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# FINANCING INVESTMENT IN TIMES OF HIGH PUBLIC DEBT

2023 European Public  
Investment Outlook



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## PART II. CHALLENGES



# 6. Escaping Fragmentation and Secular Stagnation. The EU Policy Mix and Investment Financing

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The EU has been impacted by multiple crises due to economic and geopolitical drivers. These crises have left scarring effects and may lead to fragmentation with serious permanent consequences. This takes place against the background of secular stagnation which makes the policy response more difficult. The main response strategy is the NGEU mechanism, based on public investment and structural reforms. It should deliver sustainable growth and structural change that allows to exit the multiple crises—pandemic, geopolitical, energy, inflationary—and puts the European Union on path of twin transformation (digital and green), reverting the drift towards secular stagnation. NGEU is an effective policy tool, provided it acts through policy packages of public investment and structural reforms and allows for time to complete the reform cycle. Its effectiveness must be seen in the context of a new policy mix fit to address the multiple-crises framework.

## 6.1 Introduction

The COVID crisis has prompted a joint response by EU Member States and by the European Commission. In the short-term, temporary measures such as the suspension of the Stability and Growth Pact and the temporary framework on state aid have minimized the immediate costs of the COVID shock. In the medium to long term, policymakers will have to address the challenges of the twin transition towards digital and green activities and to reinforce the EU-growth model. What will make this more

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difficult are the consequences of the energy crisis and the inflation acceleration which impacts the dynamic of economic growth. Policymakers will also have to face the challenge of fragmentation generated by geopolitical tensions against the background of persistent secular stagnation.

To deal with the Covid crisis, the EU Commission has launched the Next Generation EU (NGEU) programme and activated its operational arm, the Recovery and Resilience Facility which is translated into National Plans of Recovery and Resilience (NPRR). The mission of the temporary instrument is to revamp EU growth in quantitative (how much growth) and qualitative (what kind of growth) terms. It does so by supporting public investment and structural reforms through substantial financing. €750bn in financing is provided by the EU budget and funded by the issuance of dedicated European bonds.

## 6.2 Phases of European Growth

In what follows, I consider the underlying logic of NGEU, linking the specific measures to the EU growth model to evaluate if and to what extent NGEU will be able to deliver growth and transform the EU economy towards its green and digital targets. I also look at the role of investment, both public and private, and the possible financing strategies, given the very large amounts of investment needed to complete the twin transition.

Post-war EU growth can be viewed as a sequence of subperiods characterised by growth-acceleration episodes (Hausmann, Pritchett, and Rodrik 2004). One way to identify subperiods is to mirror them with the evolution of the global economic and monetary system. From the Bretton Woods days to the present, the different subperiods exhibit characteristics that can be described as follows, with a specific focus on growth drivers.

1) Free Trade Area and Custom Union. This phase replicates the extension of the Bretton Woods (BW) system at the global level. The Bretton Woods regime was based on a domestic, demand-driven USA economy and an export-driven EU economy. The currency arrangement included a peg to the dollar backed by gold reserves. The main growth drivers in the EU were integration and trade openness. This structure generated a large positive supply shock for the EU, and the opening to international trade led to a significant reallocation of resources within countries. Resources were shifted from non-tradable to tradable sectors. There was no international capital mobility. Most EU countries ran a current-account surplus that reflected an excess of savings (savings > investments).

2) After the BW collapse in 1971, the dollar standard, and the two oil shocks, the EU struggled to converge. Sluggish growth highlights the fragmentation in the EU economy and the persistent risk of divergence between Northern and Southern members. Many EU countries adopted flexible exchange rates in reaction to dollar

flexibility. Northern members of the EU, however, established fixed exchange rates among themselves (giving birth to the 'D mark zone' in the first part of the 1970s) to enhance stability. Southern members' currencies devalued as oil prices raised inflation. Inflation differentials widened. Risks of divergence within the EU increased. Stagflation loomed.

