

¹⁴ See Esposito and Messori (2018). It should be recalled that Ireland is an exception. This country utilised the European aid program, required to handle the impact of the ‘doom-loop’, to implement innovative investments and to structurally increase its labour productivity.

short of the evolving international technological frontiers. The programme proposed by the new Commission at the end of 2019 that focused on green and digital investments was the first attempt to upgrade the EU production model.

The implementation of the RRF since 2021 and its three pillars have put in motion a “growing machine” for the relaunch of the EU economy in the long term (Padoan, 2023). However, only the unexpected persistence of supply bottlenecks and the Russian invasion of Ukraine with the consequent energy crisis have made it evident that the EU's economy was losing its international competitiveness and needed a new and innovative production model and not just an upgrade (see Buti and Messori, 2023). This acknowledgment has highlighted that the green and digital transitions and improvement in social inclusion can be achieved in a time largely beyond the end of the RRF (mid-2026) and that radical economic changes cannot be supported only by a temporary, even if significant, CFC. The construction of a new EU production model requires an innovative industrial policy, centralised at the EU level and aimed at incentivising efficient public and private investments. Here, it would be inappropriate to go into the details of the possible features of this new European industrial policy. It suffices to emphasise that public and private investments should be financed by a permanent and significant CFC and by mobilising vast private financial wealth.

In such a framework, the centralised fiscal policy should be expansionary, and the liquidity in circulation should be abundant. Implementing these policies would have been highly ambitious at the beginning of 2021, when the euro area economy was in a low-inflation and starting-recovery phase. It has become a dramatic challenge today. As showed in Benigno *et al.* (2023b) and mentioned in the previous sections, the price index started to pick up in the euro area during the first quarter of 2021 and the inflation rate has exceeded the 2% target since July 2021. The ECB changed the stance of its monetary policy in March 2022 and implemented a dramatic sequence of policy interest rate increases from July 2022 to September 2023 accompanied by a more gradual but severe reduction in liquidity supply. At mid-September 2023, there is a high probability that these monetary policy decisions will lead to an economic recession in a euro area already in stagnation (see European Commission, 2023).

In the current framework, it is understandable that the ECB is concerned about again being “the only game in town” able to bring the excessive inflation rate under control. The considerable risk of a persistent recession in the euro area weakens the willingness of many national policymakers to reverse the stance of their expansionary fiscal policies implemented in the post-pandemic phase. Specifically, in countries with high public debt stocks, the attempt is to use the RRF resources to overcome the lack of space in the national fiscal policies due to the restrictive monetary policy implemented by the ECB.

4.2. The role of European public goods

EPGs are pivotal for implementing the triple transition (green, digital, and social) as the way to change the EU production model, to increase sustainable growth within the area, and to enhance European competitiveness in international markets. Being centralised projects with common funding, the EPGs are a specific component of the CFC; however, they offer a less controversial option due to their potential to weaken the “net balance” narrative among EU countries and to reduce tensions between creditors and debtors (Buti *et al.*, 2023.) The vital role played by the EPGs in the EU evolution has become clear in the economic aftermath of the Russian invasion of Ukraine. However, the importance of their production was already raised when the RRF's potentials were hampered by the national utilisation of the EU funds.

Buti *et al.* (2023; see also: Fuest and Pisany-Ferry, 2019) identify six priority areas for EPGs: digital transition, green transition and energy, social transition, raw materials, security and defence, and health. These areas address crucial EU challenges such as the aims of achieving climate neutrality, reducing technological gaps, enhancing education and re-skilling, and bolstering open strategic autonomy. It

follows that a moderate stance is necessary to finance, produce, and deliver adequate EPGs in a period characterised by a restrictive monetary policy. As already stressed, the implementation of EPGs also requires a permanent CFC and appropriate European technical vehicles. As Buti *et al.* (2023) point out, the intrinsic links between a permanent CFC, effective European vehicles, and the availability of EPGs raise legal, technical, and institutional problems. It is sufficient to recall that the current European Treaties do not leave an adequate space for centralised fiscal policies. Consequently, European institutions face difficulty in planning increases of “own resources” to strengthen the production of EPGs. Moreover, EU programmes such as the Connecting Europe Facility, InvestEU, and the Innovation Fund can ease the delivery of EPGs, but they require significant improvement and redesigning.

