Insights from the EIB Annual Economics Conference 2022: Accelerating transformation

EIB Annual Economics Conference jointly organised with OECD, Columbia University and SUERF

Conference Report

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Executive Summary

How can we speed up the digital and climate transition, whilst recognising and mitigating the asymmetric impacts of the transition? This was the topic of the 2022 edition of the EIB's Annual Economics Conference 2022, organised in cooperation with Columbia University, the OECD and SUERF (The European Monetary and Finance Forum). It brought together the perspectives of policymakers, academia, business and finance, and of Chief Economists from different private and public sector institutions.

The pandemic transformed the economy: in particular, it prompted many firms in the EU to become more digital. Some firms have developed new products and a few have shortened their supply chains. Policy support went largely to those firms that needed it, reduced the probability of their default, and supported their investment plans. Firms delayed climate-related investment but the share of firms planning to invest in climate-related measures increased. In aggregate, therefore, the picture is, so far, positive. But divergences and asymmetries remain an issue, among firms, sectors, and countries.

The pandemic also transformed EU policy making. Policy programmes placed more emphasis than before on ensuring that EU Member States feel as owners of EU-wide policies and that they are committed to change. This was particularly evident in the design of the key EU policy support programme, the Recovery and Resilience Facility. National investments and reforms were chosen by each member state. Quantitative targets for green and digital investments ensure that key European reform targets are reflected in national plans. Funds from the Facility will be paid out only if investment and reform targets are achieved.

The amount of investment needed to reap the benefits of the green and digital transition are huge. Public and private investment have to complement each other. This calls for continued policy focus on public investment and for increased efforts to catalyse private investment. The impact of fiscal support programmes on private investment and GDP growth will be much higher if the programmes are well implemented and if structural investment barriers are reduced at the same time.

Mobilising sufficient private capital for the green transition remains a challenge. Innovation and economic transformation are important. By their nature, innovative projects are risky and illiquid. Retail investment funds with their mainly short dealing cycles are not well placed to channel funds towards long term, illiquid investments. Banks might find them too risky. Banks, including the EIB, are therefore involved in making such projects bankable by structuring cash flows at the project level to investors' needs. Securitisation markets should be revived to scale up this approach and to allow smaller investors to diversify their exposures.

The continued availability of public funds for the green and digital transition depends on the reinforcement of fiscal governance. Several speakers expressed concerns for the risk that abrupt fiscal consolidations might lead governments again to de-prioritise public investment. Discussions about the desirable degree of flexibility in the Stability and Growth Pact's rules are ongoing, with multiple proposals. Raising the debt limit appeared justified because long-term interest rates had declined since the limit was calibrated. Excluding some types of public investment might help to promote public investment. Any reform would need to be future-proof: frequent adjustments would reduce the effectiveness of the rules.

The following sections contain a summary of each speaker's key points.[1]

Day 1, January 12

Werner Hoyer (President, EIB): Policy priorities during and after the pandemic

EIB President Werner Hoyer opened the conference by stating that this crisis has been tough, but the policy response to it has been quite remarkable. Investment got back to pre-crisis in less than 2 years, compared to a decade after the financial crisis. However, despite these positive developments, he stressed that we have to remain cautious in our assessment as the pandemic is still not over and continues to be a source of great uncertainty. And uncertainty is a threat in particular to the long-term investment needed to tackle structural challenges like climate change, digitalisation and the competitiveness of Europe's economy. He emphasised the importance of high-quality, forward-looking public investment, which play a crucial role in creating the enabling conditions to catalyse action by the private sector. He concluded that we have seen some positive developments in the last year on the economic front in Europe and to re-inforce this momentum, policy priorities need to be get straight. In his view, this means, first to double down globally on the fight against COVID-19; second to remain conscious of pockets of vulnerabilities in the European economy as broad-based public support measures are scaled-down; third to make sure that political and regulatory environment is consistent with the modernisation course; and fourth, to prop-up targeted policy support in key areas of strategic importance for the European economy – like climate, innovation and development.

Debora Revoltella (Chief Economist, EIB): The recovery as a springboard for change – Highlights from the EIB Investment Report

Based on the impact of the pandemic on individuals, firms and counties in the EU, the EIB Investment Report 2021-2022 discusses how to use the recovery as a springboard for transformation. Ms Revoltella stressed that policy support has been crucial for the recovery but that despite this support the crisis is not over. Vulnerabilities and risks of asymmetries persist, while the capacity of firms and people to adopt to the new normal has still to be tested.

The pandemic prompted many firms in the EU to become more digital. Some have developed new products, and a few have shortened their supply chains. Policy support went largely to those firms that needed it, reduced the probability of their default, and supported their investment plans. Firms delayed climate-related investment but the share of firms planning to invest in climate-related measures increased. In aggregate, therefore, the picture is quite positive. But at the same time, asymmetries remain an issue. Southern Europe was hit more and has not yet fully recovered from the pandemic, and firms in Southern Europe appear more vulnerable than those in other parts of the EU.

[1] This summary was prepared by **EIB Economics staff** (Alfredo Baldini, Andrea Brasili, Peter Harasztosi, Laurent Maurin, Peter McGoldrick, Fotios Kalantzis, Atanas Kolev, Désirée Rückert, Simon Savsek, Jochen Schanz, Christoph Weiss, and Patricia Wruuck). Unless indicated otherwise, statements attributed to individual conference speakers should not be interpreted as quotes.