3) In spite (or because) of the economic fragmentation in the global system, the EU's move from a custom union towards deeper forms of integration drove growth. Stability-growth tradeoffs in an inflationary environment are the key features of the macroeconomic system. Initially, flexible exchange rates were effective in absorbing shocks, but inflation in the EU accelerated at different speeds, which generated divergence in relative competitive positions. Excessive currency flexibility and volatility were seen as a challenge to the custom union. The European Monetary System (EMS) was established in 1979 as an attempt to provide stability and convergence in a stagflation environment. The move towards fixed exchange rates, with German monetary policy as an anchor, was seen as a way to enforce discipline and to restore integration. However, the EMS collapsed after a decade, when fixed exchange rates, full capital mobility, and national macroeconomic policies proved to be incompatible.

4) The Single European act. As monetary stability was reestablished, the EU single market and exogenous Total Factor Productivity (TFP) emerged as the drivers of growth. Evidence shows that economic and institutional complexity (such as the one associated with intra-industry trade and 'social capital') supports growth. Complexity as a feature of social and economic institutions that affects growth is more pronounced in northern EU members. However, not all TFP is exogenous. An endogenous component is driven by investment in innovation, research and development, and human capital. In spite of a self-sustained growth dynamics, an underlying tendency towards secular stagnation emerged, driven by demographics, inequality, and decreasing productivity. Growth below potential and, in some cases, declines in potential output characterised EU members and the Euro Zone, especially during the euro crisis (see 7, below). The sequence of EU enlargements in the 1980s also mark the start of acceleration episodes.

5) Growth gaps to potential output emerge in the Euro area. In a number of EU countries, structural impediments to growth (including the low quality of institutions) persisted in spite of efforts to complete the single market. This is particularly visible in the lack of a single market for services, which holds back productivity and innovation. Large output gaps also emerged in the USA. Globally, trade regionalism developed as a factor determining the nature of competition and conflict. Strategic trade policy became a policy option in support of national interests. Despite an increasing tendency towards regionalism, the global financial system remained dollar-based.

6) After the crisis of the European Monetary System, a 'corner-solution dilemma' emerged regarding the choice of exchange-rate arrangements (was it preferable to have fully flexible rates or a single currency?). The euro was introduced, but not all EU members joined the single currency. Initially, the introduction of the euro brought

convergence: the narrowing of spreads among members of the Euro was seen as a move towards a zero-risk or free-capital-mobility environment. A debt financed growth model also emerged, that is, one in which countries finance their growth through borrowing. This pattern generated imbalances that led to capital flows from excess-saving to excess-investment countries. Investment was directed, especially, towards low-productivity, non-tradable sectors. The lack of exchange-rate flexibility generated a deflationary pressure on deficit economies as surplus countries refused to reflate in order to allow for relative prices to adjust. The overall policy stance was restrictive, and the undervaluation of surplus countries' currencies was persistent. Integration did not progress.

7) Convergence turned into divergence, and risks of fragmentation increased significantly. In spite of large capital flows, or, rather, because of these, the eurozone proved to be unsustainable, an 'impossible trinity'. This 'euro crisis' and the bank sovereign doom loop prompted euro reform (most notably, the creation of a banking union). This policy response avoided the collapse of the monetary union. However, it shows the fragility of the collective agreement on which the euro was based. The reform was only partly successful, as a conflict between national and EU perspectives (risk mitigation versus risk sharing) persisted and the tendency towards divergence renewed.

8) Global imbalances and the global financial crisis. To accelerate recovery after COVID, the NGEU was launched. Its long-term structural orientation has been seen as the opportunity to reverse secular decline, replace external demand with internal demand, and change the composition of production and consumption in the twin transformation towards green and digital. However, these shifts require investment (both public and private), structural change, and an availability of non-tradable goods (services) to enhance TFP growth.

9) The current state of the EU (and global economy). The latest phase of the EU and global economy shows fragmentation both in financial markets and in trade relations. However, this fragmentation is not affecting Europe as much as other regions—an inversion of the case during the sovereign crisis. What is exceptional about this phase is the coincidence and interaction of multiple crises: geopolitical instability, the return of inflation, global fragmentation, and secular stagnation. This 'perfect storm' is reflected in an increase in global risk, monetary-policy dilemmas (inflation-financial fragility tradeoffs), and structural components of inflation.

