

EEAG Report on the European Economy 2022 - Economic Policy for the Next Decade: A Changed Role of Governments?

Torben M. Andersen, Giuseppe Bertola, Clemens Fuest, Cecilia García-Peñalosa, Harold James, Jan-Egbert Sturm

▶ **To cite this version:**

Torben M. Andersen, Giuseppe Bertola, Clemens Fuest, Cecilia García-Peñalosa, Harold James, et al.. EEAG Report on the European Economy 2022 - Economic Policy for the Next Decade: A Changed Role of Governments?. 11, CESifo. 2022, pp.87. hal-03995004

HAL Id: hal-03995004
https://amu.hal.science/hal-03995004

Submitted on 17 Feb 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

EEAG
Report on the European Economy

2022
Vol. 21

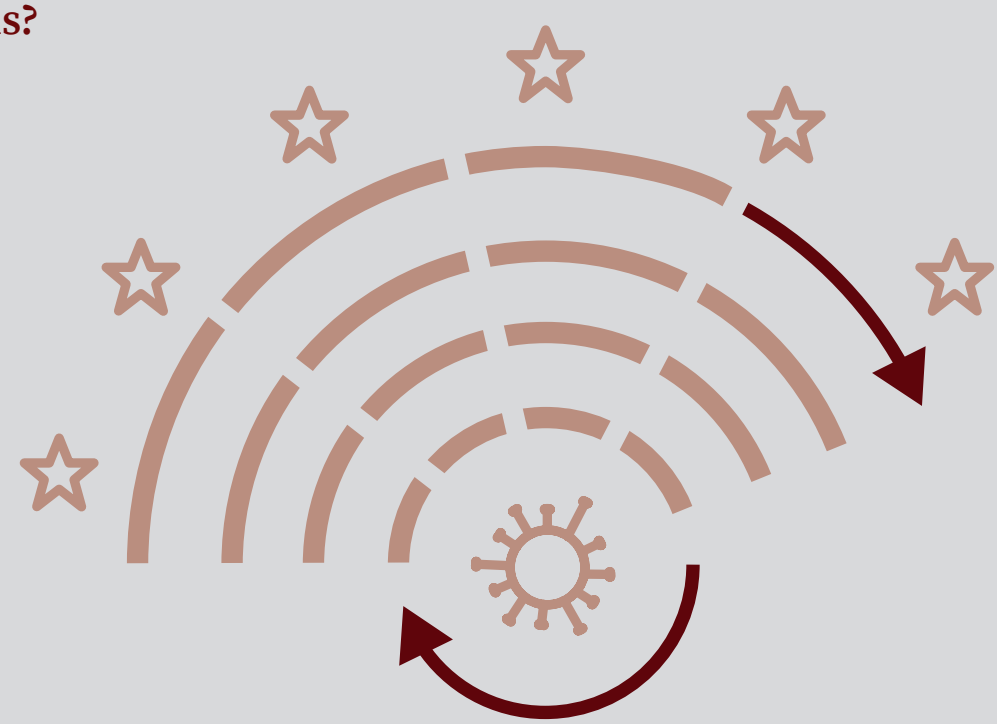
Economic Policy for the Next Decade: A Changed Role of Governments?

Macroeconomic Conditions and Outlook

The Rise of Market Liberalism

From the Global Financial Crisis to the Covid-19 Pandemic: The Rise of Populism

Will the Role of Governments in the Economy Change after the Crisis?



EEAG European Economic Advisory Group @ CESifo
EUROPE econPOL

The European Economic Advisory Group (EEAG) analyzes key economic policy issues of common European concern. It aims to offer the public and policymakers research-based insights. Taking into account the variety of perspectives within Europe, the group fosters bridge-building between research and policy as well as across European countries.