The amount of investment needed to adapt to the new normal and to reap the benefits of the green and digital transition are huge. Public and private investment have to complement each other. This calls for continued policy focus on public investment and increased efforts to catalyse private investment.

Panel I: Did the pandemic serve as an opportunity to accelerate transformation in Europe?

Moderator: Gelsomnia Vigliotti, Vice President, European Investment Bank

Panellists: Robert Koopman, Chief Economist, World Trade Organisation
Pier Carlo Padoan, Chairman, UniCredit Board
Peter Praet, former Member of the Executive Board, European Central Bank
Mario Nava, Director General, Structural Reforms, European Commission

Gelsomina Vigliotti (EIB) introduced the panel discussion. The pandemic has added pressure to existing structural trends, in particular digitalisation and the green transition. It has also reinforced the need to deal with low productivity, slow cohesion, and skills gaps. That said, the policy response has also provided the means for accelerating transformation and addressing long-lasting weakness.

Mario Nava (European Commission) thought that the pandemic not only accelerated existing economic changes but also transformed policy making at the level of the EU. More emphasis than before has been placed on ensuring that EU Member States are owners of EU-wide policies and that they are committed to change. This was particularly evident in the key policy support programme, the Recovery and Resilience Facility. Member States selected reforms and investments and committed to them. Funds from the Facility will be paid out if investment and reform targets are achieved. The European Commission provides technical support as requested. Quantitative targets for green and digital investments ensure that key European reform targets are reflected in national plans. Nava also emphasised the positive spillovers of each member state implementing the RRF reforms for the rest of the EU.

In **Peter Praet**'s view, the biggest scar from the pandemic is on human capital, in particular for the young generations. The pandemic hit societies after a succession of systemic shocks in a decade: the Global Financial Crisis, the Euro Sovereign Crisis, and broad (geo)political developments, in particular the decline in multilateralism. These shocks demonstrated the critical role of the state in crisis management and that power does matter in such environment. But they also revealed lack of preparedness, underinvestment in essential public goods (security, resiliency, sustainability) and the incompleteness of European integration.

The pandemic also showed that there is a big demand for public goods. This demand may further increase, as the uncertainty on the effects of the green transition on potential growth increases this demand relative to private consumption.

The transition to net zero in a relatively short period of time will add to the number of unresolved issues in our societies. It is likely to have a major impact on the economy as a result of accelerated obsolescence of the capital stock, reallocation of labor, relative price changes. As the consequences on potential growth and inflation are highly uncertain, financial conditions may at times become stressed in a situation of high public debt in a number of countries.

The reinforcement of economic governance will be essential, also to allow a smooth exit of the ECB from the exceptional measures taken during the pandemic crisis. A looming high demand for public goods requires higher government investment, so the Stability and Growth Pact should probably include some protection for government investment, but there are limits. Care should be taken in defining what exactly is protected.

Pier Carlo Padoan (Unicredit) concentrated on the role of banks in the European transformation. This transformation is centring around two areas: Digitalisation and the attainment of ESG objectives.

Banks should understand their customers' needs. This involves collecting and rationalizing data. Banks should go back explicitly to their historical role - financial intermediary reallocating finance and channelling public funds towards the real "green" economy. By doing that they maximise social welfare.

Public and private investments should be integrated. NGEU is a step in this direction as it requires both public and private investment. Completing the capital markets union will help with additional finance for both investments.

Robert Koopman (WTO) focused on the effects of the pandemic on trade and global supply chains. Trade bounced back in 2021, ahead of GDP. It played a critical role in vaccine production and distribution. It has been driven by a sizable demand shock emanating mostly from North America and, to a lesser extent, from Europe.

Global supply chains shaped these dynamics. They appeared less flexible than thought. One reason is insufficient digitalisation. Trade has been diverted during the pandemic but reshoring has been rare. Some 3D printing has moved closer to consumer markets, but only to a small extent because of costs. Nearshoring is still seen as a better option to re-shoring.

The role of Europe in global value chains remains sizeable despite the rise of China, due also to nearshoring. This applies both to demand and supply side and both goods and services. A further deepening of this process is expected, opening a lot of opportunities for Europe. For this to happen, domestic and international policies need to be well coordinated.

Robert Koopman found the carbon border adjustment mechanism (CBAM) contemplated by the EU as interesting and controversial. Perhaps the EU's discussion about CBAM will spur action at the multilateral level. Finding a cooperative solution would be the better option but may not be easy to bring about. The WTO would be an appropriate forum.

Panel II: Debt, Fiscal vs Monetary policy – the way forward

Moderator: Ricardo Mourinho Félix Vice President, European Investment Bank

Panellists: Laurence Boone, Chief Economist, OECD
Marco Buti, Head of Cabinet, Commissioner Gentiloni, European Commission
Vitor Gaspar, Director, Fiscal Department, International Monetary Fund
Klaus Regling, Managing Director, European Stability Mechanism.
Moritz Schularick, Professor of Economics, University of Bonn

The panel provided a lively exchange of views on the effects of the pandemic on debt and growth and debated what lessons can be drawn to coordinate fiscal and monetary policies.