Tensions will not subside soon, and global instability may rise. However, fragmentation will probably increase pressure on countries to join regional agreements or form agglomerations as a strategy to increase protection. A push for Member States' further integration may be proposed. Such a dynamic would likely be driven by geopolitical factors where Europe may play a leading role in shaping a reform of global governance, that is, a global-policy regime necessary to prevent further fragmentation. In this context, it is important to recall the conditions that enable cooperation and



regime-building with multiple actors: a few key players must be identified, there must be repeated interactions between them so as to build mutual trust, adjustments must be available to accommodate differing preferences, and, finally, agreements are to be encouraged as a strategy to aggregate preferences among likeminded countries.

The impact of the geopolitical factor can be larger than the one activated by fragmentation. As we are in a framework of multiple crises, further crisis factors can play a role. An analysis of ‘scarring’ can shed some light on these effects. S. Nujin and Yu Shi (IMF 2022) show that different types of crises, including those related to geopolitical factors, can produce scarring effects (that is, permanent negative consequences) that differ at the aggregate and sectoral levels because of the different transmission channels at work in each. The largest impact of the recent crises is seen in service sectors. As supply-side channels of transmission have been interrupted or weakened, so too have capital and research-and-development investment, human capital, and other factors that impact TFP. The ‘scarring’, in this case, is the cumulative reinforcement of the negative medium-term impacts.

### 6.3 Secular Stagnation and the Growth Environment

The multiple-crisis mechanism evolves against a background of secular stagnation which is present both within the EU and globally as reflected in the declining real interest rate. The real interest rate is connected to the ‘natural interest rate’,  $r^*$ , which is not observed and needs to be estimated. Estimates point to a decreasing natural interest rate for the Euro Zone over the past two decades. With all these caveats in mind,  $r^*$  can provide useful evidence on the long-run policy environment and information to policymakers as they form their views on policy decisions. Last but not least, the decline of  $r^*$  also reflects excess savings over investment, that is, growing savings and declining investment lead to lower  $r^*$  and shrinking policy space. The negative trend is also related to TFP dynamics. More generally, declining  $r^*$  and TFP reflect a weak effort in innovation, research and development, human and intangible capital accumulation, and demographic factors.

As already mentioned, in advanced economies, TFP is partially endogenous, that is, determined by investment in innovation and partly determined by policy which impacts on innovation activities. Evidence confirms the negative impact of TFP and demographic as well as the countervailing impact of fiscal policy on  $r^*$ . The fall in TFP is generalized in advanced economies but significantly present in the EU.

Such a dynamic carries important policy implications. According to a view of the policy process in the long term (which is the one of interest here), a declining  $r^*$  compresses the space for monetary policy since  $r^*$  is the upper boundary of the policy rate. However, if  $r^*$  increases, it compresses fiscal space to the extent that  $r^*$  is related to the market rate. For a given growth rate, a negative difference with respect to the policy rate makes debt unsustainable. Policy can raise  $r^*$  in the medium to long run through

productivity-enhancing and demographic-improving measures. As a consequence,  $r^*$  can increase and impact on fiscal-policy space. Put differently, the analysis of long-term growth factors provides indications of how to improve the policy mix and activate a virtuous circle as policy space is being created. Recently, pressures towards secular stagnation seem to have lost steam somewhat. Nevertheless, the underlying weakness of the economy, especially in the EU, does not support much optimism. In particular, there are no signs of significant turnaround in long-run productivity growth. In sum, to deal with the multiple-crisis environment, a new policy mix is needed, given that no single policy-instrument alone will support a new sustainable-growth acceleration.

Shocks interact and perpetuate themselves. They lower the long-term growth rates and may perpetuate secular stagnation. Fragmentation of global value chains generates supply shocks. Structural reallocation and appropriate industrial policies are needed. The impact of geopolitics feeds back on monetary policy via inflation and financial stress.

Monetary policy cannot be left alone. We also need fiscal and structural income policy as well as a global collective effort for regime rebuilding. This approach is consistent with the pattern of growth through accelerations and institutional change we have discussed above.

## 6.4 The NGEU Policy Response

EU policy design has made progress as a reaction to the crisis with the introduction of Next Generation EU (NGEU). In the current phase, NGEU is the single most relevant institutional innovation in Europe. It rests on the combined impact of public investment, structural reforms, and private investment. It can provide positive shocks similar to those related to the Single Market or the single currency. Let us look at this process in steps.

Step 1. The governments provide an immediate response to COVID-19 in terms of national budget resources to absorb the initial impact. The suspension of the Stability and Growth Pact provides the necessary fiscal space.