EEAG Report on the European Economy
ISSN 1865-4568 (print version)

A yearly journal on European economic issues
Publisher and distributor: CESifo GmbH, Poschingerstr. 5, 81679 Munich, Germany
Telephone +49 89 9224-0, Telefax +49 89 9224-1409, Email ifo@ifo.de
Reproduction permitted only if source is stated and copy is sent to the publisher.

Suggested citation
EEAG (2022), "The EEAG Report on the European Economy – Economic Policy for the Next Decade: A Changed Role of Governments?," CESifo, Munich.

www.cesifo.org

Foreword

The coronavirus crisis has shaped economic policy in a way that differs from the policies that prevailed before the crisis, bringing to the fore political challenges such as climate change, technological change, aging, and inequality, but also possible de-globalization. Governments around the world have taken drastic measures to protect the economy and support households, jobs, and businesses. This has also led to a rethinking of the debate about the role of government. Some believe that governments should continue to take a more active role in the post-pandemic period. Others argue that the situation is so special and different that it has no implications for the future of government. Still others object that the weaknesses and inadequacies of government responses to the pandemic reflect the limited effectiveness of the public sector in general.

This year's EEAG Report on the European Economy takes a broader perspective to relate the current situation to economic and political developments since the 1970s and to examine whether and how the role of governments will change after the Covid-19 crisis. **Chapter 2** reviews the stagflation episode of the 1970s and in the disinflation, international integration, and market liberalization developments of the 1980s and 1990s. The chapter examines three principal areas of policy change or reorientation: the search for an answer to inflation, the deregulation of labor markets, and attempts to limit the growth of government expenditure and of government debt.

Chapter 3 explores the period between the Global Financial Crisis and the Covid-19 pandemic, which was mainly characterized by a new rise of populism. The chapter outlines what was perceived as the downside of the economic effects of market liberalization – increased inequality and instability – and how these were associated with the rise of populism.

Chapter 4 investigates the future role of governments. The Covid-19 crisis has sparked a debate not only about how to revive the economy after the pandemic, but also about the need to rethink economic policy to address policy challenges such as climate change, aging, technological developments, and inequality. Much of the debate centers on whether more or less government intervention in the economy is needed.

As in previous years' reports, **Chapter 1** provides an in-depth analysis of the economic situation of the European Union and the world, as well as forecasts. Despite increasing immunization of the population, the more infectious new Omicron variant has triggered a new wave in large parts of the world. The associated uncertainty, consumer reticence, labor shortages, and existing problems in international supply chains will determine the development of the global economy this year and imply that economic activity will be noticeably subdued this winter.

The European Economic Advisory Group at CESifo, which is collectively responsible for all parts of the report, consists of six economists from six countries. This year the Group is chaired by Torben M. Andersen (Aarhus University). The other members are Giuseppe Bertola (University of Turin), Cecilia García-Peñalosa (Aix-Marseille University), Harold James (Princeton University), Jan-Egbert Sturm (KOF Swiss Economic Institute, ETH Zurich), and me, Clemens Fuest (ifo Institute and Ludwig-Maximilians-University Munich). I would like to express my gratitude for the valuable assistance provided by the scholars and staff at CES and ifo who helped to prepare this report. This year's participants were Clara Albrecht and Tanja Stitteneder (assistants to the group), KOF Swiss Economic Institute (economic forecast), Christiane Nowack, Christoph Zeiner, and Jasmin La Marca (graphics), Katharina Pichler and Elisabeth Will (typesetting), and Ines Gross (cover).