Mourinho Felix (EIB) introduced the panel discussion, highlighting that to counter the impact of the pandemic, policymakers in the world and the EU succeeded in aligning fiscal, monetary, and prudential policies to support their economies during 2020 and 2021. Both monetary and fiscal policies were outright expansionary. Macro-prudential policies could be used countercyclically to support bank lending. The 2021 EIB Investment Report shows that firms in EU clearly benefited from policy support, and that over half of firms received some kind of support in the form of guaranteed credit, support for social security contributions or deferred payments. Financial support tilted towards firms facing greater declines in revenue and financial constraints did not emerge to be major investment barriers.

Laurence Boone (OECD) presented evidence on global growth, expected to mean-revert to pre-crisis rates after the pandemic shock, and on a pro-cyclical bias in fiscal policy in EU countries (i.e. providing fiscal stimulus during good times rather than in bad times), despite the existence of fiscal rules which should favour countercyclical fiscal policies. Based on this evidence, she argued that fiscal authorities should review their public finance management frameworks by enhancing the stabilisation function of fiscal policy and by allowing different speeds of adjustments toward a common debt target.

Marco Buti (European Commission) described the last two decades of European Monetary Union (EMU) monetary-fiscal interactions through the lenses of a trilemma policy triangle between national fiscal policy (constrained by asymmetric fiscal rules), monetary policy (lately constrained by the inability to lower policy rates significantly below zero), and the lack of a central fiscal capacity. Using this framework, Mr Buti highlighted three periods in the EMU history: weak monetary dominance during the 1999-2008, followed by a relative fiscal dominance (orthodox fiscal policies) during 2008-1019, and finally congruent policy mix during the pandemic shock period (2020-21). Looking forward, Mr. Buti argued that coordinating national and EU budgets would help ensure an adequate fiscal stance and avoid the overburdening of the single monetary policy. The large funding from the Next Generation EU program would provide the first opportunity to do so.

Vitor Gaspar (IMF) presented stylised facts on fiscal policy and economic developments after large negative shocks by comparing different crises. He stressed that this time (with the pandemic shock) not only public debt has risen to very high levels in the euro area (reaching almost 100 % of euro area GDP) but there was also a remarkable increase of household debt, thereby increasing the risks of future bailouts from the public sector if these debts will not be repaid. He concluded that over the medium term, public debt is projected to decline as the economy recovers to the pre-COVID growth path and budget deficits decline. Nevertheless, debt is projected to stay high at about 95% of GDP.

Klaus Regling (ESM) shared Mr Gaspar's views on fiscal sustainability, which has been weakened by the pandemic shock, and offered his views on how to reform of the EU Stability and Growth Pact (SGP). While acknowledging the benefits achieved by the SGP in the last two decades of enforcing and containing budget deficits across the EU membership, Mr. Regling affirmed that the SGP remains crucial for cohesion in the monetary union and that countries with relatively high debt ratios should adjust their fiscal policies in such a way that the debt remains sustainable. However, the secular decline in the equilibrium real interest rates and current very low market rates have created fiscal space to sustain higher public debt. As a result, the SGP's debt ceiling could be raised (from 60 to 100% of country's GDP) but the 3% deficit rule should be maintained. Mr. Regling concluded that reforming fiscal rules is just one undertaking among many that are critical to our shared success, such as: the creation of a banking union and a capital markets union; the strengthening of the international role of the euro; enabling investments in climate-friendly technologies and in digitalisation; and strengthening convergence in the euro area.

Prof. Schularick (University of Bonn) discussed the alternating fortunes of fiscal and monetary policy in stabilising the economy over the past half century. More recently, monetary policy has played an important role in the allocation and redistribution of resources with the various asset purchase programs and waves of quantitative easing in directing liquidity towards SMEs. The role of the central bank is to avoid both inflation and deflation, but also prevent self-fulfilling sovereign debt panics and to buy time for the member states that will then be able to spread the cost of the crisis over a long period.

The ensuing discussion highlighted the risk that an early tightening of monetary policy to reduce inflation might stifle the growth rebound in the EU and discourage much needed private and public sector investment due to higher interest rates. Panellists also reasserted the crucial importance of Next Generation EU to help structural convergence within EU area, rather than being used as a stabilization tool.

Charles Michel (President, European Council): We need to remain the masters of our own destiny

President Michel highlighted a number of challenges faced by the EU, including COVID, climate change, digital, geo-strategical competition and security threats. In such a challenging environment, it will be critical "to remain the masters of our own destiny" and respond to these challenges decisively. Strengthening the internal market will be crucial to shape tomorrow's economies, backed my massive investment, both private and private, to make economies greener and more digital and inclusive. The focus is shifting to the recovery, which provides a unique opportunity for transformation and innovation, as well as "to make peace with our planet by switching to a carbon neutral growth paradigm" and to advance the digital agenda. Clear policies and regulations will play an important role in this respect, as well as the Next Generation EU package of policies, where the role of the EIB remains paramount.