Here, we briefly examine three key sectors in which the availability of EPGs is clearly required for implementing innovations that – in their turn – are essential parts of the new EU production model, and for strengthening the social cohesion within the area. These sectors are defence (entirely reliant on public spending), climate transition (where resources come from the public and private sectors at roughly a one-third/two-thirds ratio), and digital transition (primarily private-driven, yet involving important public resources).

Let us address at some length the financial aspects of the green transition. The European Commission’s central scenario suggests that achieving a 55 per cent reduction in greenhouse gas emissions by 2030 would require about €360 billion in total investments (both public and private) for energy and transportation (European Commission, 2020a). These financial resources are equivalent to around 2 per cent of the EU’s GDP per annum. Moreover, additional and significant investments and related financial resources will be required beyond 2030 to achieve net-zero emissions by 2050. Finally, additional expenses derive from eliminating any dependence on Russian fossil fuels by 2027. According to the REPowerEU Communication (see European Commission, 2022), the EU’s geographical reallocation of its demand for fossil fuel will require substantial investments.

European and national regulations, centralised and decentralised taxation policies, carbon pricing, subsidies and non-pecuniary incentives for private investments can help reduce the burden for the public sector. However, in various cases (for instance, energy-network externalities and informational inefficiencies), private investment cannot integrate the public one. Current projections suggest that the contribution of the public sector to the EU’s overall climate investments should amount to about one-third, with additional investments of around 0.6 to 1.8 per cent of EU’s GDP needed and still not covered.¹⁵ The EU’s multiannual financial framework and NGEU fail to address this funding gap; and the declining private investments are largely insufficient to solve or even to mitigate the problem.

The implication is that addressing the impact of climate change in the EU will lead to heavy consequences in terms of CFC and national debt sustainability. As Zenios (2021) outlines, there will be a need for dramatic improvements in public investments. To avoid unsustainable increases of public expenditures and borrowing costs in the most fragile EU member states with negative consequences in terms of economic stability and growth, the production of appropriate EPGs will become crucial. The latter could fill a large part of the gap. Leaving aside the other difficulties that hinder this production and delivery, two necessary conditions directly relate to our topic: an effective policy mix and an accommodating monetary policy. In this respect, the innovative policy strategy discussed in Section 3 becomes fundamental.

Let us now outline some problems relating to digital transition by focusing again on the funding gap. The European Commission has calculated an investment gap for digital transformation of €125 billion, equivalent to 0.9 per cent of GDP per annum (European Commission, 2020a). A large portion of this

¹⁵ The reference is to Eurostat (2021)

funding requirement should be met by the public sector. In this respect, it must be recalled that, according to the EU Digital Compass 4 strategy, the EU's goal is to achieve the 100 per cent online provision of essential public services by 2030 (European Commission, 2023a). Moreover, the involvement of the public sector is crucial in enhancing digital skills, promoting digital inclusion, and facilitating the digitalisation of small- and medium-sized firms. Finally, several EU countries with substantial public debt exhibit subpar performance in digital public services and digital skills. This picture is worsened by the fact that the NGEU programmes are planning to cover a small fraction of these investment and financial gaps (Darvas and Wolff, 2021.) Hence, even in this case, the EPGs and – consequently – an effective policy mix and an accommodating monetary policy should play a substantial role. In this respect, the innovative policy strategy is again crucial.

As far as defence is concerned, it is necessary to recall that in 2006 the defence ministers of the North Atlantic Treaty Organization (NATO) committed to allocating a minimum of 2% of their respective countries' GDP to defence spending. In 2014, Russia's annexation of Crimea and the Middle East turmoil prompted a new engagement: countries falling below the 2 per cent threshold pledged to reach this target within a decade. As of 2021, Eurostat data reveals that the average defence spending in the EU stood at 1.3 per cent of GDP, with only Greece, Latvia, and Estonia meeting the 2 per cent requirement.¹⁶ NATO's data (NATO, 2023) slightly varies from Eurostat's, indicating that even Poland surpassed the 2 per cent mark in 2021. However, the crucial factor is that the more recent and partial data (2022), as well as the announced ambitious national plans, indicate that defence spending in the EU continues to grow. The persistent war at the eastern borders of the EU implies that this growing trend will further strengthen in the near future. Hence, it is urgent to start the centralisation of European defence to effectively allocate the growing public spending. In this respect, EPGs should play a fundamental role.

Despite the ongoing challenges and difficulties, the transformative potential of EPGs to shape EU economic dynamics underscores their importance for EU institutional evolution. As shown in the previous Sections, the policy mix and monetary policy have the decisive duty to support the production of EPGs, and, in this respect, the innovative policy strategy appears to be the dominant strategy.