Clemens Fuest
President ifo Institute and CESifo Group
Professor of Economics and Public Finance
Ludwig-Maximilians-University Munich
Munich, March 2022

Table of Contents

POLICY RECOMMENDATIONS FOR EUROPE 4

EXECUTIVE SUMMARY 5

1. MACROECONOMIC CONDITIONS AND OUTLOOK 9
1.1 Introduction 9
1.2 Current Situation 10
1.2.1 Global Economy 10
1.2.2 European Economy 13
1.3 Fiscal and Monetary Policy 15
1.3.1 Fiscal Policy 15
1.3.2 Monetary Conditions and Financial Markets 18
1.4 Macroeconomic Outlook 21
1.4.1 Assumptions, Risks, and Uncertainties 21
1.4.2 Global Economy 22
1.4.3 European Economy 24
Appendix 1.A Forecasting Tables 27

2. THE RISE OF MARKET LIBERALISM 30
2.1 Attacking Inflation 30
2.1.1 Supply Shocks 30
2.1.2 Independent Central Banks 32
2.2 Market Structure Developments 33
2.2.1 Trade Union Liberalization 33
2.2.2 Deregulation 34
2.3 Labor Market Performance and Reforms 34
2.3.1 The Rise and Divergence of Unemployment 35
2.3.2 The Mechanics of Labor Market Regulation 35
2.3.3 Determinants of Labor Market Regulation 37
2.3.4 Patterns of Labor Market Regulation 37
2.4 The Size of Government 38
2.4.1 Political Shifts 39
2.4.2 Macroeconomic Fluctuations and Government Size 39
2.4.3 Supply and Demand of Public Services 40
2.4.4 Demographic Trends 40
2.4.5 Public Debt Dynamics and Implications for Government Size 40
2.4.6 Intergenerational Integration 42

3. FROM THE GLOBAL FINANCIAL CRISIS TO THE COVID-19 PANDEMIC: THE RISE OF POPULISM 44
3.1 Policy Before and After the Great Recession 44
3.1.1 The Size of Government 44
3.1.2 Inflation 45
3.1.3 Labor Markets 45
3.1.4 Market Regulation 46
3.1.5 International Trade 48
3.1.6 Policy Conflicts across Countries 49
3.2 Distributional Tensions within Countries 49
3.2.1 Concentration and the Profit Share 49
3.2.2 Inequality and the Feeling of Being Left Behind, Vulnerable, and Ignored 50

3.3 The New Populism 53
3.3.1 What is Populism? 53
3.3.2 What are the Causes of the Growing Support for Populist Politicians? 53
3.3.2.1 Cultural and Political Values versus Economic Factors 53
3.4 A Perception of Policy Failure 54
3.4.1 Those Left Behind versus the “Elites” in the Aftermath of the Great Recession 54
3.4.2 Freedom, Meritocracy and Populism 55
3.5 How did Populist Policies Perform? 56
3.6 New Crises, New Policies 57

4. WILL THE ROLE OF GOVERNMENTS IN THE ECONOMY CHANGE AFTER THE CRISIS? 59
4.1 How Did Previous Crises Affect Policymaking and the Role of Governments? 60
4.2 A Different Role for Governments in the Economy after the Covid-19 Crisis? 61
4.2.1 The Performance of the Public Sector During the Crisis 62
4.2.1.1 Management of the Health Crisis 62
4.2.1.2 Border Closures and Trade Disruptions 63
4.2.1.3 School Closures 64
4.2.1.4 The Vaccines 64
4.2.1.5 Macroeconomic Crisis Management 64
4.2.2 Implications for the Future Role of Governments in the Economy 65
4.2.2.1 What does Performance During the Crisis Imply for the Future Role of Governments? 65
4.2.2.2 A Shift in What People Expect from Governments? “Getting Back to Normal” versus “Building Back Better” 68
4.3 Fiscal Policy: Does the Public Debt Legacy of the Crisis Diminish the Active Economic Role Governments Can Play? 68
4.4 The Labor Market – The Future of Work 70
4.5 Conclusions and Outlook 72

LIST OF FIGURES AND TABLES 75

THE MEMBERS OF THE EUROPEAN ECONOMIC ADVISORY GROUP 77

PREVIOUS REPORTS 80

Policy Recommendations for Europe

INFLATION

Over the last decade, inflation was generally too low, and central banks including the ECB undershot a 2 percent target: thus some rise in inflation is beneficial. There is uncertainty about the extent to which the inflation hike created by supply chain issues and a rise in energy prices will last. At the same time, the ECB faces pressure to keep spreads under control in the interest of both financial and fiscal stability; but these objectives may conflict with price stability, and high rates of inflation would be a threat to both the goals of financial and fiscal stability. Drawing the lessons of the 1970s involves meeting a rise in inflation promptly, as disinflation was then (and will be in the future) much costlier the later it comes, or when and if higher inflationary expectations become entrenched.