To make Europe a global economic and political leader in the 21st Century, three areas will be crucial. First, the internal market, the foundation of Europe's prosperity, needs to be empowered. Second, Europe needs to mobilize adequate finance for the real economy, taking into account the EU's priorities. Third, economic governance, should strike the right balance between sustainability and stabilization. "Europe is stronger when our partners are stronger", Michel said, and therefore the support to the EU's partners, such as Africa, remains particularly important. Finally, Europe has two paramount assets, the single currency, and the people. Those should "fill us with pride and confidence". Further investment into people's skills and talents will be needed to respond to the challenges and the opportunities of the "new world that is unfolding before our eyes", the President said, taking time to answer some of the questions from the audience, thereby closing the conference.

Day 2, January 13

Ricardo Mourinho Felix (Vice President, EIB): Financing the green transition

Ricardo Mourinho (EIB) noted that climate and the green transition would take a central place in the discussions during the second day. He emphasized that the massive change that the green transition entails is an opportunity to make the EU economy more vibrant, dynamic and innovative. The investment associated with this change will require the mobilisation of large funds and allocating them efficiently. Financing the green transition thus becomes a challenge of its own. The EIB, the EU Climate Bank, is a world leader in green financing. The EIB is transforming along the lines set forth in the Climate Bank Roadmap, published in 2020. Commitments detailed there include allocating at least 50% of its finance for Climate Action and Environmental Sustainability by 2025. By 2030, the EIB aims to mobilise EUR 1trn in climate action investments. In addition, the EIB Group has aligned all its financing activities with the goals and principles of the Paris Agreement.

Panel III: Asymmetric Impacts – Are Europe's economies converging or diverging?

Moderator: Debora Revoltella, Chief Economist, European Investment Bank

Panellists: Pablo Hernández de Cos, Governor, Bank of Spain
Catherine L. Mann, External Member, Monetary Policy Committee, Bank of England
Frank Smets, Director General Economics, European Central Bank
Boris Vujčić, Governor, Croatian National Bank

Debora Revoltella (EIB) introduced the panel discussion, highlighting the positive role of the policy response so far. Ms Revoltella also stressed some risks during the recovery. The propagation of the macroeconomic shock across European economies results in differing effects across sectors and types of firms. Some countries are more affected and more vulnerable given their initial higher indebtedness. The nature of the policy support also differs across countries, affecting the capacity of national economies to rebound: firms that have to repay debt, whether or not guaranteed, are likely to have less financial room for investment than those benefitting from subsidies. There is evidence that divergences between the best and the worst performing firms widened after the crisis. Finally, the recovery is clearly uneven outside Europe.

Catherine Mann (Bank of England) emphasised that the asymmetric impact of the pandemic lead to spillovers between economies. Spillovers from the highly expansionary US policy response fuelled the worldwide demand for products. Given the limited supply elasticity in the short term, the strong global spillovers result in bottlenecks, whose effects propagate through global value chains and increase inflation. Besides, the strong rise in energy prices also contribute to raise the outlook for inflation.

Frank Smets (ECB) stressed the role of policies in Europe in preventing the scarring effects that followed the previous crisis so far. First, the ECB's Pandemic Expenditure Purchase Programme compressed term spreads, by up to 60 bps at the ten years horizon. Public credit guarantees and the ECB's Targeted Longer-Term Refinancing Operations supported the supply of corporate credit. Fiscal policies dampened the heterogeneous impact of the pandemic and supported the financial liquidity of firms.

However, the risks of scarring effects have recently increased. In this context, it is key to make policies more targeted and to address the longer-run structural issues such as by improving the efficiency of resource reallocation and by facilitating the structural shift towards digital technologies and greening of production.

Mr Smets also drew attention to the asymmetric effects of the pandemic across countries and regions. In Europe, the poorest regions did relatively well, while the Mediterranean countries were most hit. The high share of contact-intensive services in Mediterranean countries contributed significantly to this heterogeneity. That said, forecasts for economic growth suggest that economic convergence will resume.

Pablo Hernández de Cos (Bank of Spain) Pablo Hernández de Cos (Bank of Spain) discussed whether the European policy response to the pandemic might become a blueprint for tackling future divergences. The pandemic had a more profound economic impact on economies most dependent on the services sector that entail more social interaction and it could cause some structural changes in demand in some sectors, due for example to further progress in digitalisation. Next Generation EU (NGEU) funds are, in principle, the right tool to tackle both cyclical and structural effects of the crisis since hard-hit countries will receive more funds in per capita terms, and funds are conditional on the implementation of structural reforms. The final impact will depend crucially on the correct implementation of these investments and reforms: there is indeed evidence that structural reforms can increase the effect on GDP of investments financed by the EU's structural funds and the conditionality of the transfer of the EU funds on introducing proper structural reforms is also a unique opportunity to have these reforms done and, in this way, maximize the impact of the use of NGEU. Particular challenges are the absorption capacity of EU funds and their allocation, which is concentrated in some sectors that already suffer from supply constraints. Moreover, the success of the NGEU programme will help deepen the euro area monetary union by increasing risk-sharing in the EU and because the issuance of European debt will alleviate the scarcity of safe assets in euros. But NGEU cannot and should not be seen as the cyclical stabilization mechanism that the euro area needs as a complement to the Eurosystem's single monetary policy as it remains very limited compared to that of individual EU countries and more developed fiscal-federal systems, as in the United States. A permanent macro stabilisation mechanism should have taxation power, sufficient size and the capacity to issue debt.