4.3. The policy mix and social cohesion¹⁷

The rise in energy and import goods prices has adversely impacted real incomes, leading to recent bargaining between firms and employees about a fair distribution of the losses. Firms are inclined to raise their prices to safeguard their profit margins, while workers consider higher wage claims to offset the erosion of their purchasing power. These dynamics can play a role in driving inflation. If each party unilaterally tried to compensate for their specific income losses, the interconnectedness of expanding profit margins, increasing nominal wages, and surging prices could fuel a continuous price hike. The ECB President has warned against the potential risk of the above-described "tit-for-tat" game between firms and workers, as this interaction would interfere with the ECB's 2% inflation target.¹⁸ Lagarde emphasised that this risk justifies a long-term monetary tightening strategy to maintain economic equilibrium during downturns and anchor expectations.

¹⁶ See Darvas and Wolff (2022); and Baccianti (2022).

¹⁷ This section is largely based on Ciccarone and Di Bartolomeo (2023).

¹⁸ Lagarde (2023b).

The risk of escalating social disputes, particularly against the backdrop of increasing income inequality, is substantial.¹⁹ Due to differences in production methods, labour market setups, and industry strategies among EU countries, these disputes could have varying national impacts and cause further strain on EU integration. The potential monetary tightening threatened by Lagarde could be less effective or even distortionary in this setting. Anchoring expectations is a necessary but insufficient condition to ensure monetary stability. Social agreement on income distribution grounded on income policies is also required. Hence, it is crucial to understand that the ECB's stabilisation strategy fundamentally depends on a consensus about income distribution. In the presence of inflation, income distribution is altered between those who can and those who cannot adjust the price of their goods or services upward. The assignment of the concept of ensuring monetary stability to central banks arises precisely from the desire to prevent income redistribution 'through inflation', not determined by elected public authorities. With zero inflation, in the absence of such government measures, the distribution is maintained only if there is consensus on it; otherwise, price-wage spirals are triggered.

In this context, Ciccarone and Di Bartolomeo (2023) recently revisited Tarantelli and Modigliani's proposal for managing inflation during the 1980s. Tarantelli and Modigliani were aware of the link between 'programmed inflation' as an anchor of expectation and the social conflict related to income distribution. In fact, according to Ciccarone and Di Bartolomeo (2023), the most ground-breaking facet of their proposal was not merely the predetermination of inflation or the portrayal of unions as proactive economic agents. Instead, it was the visionary realisation that steering inflation toward a predetermined target requires a coordination mechanism fundamentally distinct from those subsequently identified by theoretical frameworks incorporating rational expectations.²⁰ Tarantelli and Modigliani's proposal suggests that coordination elements²¹ can skilfully guide expectations in systems where the assumption of rational expectations cannot be invoked.²² This idea aligns with the Keynesian perspective that institutions, conventions, and social agreements can act as tools to orchestrate the choices of economic actors, even when they might be unstable. When paired with businesses setting prices based on forecasted inflation, this coordination ensures that actual inflation matches the target.

In contemporary economies, the central bank's inflation target has taken on a role akin to the one Tarantelli and Modigliani assigned to the predetermined inflation rate agreed upon by social partners and the government. However, this substitution will be robust only if it is supplemented by an income distribution agreement. For an extended period, the concept of inflation targeting excluded the possibility of incorporating social agreements to manage inflation. We posit that the significant fluctuations in current inflation rates (unprecedented in the euro area) and disparities in income distribution could trigger dynamics that monetary policy alone cannot handle. In the euro area, the unique monetary policy has asymmetric impacts because countries vary in production structure and labour relation types.

¹⁹ Some firms attempted to push profit margins beyond what increased costs should justify, aiming to offset past losses (from events such as the pandemic). However, while firms can adjust prices quickly, in euro area countries wage changes often require lengthy negotiations. During inflationary periods, this mismatch can initially cause a steep drop in real wages, potentially prompting workers to seek hefty wage raises later.

²⁰ These frameworks underpin the anti-inflationary monetary policies anchored to rigid rules, central bank transparency, reputation, and similar tenets, progressively applied globally since the 1980s. Especially within inflation targeting regimes, an optimally devised monetary policy poses a credible threat to the private sector, compelling it to endure high interest rates, engendering unemployment and adverse production gaps until the expectations of both workers and firms align with the target.