EUROPEAN ECONOMIC AND MONETARY INTEGRATION

Markets are more efficient when they can cross country borders but, in the absence of common or coordinated policies, economic integration can generate inequality and instability, as evidenced by the European public debt crisis triggered by the Great Recession's asymmetric shock. The Next Generation EU joint borrowing program is a useful step towards coordination of fiscal policy, which, however, should not come at the expense of distorting monetary policy. The ECB should not be tasked with fiscal policy. To ensure financial stability, banking union needs to be completed and governments' financial problems should be dealt with by separate institutions, possibly expanding the size and role of the ESM.

GOVERNMENT VS. MARKETS

Regulation and dirigisme were problematic would-be solutions to the 1970s crisis. The pandemic emergency justified exceptional intervention in the form of fiscal stimulus, redistribution, and heavy regulation such as in lockdowns and vaccination. However, this should not lead to a permanent change of the role or size of government. Governments will need to deal primarily with two consequences of the crisis: high public debt and losses in education. High public debt implies solid public finances and economic growth should be higher on the agenda of economic policy than before. The educational losses require targeted compensating measures.

INCLUSIVE GROWTH

The changes in inequality that we have identified and their political consequences imply that inclusive growth should be at the forefront of the policy agenda. The pandemic has had further distributional consequences and a populist backlash is possible if inequality is not kept under control. Regulation and subsidies to those with endangered jobs are politically appealing, even if inefficient, and the way to combat demand for such types of intervention is through inclusive growth that allows for market-driven reallocation. Policy should target skills and employability. The educational losses that have occurred during the pandemic and that are closely related to family background need to be compensated through suitable schooling, and labor market policies should prioritize programs that foster employability of young individuals. If done properly, such policies would both boost growth and address inequality. Moreover, the distributional consequences of current policy priorities should not be ignored. While digitization can foster productivity growth and greening subsidies are needed to combat climate change and address supranational coordination problems, both are likely to favor the relatively privileged and should hence be accompanied by suitable education and labor market interventions.

Executive Summary

ECONOMIC POLICY FOR THE NEXT DECADE: A CHANGED ROLE OF GOVERNMENTS?

Will the role of governments in the economy change after the Covid crisis, and if so how? During the crisis, government activism to protect the economy, supporting households, job matches, and firms has been massive. While the pandemic crisis is unusual, these developments have revived discussions on the role of government. Some people argue that governments should also take a more active role after the pandemic, at least for a longer phase during the economic recovery. Some argue that the situation is so special and different that it does not have any implications for the future of government. Others object that weaknesses and deficiencies of government responses to the pandemic reflect limited effectiveness of the public sector in general, suggesting that devoting more resources to it may be counterproductive unless accompanied by significant reforms.

The future role of governments depends on other consequences of and lessons drawn from the crisis. First, public debt has increased considerably, limiting the financial resources available to governments in the future. Second, the disruption of international trade and supply chains and the lack of critical medical supplies like masks and ventilators in certain countries in the early phase of the pandemic is sometimes presented as a reason to foster autarky and roll back globalization and international trade. Third, the idea that many companies and even entire sectors need support to restart their activity has given rise to the idea of "building back better," suggesting public support for the recovery should steer the economy towards more sustainability, in particular decarbonization. The European Green Deal reflects this view. But it is also a concern that exaggerated views on what governments can accomplish can lead to inefficient policies and stifle adjustment and growth.