Boris Vujčić (Croatian National Bank) focused on asymmetries in Central and Eastern Europe. In these countries, convergence has continued, with 2021 GDP being above 2019 in all but one economy. Exports proved very resilient. Sectoral asymmetries, however, exceed substantially those occurring during a typical (balance-sheet driven) recession. For corporates, fiscal subsidies effectively turned fixed costs in variable costs, thereby supporting operating margins and the economic rebound. Regarding NGEU, conditionality matters to increase the effect of the support. The fiscal framework should enable convergence.

Panel IV: The climate transition as a driver of change

Moderator: Laurence Boone, Chief Economist, OECD

Panellists: Laura Cozzi, Chief Energy Modeller, International Energy Agency
Jos Delbeke, EIB Climate Chair, European University Institute
Ambroise Fayolle, Vice President, European Investment Bank
Sylvie Goulard, Deputy Governor, Bank of France
László Varró, Vice President, Global Business Environment, Shell

Laurence Boone (OECD) introduced the panel discussion by highlighting the importance of climate change in the global policy agenda and the huge amount of investments that are needed to transform all economies and tackle climate change. A transformation process that will affect all stakeholders and every aspect of our lives. Therefore, she suggested taking advantage of the experience gained from similar situations in the past, such as the automation process, to plan better, provide incentives for green investments, and tackle asymmetric (distributional) effects across sectors and countries.

Laura Cozzi (IEA) agreed that climate change and the energy transition will be crucial in the next years. In her view, the good news is that for the first time in COP26 countries, which account for 99% of global CO2 emissions, have agreed to take actions to reach a net-zero emissions around mid-century. Also for the first time, it is expected that in 2022, economic growth will coincide with an overall decrease in global CO_2 emissions. Still, more climate actions are needed, as the current clean energy and infrastructure investment represents only a third of the investment required in these areas to reach climate objectives. Advanced economies and Europe have directed investment flows towards sustainable activities, through initiatives similar to the European Green Deal. Private capital needs to follow the lead of public investment.

Jos Delbeke (EUI) opened his remarks by highlighting the biggest achievement of COP26, which is the pledges of the most important players, including G20, to contain the expected increase in global temperature within 2° C, down from 3° C before the climate summit. However, it remains to be seen whether these pledges will materialize, given the alarming signals stemming from the disagreement to phase out coal power plants. High energy price inflation makes this strategy more challenging, even in Europe. It is thus fundamental to focus on supporting the transition of the construction and infrastructure sectors, which make up for a large share of total emissions. Policymakers should make a deliberate effort to keep the transition going despite the inflationary effect of higher energy prices. Revenues from the rising carbon prices could be used to address social concerns. Prof Delbeke argued in favour of more comprehensive and proactive economic policies, like the European Green Deal, to drive climate action and to scale-up investment in low-carbon innovation.

Ambroise Fayolle (EIB) presented the EIB's targets concerning climate financing, both quantitative (increase the share of financed projects related to climate transition from 25% to 50% by 2025) and qualitative (alignment of counterparts and projects with the Paris agreement). Mr Fayolle provided examples (French chip designer MENTA) for how the EIB contributes to achieving the EU Green Deal, by helping to take off the ground risky innovative projects that would not have taken place otherwise. The EIB also aims to ensure support to those lagging behind to guarantee a fair transition. In particular, the EIB would like to support projects more, including by taking on more risk. Many other issues remain to be tackled, like climate adaptation and biodiversity. On a positive note, the engagement of the private sector in the climate transition has been increasing, as observed in COP26.

Sylvie Goulard (BdF) underlined the importance of collective efforts to combat climate change and praised the actions taken by central bankers and the private sector to fight climate change. For example, the Network of the Greening of the Financial System has provided useful insights into the trade-offs between the transition and physical risks and into the climate scenarios that could be used for stress testing. The private sector is the main force that drives the financial market and economic transformation – without its engagement, the climate goals cannot be attained.

The key challenge is to ensure the implementation of what has been promised and to reinforce the debate on climate change. It is important to move from awareness to implementation, despite the cost that this transformation requires. Finally, Ms Goulard underlined that tackling climate crisis goes beyond mitigation and adaptation measures and therefore policymakers need to ensure that finance goes also to other environmental objectives, including biodiversity.

László Varró (Shell) shared his views on the recent trends in the energy markets and climate policy developments. One feature is the asymmetric recovery of demand. Demand for goods has recovered much faster than the demand for services. As a result, the global demand for fuel exceeded its pre-pandemic level despite collapsing demand by the aviation sector.

Global investment in gas and oil has halved in recent years. For instance, Shell does not plan to increase the current level of investment in gas and oil but to pursue investment in green and digital technologies, especially in technologies that will be beneficial in hard-to-abate emission sectors (e.g. carbon capture and storage). There is a strong demand for renewable investment in Europe, but due to non-market barriers the projects do not materialize and hence big investors have started thinking of investing outside Europe in Africa and Latin America. Finally, there should be a stronger reorientation of training towards green skills to tackle the existing skills gap.