Step 2. Governments, in agreement with the Commission, define their structural-transformation strategy in terms of plans and sectors to be impacted by the resources made available by the Commission. The composition of the budgetary responses and the structural agenda reflect national preferences.

Step 3. The governments set the sequencing of measures related to investment and structural reforms. It is interesting to note that, on preparing their National Recovery and Resilience Plans, governments anticipated milestones relative to structural reforms with respect to those related to investment. The rationale for this is that the anticipation of reforms would make the implementation of investment faster and somehow smoother.

Step 4. A possible ‘acceleration cycle’ is activated as follows: 1) public investment is activated also with the support of structural reforms; 2) the public-investment component, in turn, activates accelerators and spillovers (see below); 3) private investment in the digital and green transformation is activated, and institutions facilitate the impact of reforms and allocation processes; 4) public-aggregate demand fills the output gap that may arise; 5) the impact of structural reforms, depending on the policy mix, may sustain acceleration.

We now look at some simulations of the possible impact of NGEU, relying on estimates produced by international organisations (Bankowski et al. 2022). The impact of NGEU is reflected in higher-potential output. The initial impact is largely due to investment, but, eventually, the contribution of TFP becomes the most relevant one by far.

In terms of the performance of NGEU, public investment would impact relatively more on acceleration (especially from the demand side of investment) while structural reforms would impact more on the sustainability of growth effects. This framework implies that the public-investment channel impacts directly on GDP growth while private investment and structural reforms impact on TFP and, hence, indirectly on GDP.

### 6.4.1 Public Investment

Demand effects of NGEU may be significant in the short run. They also facilitate structural-reforms implementation with benefits for supply that build up in the long-term. At the same time, as already mentioned, early implementation of structural reforms facilitates the impact of public investment.

The impact of NGEU on supply is not only such as to increase productive capacity, but it also creates the conditions to change the composition of supply towards a more digital and environment friendly configuration.

Within this framework, Member States allocate resources according to their specific priorities. Green investments are particularly prominent. Public investment impacts as a demand factor in the short-term but with multiplier effects that are particularly relevant for smaller countries.

Openness may be a decisive factor for the sustainability of accelerations. The deeper the economic integration among Member States, the larger are the spillover effects. Such effects are larger for smaller economies, given their relatively greater degree of openness. They also materialize in the early stage of the policy cycle.

Spillover effects are also present in the case of structural reforms. There are visible differences in the GDP response to public investment across Member States and financing instruments. GDP response depends on the content of public investment and on its financing characteristics. Evidence suggests that grants are used to finance shorter-term measures, while loans tend to be used to finance measures which impact

more prominently on long-term growth. Finally, peripheral countries benefit more from public-investment boost. The impact on private investment depends primarily on the effectiveness of incentives.

#### 6.4.2 Structural Reforms

The impact of structural reforms on GDP is more articulated and requires analysis of several aspects including the definition, functioning, and policy implications.

The quality of institutions helps (in part) to explain long-term growth performance in EU countries and elsewhere because these institutions impact on the effectiveness of investment and of allocation, as discussed above.

Growth accelerations are more likely when the spark-off is generated by a basket of policies. Combining reforms with expansionary macroeconomic policies, but also micro-policy measures, creates synergies to mitigate adjustment costs. This is the more important as reforms might entail transitory costs, such as temporary negative-demand effects or redistribution among segments of the population. A credible implementation of reforms allows future reform-driven income gains to be brought forward, as well as improving expectations of future benefits, thus mitigating short-term costs. The credibility of institutions that kick off reforms may contribute to enhance initial reforms-related gains. More generally, as shown by the literature, the acceleration, coordination, prioritization, and sequencing (or packaging) of reforms can generate benefits from complementarities and synergies.

However, the 'Structural Reform Cycle' (the sequence of steps that are needed to fully implement a reform measure) may be very long and difficult to complete. It follows that near-sighted politicians may find no interest in launching the process for structural reforms. The cycle begins the moment in which new legislation is introduced and approved by Parliament, to be followed by the adoption of administrative measures, their implementation, and possible revision. Consequently, it takes a long time for public opinion to appreciate the benefits of reforms (if it ever does at all).