No crisis passes without causing structural changes, and it is therefore natural to reflect on the role of government and economic policies in the perspective of a long list of policy challenges including the climate, technological change, aging, and inequality, but also a possible de-globalization. At the same time, it is important to see the developments in a broader perspective, not forgetting the experience and lessons of the recent past. This report takes such a broader perspective to relate the current situation to the economic and political developments that have occurred since the 1970s, highlighting specific aspects particularly relevant to the contemporary discussion and also pointing out some of the current challenges, including high debt levels and looming inflationary pressures, that have been experienced in the past.

CHAPTER 1
Macroeconomic Conditions and Outlook

Since the beginning of 2020, the world has been under the shadow of the Corona pandemic. Despite increasing immunization of the population, the more infectious new variant called Omicron has triggered a new wave in large parts of the world this winter. The associated uncertainty, consumer reticence, labor shortages, and existing problems in international supply chains will determine the development of the global economy this year and imply that economic activity will be noticeably subdued this winter. Thereafter, a strong recovery is likely, as experiences from previous pandemic waves have shown. Industrial order books are full, and with a renewed and further normalization of everyday life, services will also largely recover. The current inflationary dynamics in the world will ease once the demand overhang has been reduced. The underlying supply chain problems, the shift away from just-in-time production in industry, and the substitution of services for goods by consumers are only temporary. In addition, central banks have begun tapering and the first interest rate hikes have already occurred or are expected. Nevertheless, inflation rates in many countries around the world will remain well above implied or communicated inflation targets for some months to come.

In Europe, too, inflation has risen sharply over the course of 2021. It peaked at 5 percent in the euro area at the end of last year. The gradually easing supply constraints will not only ensure an easing of inflationary pressures, but also strong value-added growth in the manufacturing sector during the year. The construction sector will continue to be supported by the low interest rate environment and public financing of transport infrastructure investments. The retail sector, which has benefited from consumers substituting goods for unavailable services since the start of the pandemic, will return to normal this year. The UK economy continues to be also weighed down by the impact of Brexit. The economic recovery is less advanced in the United Kingdom than in the euro area. In addition to the problems also faced in Europe, a severe shortage of certain skilled workers has made itself felt.

Forecast risks are once again on the downside. While advances in vaccination may accelerate and the Omicron wave may support overall immunization, increasing the likelihood of the virus becoming endemic, emerging viral variants may pose new challenges to

society. Further recovery will also depend on how quickly supply-side shortages can be addressed. On the political front, risks relate to the negotiations between the European Union and the United Kingdom on the Northern Ireland Protocol and the foreign trade agreement between the United States and China in 2022. Another risk is that the economic slowdown in China could be more severe than expected. The impending exit from loose monetary policy, especially in the United States, also poses the risk of negative spillover effects for emerging markets, as in previous tapering episodes.

CHAPTER 2
The Rise of Market Liberalism

To understand what might happen post the pandemic it is useful to review how policy and circumstances interacted in the stagflation episode of the 1970s and in the disinflation, international integration, and market liberalization developments of the 1980s and 1990s. We examine three principal areas of policy change or reorientation: the search for an answer to inflation, including institutional changes and the move to central bank independence; the deregulation of labor markets, as an answer to persistently high levels of unemployment; and attempts to limit the growth of government expenditure and of government debt. In each case we attempt to answer the question about whether the move was driven by international exposure, global competition, and a pressure for institutional emulation. Did market liberalism follow from globalization (and conversely might a retreat from globalization necessarily imply a cutting back of market liberalism)?

Bad economic performance and ideological shifts often trigger sharp policy changes. What is now frequently if perhaps inaccurately termed “neoliberalism” emerged as a response to the economic and political crises of the 1970s. Reduced growth, high inflation, and the challenge of the oil price shocks seemed to offer a fundamental challenge to democracy. The malaise of the 1970s, a combination of a threat to growth, concern with limited resources, higher inflation, and challenges to democracy, all look quite contemporary again. It is consequently worth revisiting the experience of the 1970s, at a moment when the world seems to be denouncing, reviling, and moving away from neoliberalism.