The panellists concluded that investment in innovation is crucial for achieving carbon neutrality, especially beyond 2030. Carbon prices are playing a crucial role in scaling up investments in climate and innovation and reducing emissions. Higher energy prices and ensuing inflationary pressures could be tackled by moving faster to a net-zero carbon economy. Addressing the non-market barriers would be important to promote climate action.

Parallel Sessions

Session A: Financing the innovation and the green transition

Moderator: Michala Marcussen, Group Chief Economist and Head of Economic and Sector Research. Société Générale, Vice-President of SUERF

Panellists: Marco Annunziata, Founder, Annunziata + Desai Advisors
Roger Havenith, Deputy Chief Executive, European Investment Fund
Christian Kopf, Head of Fixed Income and Currencies, Union Investment
Jean-Christophe Laloux, Director General Operations, European Investment Bank

Michala Marcussen (Société Générale, SUERF) introduced the panellists and highlighted that companies and governments are already signing up to the challenge of mitigating climate change and are implementing changes in their strategies and investments. Ms Marcussen also noted that the green transition still needs great amount of new investments in new products and infrastructure. All these require finance and support from the EU financial system.

Christian Kopf (Union Investment) pointed out that demand for sustainability-themed financial funds is increasing, and that assets under management are rising. Investors are equally interested in ecological as well as financial returns. However, retail investment funds with their mainly short dealing cycles were not well placed to channel funds towards long term, illiquid strategic investments. The review of the European Long Term Investment Funds regulation might help in this regard. Mr Kopf also pointed out that corporate data on climate change is of inadequate quality hindering evaluations and investments. As a result, concerns about greenwashing were prevalent, potentially leaving non-yet-green industries short of funds to transform. Mr Kopf suggested a co-operation between public and private sector lenders to act for better data quality, for example by using agreed covenants on climate-related information sharing in their products.

Mr Kopf advocated to revive securitisation markets to improve funding for green investments. For green transition investments, SME in bank-dominated countries would typically approach smaller local banks for funding. But these banks might not yet be well equipped to provide this type of funding. Securitization would help to tailor risks to investor needs and would allow even smaller investors to diversify their exposures.

Commenting on inflation, Mr Kopf thought that it was unavoidable that the green transition would lead initially to higher costs as expensive technologies need to be installed. Central banks' mandates might have offer too little room for adjusting to these persistent supply shocks.

Roger Havenith (EIF) thought that much remained to be learned about how to fund the green transition. Public actors have an important role in building up the financial ecosystem, including the equity ecosystem. The EIF's work with a network of 500 banks and 600 venture capital and private equity funds shows the need for clear eligibility criteria and strong incentives brought forward by adequate guarantee rates, substantial risk sharing and clear concepts. However, as the key goal is SME finance, it is important to find eligibility and transparency criteria that do not overburden small firms. For green innovations, the EIF's experience with funding innovation more generally provides good basis to build on. The measurement of impact is key, which calls for experts that are able to evaluate the changes achieved.

Jean-Christophe Laloux (EIB) emphasised the importance of innovation to achieve green objectives. Half of the solutions required to meet green objectives still await invention. Financing this innovation requires offering a mix of financial sources for green financing. Since 2000, the EIB has provided EUR 200bn for innovative projects. Of this amount, climate action has a 40% share. In 2021 this share has reached its highest value ever. For risky green projects, cash flows need to be structure to match investors' risk bearing capacities. The EIB has been involved in such type of financing activity for example for a battery factory in Sweden and for offshore windfarms in Portugal. The EIB finances the green transition globally. To meet local demands, it is developing a specific structure for operations outside the EU.

Marco Annunziata (A+D) agreed that there are still a number of missing technologies to be invented, but added that policy should take an agnostic stance. Selection among technologies should be left to engineers. Funding for innovation was still scarce, in particular equity financing for small companies. Funding needs appeared particularly large in energy infrastructure, including in emerging markets. Fintech can facilitate access to more diverse sources of finance.

Mr Annunziata also noted that the recent inflationary pressure may negatively impact the public perception of the green transition effort and raise policy uncertainty.

Session B: Public versus private sector – catalysing investment

Moderator: Giorgio Barba Navaretti, Professor of Economics, University of Milan

Panellists: Ana Fontura Gouveia, Economic Adviser, Office of the Portuguese Prime Minister
Christopher Hurst, Director General, Projects Directorate European Investment Bank
Gerassimos Thomas, Director General, Taxation and Customs Union, European Commission
Fritzi Koehler-Geib, Chief Economist KfW.

In his opening remarks, **Professor Navaretti (University of Milan)** mentioned the asymmetric nature of the pandemic shock in particular for regions, sectors, and incomes. Prof. Navaretti also noted the importance of having the adequate skills and technical capacities to implement the investments needed to tackle successfully the challenges of climate change and digitalisation.

Christopher Hurst (EIB) noted that the EU has 25 years to transform its economy from a carbon-powered one to one powered by renewables. At prevailing rates of energy consumption, the transition to net zero carbon emissions will need to rely on technologies that remain immature to date: 1/3 of these are in early stage development and 40% remain to be adopted. At the same time, we need to speed up climate change adaptation to protect existing assets. The negative impact of climate change is increasing, notably via incidence of extreme weather and related severity of damage. The annual required investment according to IEA is EUR 4tn and 1/3 should be public and the rest – private. The public sector faces important challenges to facilitate early-stage commercialisation. For instance, some EUR 400bn are earmarked for the development of rechargeable batteries. Yet, a certain scale is needed in order to compete in this market. Add to this heightened technological uncertainty and one faces considerable uncertainty about the viability of very large investments. Fragmentation of EU regulations and markets hampers the EU's potential.