The interaction between structural reforms and public investment is a key driver of acceleration in the implementation of NGEU. The 'impact stage' relates to the impact of reforms on the behaviour of firms, households, stakeholders, or entities exposed to the reforms, reflecting the change in incentives which the reform (should) produce. The very final stage implies firms' and households' (possible) perception of the reforms as having improved or degraded individual welfare. Possibly (but not necessarily) such perceptions may lead to an increase or decrease in approval and political support for the Government considered to be responsible for the change. In an integrated environment, national-reform programmes can generate significant spillover effects. This effect would add to the impact of public-investment and related spillovers we have discussed above. Note that the time horizon for the full benefit of reforms to materialize is quite long.

Last but not least, structural-reform programmes are very much country specific, reflecting national institutions and preferences. As such, there is no general policy recipe that can be applied to all countries without adaptation to national features.

### 6.4.3 Financing Needs and the Role of Private Investment

We now look at the financing mechanism for both public and private investment. Public investment in NGEU is financed through debt or grants. The cost of financing reflects the market reaction to the decision to launch the programme. Note that a virtuous circle may develop as follows: the announcement of NGEU, to the extent that it is credible, produces a positive impact on financial markets that, then, translates into a lower-interest rate and spreads.

The debt issuance that finances NGEU produces a decrease in financing costs which is self-fulfilling, as long as the operation is credible. This, in turn, implies that the design and implementation of NGEU projects are consistent with the mission of the overarching project. In terms of impact, an increase in government consumption has the most visible effect on private investment. Underpinning the NGEU, in this respect, is the temporary mechanism SURE—Support to mitigate Unemployment Risks in an Emergency. This scheme for financing, through the issuance of European bonds that are guaranteed by the EU budget, provides the required encouragement.

We now turn to consider private investment as green investment. Two symmetrical issues need to be addressed: to what extent is the private sector interested in investing in climate change, and to what extent are private investors interested in financing green activities?

Beginning with the first issue, EIB evidence shows that companies respond positively to investment in climate activities to the extent they have set climate targets, are energy intensive, have energy-cost concerns, and have adopted digital technologies. Other, less-prominent factors that affect companies' responses to green activities include their size and their adoption of advanced managerial practices.

Obstacles to green investment are also to be considered. Such obstacles include uncertainty about environmental regulation, lack of skilled staff, cost of investment, uncertainty about regulations referring to new technologies, uncertainty about climate change, lack of green finance. It is worth noting that, for all specific factors, the obstructing factor is stronger in the EU than in the USA. More generally, patent counts and research and development expenditure follow an upward trend and are highly correlated. The correlation is somewhat less pronounced in the USA. However, the share and count of energy-related startups in the USA and EU have been steadily declining in the decade 2008—2018. This is consistent with the declining dynamics of TFP.

The financing needs requested by the green transition are overwhelmingly larger than those provided by NGEU. Capital markets must provide private resources. And

public policy must provide incentives to invest in green technology. The new climate strategy also requires new green technologies to fill the gap between the EU and the USA. More homogeneity could provide a boost to green investment. Currently, there is great heterogeneity across EU countries both in propensity to green innovation and in the use of green policies. The policy instruments impacting on performance are carbon taxes, research-and-development investment, and the mix between equity and debt (although debt finance seems to be ineffective in stimulating green innovation). Public policy can have a significant role in stimulating private investment by acting on the variables mentioned above. But this needs to be enacted at EU rather than national level: the banking channel which prevails in the EU is only modestly efficient in stimulating and sustaining innovation. At the same time, the Banking Union and Capital-Market Union are making little progress (Aghion et al. 2022).

Some progress is being made in green financing but a slow pace. In spite of increasing private-sector interest in ESG investment (Baker et al. 2022), in the case of public investment a virtuous circle of positive expectations about the success of NGEU could kick off and lead to an increase in private investment

## 6.5 Summary and Conclusions

The EU has been impacted by multiple crises due to economic and geopolitical drivers. These have had ‘scarring’ effects and may lead to fragmentation with serious and permanent consequences. Policy responses to prevent these consequences are made more difficult by the background of secular stagnation. We have looked at this issue by considering EU growth as a process based on a sequence of accelerations, sparked off by institutional changes and the ensuing structural breaks. Such acceleration episodes must be sustained with further policy measures. The main response strategy is the NGEU—a mechanism based on public investment and structural reforms. It should deliver sustainable growth and structural change that allows the European Union to exit the multiple crises (pandemic, geopolitical, energy-inflationary) and to move closer to a twin-transformation (digital and green) path, reverting the drift towards secular stagnation.