²¹ Such as planned (low) inflation and negotiated (low) wages.

²² Either due to the absence of objective probability distributions concerning significant events (Knight, 1921; Keynes, 1921) or owing to their non-stationarity over time.

It is paramount to recognise that the current economic landscape significantly diverges from that observed by Tarantelli and Modigliani.²³ In addressing inflation and income distribution conflicts, a policy adaptation of Tarantelli and Modigliani's approach should have supported a social agreement aligning wage moderation with improved public services and workers' involvement in policy decisions. Nonetheless, their proposition could still hold pertinence within the present circumstances. Today, a policy adaptation of their approach could be based on the production of specific EPGs and appropriate and centralised social protection during the transition to a new EU production model. Even in this case, the aim would be to prevent wage-price spirals and favour more stable economic conditions. However, these new income distribution agreements also have consequences for selecting an effective policy mix and monetary policy strategy.

It is increasingly acknowledged that the unavoidable one-size-fits-all approach of the ECB's monetary policy tends to favour euro area countries with more flexible labour markets. However, a well-structured social agreement could counteract this conclusion. Let us assume that the main results of the social agreement are an additional production of EPGs and stronger social inclusion during the green and technological transitions in exchange for wage moderation. These results would lead to at least three achievements in terms of an effective policy mix: they can incentivise CFC and protect low income, thus mitigating the positive supply counter-shock, bringing under control the possible source of inflationary pressure, and supporting the implementation of the EU production model; they can reduce national policymakers' aversion to adjusting the disequilibria in their public balance sheets; they can avoid excessive monetary policy restrictions because the ECB would not be left alone in handling an excessive inflationary process.

In short, the previous analysis shows that introducing a social coordination mechanism in the policy mix strengthens the dominance of the innovative policy strategy over the conventional one.

²³ Their socio-economic context was that of the mid-1980s. At that time, the objective to keep inflation low to bolster the competitiveness of domestic production clashed with two opposite positions: the endeavours of trade unions to uphold workers' purchasing power by increasing nominal wages and businesses' efforts to determine prices ensuring profit margins congruent with those of their international competitors.

5. CONCLUSION

The structural shift of the EU economy, driven by the geopolitical and economic shocks triggered by the war in Ukraine, requires the attention of the EU institutions. A strategic approach is essential as the EU faces ongoing inflation and the necessity of transforming its production model to prevent a prolonged decline and avoid social contrasts in the context of increasing inequalities within and between generations. This task calls for an expansionary centralised fiscal policy coupled with a common industrial strategy, while addressing inflation concerns through moderate restrictive monetary measures and fiscal interventions. In the present paper, we have presented an innovative policy mix to navigate the complex landscape created by this challenge.

Our innovative perspective acknowledges the potential short-term inflationary effects of centralised fiscal policies but highlights the capacity for producing specific EPGs to affect aggregate supply, even in the short run. Additionally, in cases where the CFC and production of EPGs drive transformative restructuring accompanied by temporary reductions in the activity level for green and digital transitions, the medium-term outcome will still be an expanded aggregate supply. Combining a moderately restrictive monetary policy, gradual national fiscal adjustments and an expansionary CFC makes it possible to mitigate inflationary pressures, reduce recession risks, manage the side effects of a temporary inflation surge, and support long-term sustainable growth.

In conclusion, the imperative to reshape the EU production model underscores the need for a well-balanced policy mix. It is crucial not to rely solely on monetary policy. This justifies our preference for the innovative policy strategy outlined above. The resulting policy mix, focusing on EPG production, moderately restrictive monetary measures, and tailored national fiscal adjustments can be effectively implemented only within a supportive economic governance framework. The interplay between this policy mix, the role of the ECB, and the impact of fiscal regulatory reform should not be underestimated, though specific details are beyond the scope of this paper.

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The geopolitical and economic shocks, due to the Covid-19 pandemic and the war in Ukraine, represent a structural shift for the European Union (EU) economy. The euro area needs to deal with an ongoing inflation process and the EU needs to radically transform its production model to avoid a lasting decline. An expansionary centralised fiscal capacity, grounded on public goods, and a related common industrial policy are required to allow for this structural change. In the meantime, it is necessary to bring the excessive inflation process under control. These two contrasting problems create a policy dilemma in the EU. A restrictive monetary policy backed by national fiscal actions and a temporary central fiscal initiative are inadequate to overcome this dilemma. Hence, we propose an innovative policy mix to address the problem.

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