Picking up the theme of fragmentation of regulations and markets, Prof. Navaretti asked **Gerassimos Thomas (EC)**, how fragmentation can be reduced. To Mr Thomas, fragmentation is part of a broader issue. As Director General for Taxation and Customs, he noted the varied taxation standards and diverse sources of tax revenue in the EU. Tax revenues in the EU are about 40% of GDP. About half of them are taxes on labour. At the same time, taxation faces important challenges climate change and population ageing reduce the labour tax base and increases expenditures. Taxation has to support the green deal by setting the right incentives. This involves the revision of fossil fuels taxation and a shift of subsidies to new technologies. The carbon border adjustment mechanism, necessary to level the playing field for energy-intensive industries, will increase revenue, but it is difficult the gauge the scale of this increase.

Mr. Thomas thought that the EU has various tools to achieve the large investments required by the Green Deal. The largest part would need to be financed by the private sector, with the EU making EUR 600-700bn available to catalyse green transition. Market-based instruments, e.g. Emissions Trading System, are needed to align private sector incentives. These, however, will not be enough to address investment barriers and investment in sectors with hard-to-abate emissions. Therefore, regulation and deployment of taxation measures will be also necessary.

Prof. Navaretti reiterated the importance of aligning incentives to support the required investment, and that this also needs to consider the question of competitiveness. He asked the remaining two panellists, as representatives of national actors, to reflect this in their intervention. **Fritzi Koehler-Geib (KfW)** noted that the German economy is a large manufacturing centre in EU. She stated that while green investment requirements in Germany are substantial, a lot is being done. On the digitalisation front, needs are also large, about twice the current EUR 50bn annually. Additional expenditure requirements are particular large in the manufacturing. In delivering on these, public-private complementarity is essential. While private sector innovation is critical, the number of innovators in Germany is dwindling. One question is to what extent this is a problem of incentives.

The Public sector needs to create a favourable investment environment, be a role model, e.g. energy efficiency in public buildings, and ensure that the wider public accepts the necessity of the transition. Public entities can play central role in shaping capital markets and encourage flows to green outcomes, including via green bonds, development of reporting standards that are not unduly burdensome, anchor standards and fund nascent technologies. One of the barriers to this green financing in Europe are the varying national capital market regulations.

Ana Fontura (Office of the Portuguese Prime Minister) shared the Portuguese experience in fostering innovation. First, SMEs played an important role in generating innovative projects. Financial support helped them to grow. Second, firm-specific support needs to be complemented by structural transformation, via value added creation, high-skills employment and exports. In this regard, Ms. Fontura mentioned that the enrolment in engineering degrees at Portuguese universities had increased significantly. Third, the use of digitalisation enhances interaction and collaboration among innovative firms.

Panel V: Policy support through the crisis – lessons learned

Moderator: Jan Svejnar, Richard N. Gardner Professor of Economics and International Affairs and Director of the Center on Global Economic Governance at Columbia University

Panellists: Agnes Bénassy-Quéré, Chief economist, DG Trésor, Ministry of Economy and Finance, France
Yuriy Gorodnichenko, Quantedge Presidential Professor of Economics University of California Berkeley
Sebnem Kalemli-Ozcan, Neil Moskowitz Professor of Economics and Finance University of Maryland, College Park
Jakob von Weizsäcker, Chief economist, Federal Ministry of Finance, Germany

Agnes Bénassy-Quéré (French Treasury) presented evidence that government support for the private sector in France during the COVID-19 crisis was widespread. The effect of policy measures was independent of firms' productivity. For example, the take-up rates of government-guaranteed loans did not depend on the credit ratings of firms. To weather the economic shock, the guarantee programme allowed firms to increase their net financial debt position. At the same time, there is little evidence that policy support led to zombification in France. The share of very weak firms in the balance sheets of banks did not increase significantly.

Yuriy Gorodnichenko (University of California, Berkeley) highlighted the difference in the policy response between European countries and the US. In Europe, policymakers preferred to keep workers attached to their jobs. For example in Germany, the unemployment rate peaked at only 4% during the crisis thanks to the short working time scheme. The main rationale for such policies is that achieving a good match between employees and their firm can take time and it creates valuable firm-specific human capital that would be lost with a job separation that involves unemployment. In the US, support measures relied on unemployment insurance to help workers leave "bad" firms and find a better job. As a result, the US unemployment rate peaked to almost 15% during the crisis. This raises the question of whether protecting employment and firms can reduce the efficiency of resource allocation. Using EIB Investment Survey data, Prof. Gorodnichenko highlighted that there was considerable heterogeneity in the support to the private sector across EU countries, as some governments were more generous than others. Overall, government support in the EU provided a safety net that ensured weak firms' survival. The longer-run costs and benefits of untargeted policy measures remain uncertain. In particular, it remains to be seen whether policy support helped firms to use digital technology to a greater extent.