The response to the crises takes place within a framework of long-term growth characterised by different phases of convergence (and, at times, divergence) but being generated by one, very general, growth ‘model’. In its bare bones, the long-run growth of the EU economy is based on two long-term drivers: (i) institutional change and (ii) total-factor productivity. Growth is amplified by the endogenous component of TFP, as firms invest in innovation and productivity-enhancing activities.

A framework of secular stagnation is identified by the decline of  $r^*$ , the natural interest rate. The drivers of  $r^*$  are linked to demographics and structural impediments; these are also reflected in a declining TFP. However, secular stagnation affects EU countries and sectors differently, with southern-EU Member States suffering more. This

imbalance means that, other things equal, supporting investment is more difficult in Europe than in other economic regions, given the obstacles to investment that a low  $r^*$  indicates. These effects are exacerbated by the impact of multiple crises. Nevertheless, a successful implementation of the reforms associated with NGEU should contribute to a reversal of the trend in  $r^*$  and secular stagnation, thus providing policy space, both monetary and fiscal.

NGEU is based on public investment and structural reforms, but a third pillar should also be considered to provide incentives for private investment. Public investment impacts as a demand factor in the short term. It produces a boost to growth which is amplified through spillover effects, both in investment and in structural reforms. The deeper economic integration is among Member States, the more strongly these positive effects can occur.

Over the longer term, the major impact of policy measures is on the supply side. This impact has both an aggregate dimension, feeding potential and actual growth, and a sectoral dimension, which supports the twin transformation. Therefore, higher growth is obtained through structural change, facilitated by structural reforms.

The life cycle of structural reforms is generally quite long. The reform cycle describes the steps that need to be completed before the reform policy is translated from a political decision into an implemented policy with visible outcomes. Tradeoffs may arise between the duration of the reform cycle and the intensity of policy impact. Usually, reforms come in packages. Complementarities across reforms may generate positive-scale effects. However, growth-acceleration literature clarifies that packages and structural gaps are country specific (Hausmann, Pritchett, Rodrik 2004).

NGEU is an effective policy tool, provided it acts through policy packages of public investment and structural reforms and allows time to complete the reform cycle. Its effectiveness must be seen in the context of a new policy mix fit to address the multiple-crises framework. Such a policy mix should include the following items:

- a) Monetary policies that stabilize inflation while avoiding financial stress;
- b) Policy packages that are country specific and implicate the whole of the government;
- c) A long-term perspective able to see benefits that are not immediate. This requires careful management of the transition phase to ensure it includes changes in the policy mix that are less expansionary in monetary and fiscal policy but are more supportive of the structural agenda;
- d) Policy actions, both in investment and in structural reforms, that encourage the enhancement of benefits by spillover effects through EU countries. This will become more likely with the further opening of the EU economic space;
- e) An openness to redesigning the EU fiscal framework. Irrespective of whether NGEU will be confirmed as a permanent instrument, it provides a convincing case of a policy built on a structural-conditionality system;

- f) Incentives that can spark off private-sector investment and structural reforms but also minimize the misallocation of such investment;
- g) Public-investment financing through the issuance of new European debt, provided such debt can deliver sustained growth. Private investment can be financed through financial markets as climate- and digital-related investment meet the interest of investors and households;
- h) The increase in potential output generated by NGEU must, in the long term, be matched by an increase in demand from EU institutions;
- i) The policy mix must include plans to reconstruct international-cooperation regimes to push back fragmentation. The conditions for cooperation with multiple actors are: few key players, repeated interaction to create mutual trust, the ability to adjust preferences. Finally, club-format agreements must be encouraged as a strategy to aggregate preferences among likeminded countries and, consequently, reverse stagnation pressures.

To conclude, Europe's exit from the multiple crises requires a new policy mix. Monetary policy will continue to provide price stability, while taking into account the impact on financial stability. NGEU should be the main driver of growth. Fiscal policy should be reinforced by establishing a central fiscal capacity. On a broader level, action is needed to reinforce the global-policy regime with a cooperative approach to fight fragmentation and escape stagnation. Europe should play a major role to support global cooperation.

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