Sebnem Kalemli-Özcan (University of Maryland) argued that, despite poor targeting, fiscal support provided enough liquidity to struggling SMEs. Due to the size of the fiscal programmes in advanced economies, the policy support fully offset the impact of the pandemic on SME failure rates. There is no evidence at this point that this created zombies. In emerging markets, fiscal programmes were considerably smaller as a share of GDP and did not save all viable firms. Overall, the fiscal stimulus supported aggregate economic activity by reallocating demand towards sectors with slack and sustaining employment. However, the global spillovers from the fiscal policy support in advanced economies were small: they were positive on employment, but negative on output. Overall, this crisis shows that fiscal policy can address domestic issues, but it requires fiscal space. There are also risks of a global two-speed recovery: with rising global interest rates and risk premia, there could be strong headwinds coming for emerging markets.

Jakob von Weizsäcker (German Ministry of Finance) stressed that decisions on policy measures to support the economy during the pandemic had to be made in real time and under considerable uncertainty. The restrictive measures also needed to gather political and social consensus. Different policy measures have different implications on the distribution of costs to individuals and firms. Some policy support instruments were immediately available, while others needed to be created and it could take time to put them in place. For example, in Germany, loan support to businesses (notably through KfW) and short working time schemes for employees were immediately available. Overall, there is evidence that the hardest-hit sectors in Germany have benefitted the most from "bridging" support programmes. For example, hotels, restaurants, arts and the entertainment sector benefitted more than other service activities, wholesale and retail trade or the agriculture sector. The support was widespread and untargeted, while the number of insolvency proceedings have remained at a low level.

The discussion moderated by **Jan Svejnar (Columbia University)** highlighted that it would have been very difficult for governments to select potential winning or losing sectors from the crisis in the short-term. This was the rationale for untargeted support. All panellists stressed that one binding issue in developing targeted support measures was the lack of data for decision making, namely economic and financial micro-data on households and firms. Governments had to act quickly to save jobs and disburse transfers. Some countries benefited from having national promotional banks that could rapidly deploy liquidity support measures to the private sector. Going forward, policy support will need to be better targeted to be effective: it will have to rely on the private sector to realign incentives. Government may also have a role in restructuring corporate debt. The timely availability of more and better microeconomic and financial data will make a big difference for decision-making.

Luigi Zingales (University of Chicago): Challenges for EU policy in the post-pandemic world

Prof. Luigi Zingales (University of Chicago Booth) argued that the EU has shown that it can act forcefully in moments of crisis and in doing so indicated a path for its future. In order to continue along this road towards sustained change, five key challenges need to be addressed.

The first challenge concerns technology. Prof. Zingales pointed out that due to the special nature of digital technologies (network externalities, reinforcing effects) the gaps observed today, e.g. in digital patents, can turn into large disadvantages quickly, emphasizing the urgency to close them. The second challenge stems from internal divisions. The pandemic has worked to exacerbate some of the pre-existing inequalities across space and across people. To address the latter, a focus on investment in skills, particularly digital skills, is crucial. The EU needs to be mindful not to reinforce divisions across space through prejudices. Public finance is the third challenge and Prof. Zingales cautioned that the requirements linked to existing debt rules might prove incompatible with the functioning of democratic institutions looking ahead, pointing out challenges for EU monetary policy against this background.

The fourth challenge concerns the functioning of democracies. Democracy, according to Prof Zingales, has come increasingly under attack in the Western world for a lack of decisiveness, failures to deliver desired outcomes, but also concentration of power and wealth. Again, the pandemic might have exacerbated pre-existing problems at national and European level, because it has added to the financial burden. The last key challenge is geopolitical as the EU risks being marginalized in an increasingly bipolar global order (US-China). To mitigate this risk, the EU needs to break the technological divide and address the energy divide. On the latter, Prof. Zingales warned about excess dependencies throughout the energy transition but also pointed out at opportunities of EU green technology leadership. However, being able to leverage these is contingent on global action and cooperation when it comes to climate change.

Mathias Cormann (Secretary General, OECD): Policy challenges and the importance of global cooperation

Mathias Cormann (OECD) noted that the recovery from the pandemic shock is well under way with global growth of 4.5% expected for 2022 but substantial downside risks remain. Progress on vaccination efforts globally will be crucial to mitigate these risks.

Mr Cormann stressed the importance of global coordination and cooperation to mitigate the persistent risks linked to the pandemic and to realize a greener and more digital economy that is also fair. Mr Cormann stressed that the recent agreement reached under the auspices of the OECD among some 137 countries on a fair allocation of taxing rights and a global minimum effective tax marks a milestone in coordination.

Mr Cormann recalled the need to step up cooperation on the digital and green transition to leverage transformation opportunities and mitigate the risks of exacerbating divides. Effective steps to tackle regional and social divides need to include a strong focus on universal access to broadband and investment in digital skills. In addition, competition policies need to be adapted to reflect the nature of increasingly digital economies. Furthermore, the pandemic reinforced the need to increase economies' resilience and act on climate commitments. Here, it will be crucial to maintain support by developed countries for climate action in the developing world. Finally, Cormann stressed the role of international cooperation to crowd in finance to accelerate decarbonisation.

Event Website