In a longer-term perspective, the 1970s started the most intense phase of globalization – as measured by the share of trade in output – that the world ever experienced. The elements of a new liberalism included combating inflation, deregulation, and a reduction of trade union power. The movement was most dramatic in the United States and the United Kingdom, and the outcome was often associated in consequence with Anglo-American society – but continental Europe adopted some of its precepts. Though the turning point is often associated with the highly ideological figures of Ronald Reagan and Margaret Thatcher, in reality the fundamental shift already began much earlier.

The practical outcomes of new approaches to a new challenge of globalization, however, were not dissimilar, although there were time lags. A substantial convergence took place and constituted one of the major phenomena of late twentieth century globalization. In all countries, inflation fell, with a broad convergence that by the 2000s included many non-Western countries as well. Countries increasingly embraced trade liberalization. They deregulated many markets, and those countries that hesitated were chastised as laggards. Trade union membership and labor conflicts both fell away.

CHAPTER 3
From the Global Financial Crisis to the Covid-19 Pandemic: The Rise of Populism

Economic policy in the period between the outbreak of the Global Financial Crisis in 2008 and the outbreak of the Covid-19 pandemic in late 2019 was characterized by a number of developments which distinguish it from the policies which dominated before the crisis. The most remarkable policy shift is the rise of populism. The most striking example is the election of Donald Trump to the US Presidency in 2016. Earlier in the same year, the Brexit referendum surprised the world and ended six decades of deepening political and economic integration in Europe. In the debate before the referendum, arguments frequently used by populist politicians played a key role. In other European countries, populist movements also gained influence – in many cases boosted by the migration wave in 2015 – including countries as Italy, France, Hungary, and Poland

Chapter 3 outlines what was perceived as the dark side of market liberalization’s economic implications –higher inequality and instability – and how they have been linked to the rise of populism. The distributional consequences of globalization and liberalization, which had already appeared in several countries in the 1980s, came to the forefront during the Global Financial Crises and engendered a feeling of fracture with countries.

A climate of mistrust in elites and policy makers developed in the wake of the Crisis and created a challenge to economic policy that has been accentuated by the Covid-19 health crisis. Citizens in many EU countries seem to share a widespread perception of government failures, and what makes these perceptions unique is that they are shared across the political spectrum even if the reasons for the mistrust differ.

The dissatisfaction with policy has also stemmed from the looming environmental crisis. Both markets and policies are perceived as having failed the gen-

eral population and tensions have emerged along a variety of dimensions. Younger generations feel their parents and grandparents are responsible for a crisis whose costs only the younger generations will need to bear; poorer countries blame richer nations; and within countries the income divide has also become a divide between those who generate high emissions and those who do not. Moreover, the increase in public debt that occurred during the Great Recession has been accentuated by the Covid-19 crisis, leaving governments in a tight spot. In this context, a complete rejection of the liberal paradigm of the past few decades is being advocated by many. Yet the very special economic climate over the past two years has created unusual circumstances and novel challenges.

CHAPTER 4
Will the Role of Governments in the Economy Change after the Crisis?

The Covid-19 crisis has prompted a debate not only on how to restart economies after the pandemic, but also on the need to rethink economic policies to address policy challenges including the climate, aging, technological developments, inequality, etc. Much of the debate centers on whether more or less government intervention in the economy is needed. Many observers see the Covid-19 crisis as an example of the importance of government intervention, and it is sometimes claimed that governments should also play a larger role after the pandemic. However, since the crisis situation is exceptional, that conclusion may be premature. During the crisis trust in governments has generally declined, potentially suggesting that demand for larger government is limited. But trust in governments usually declines in times of crisis and recovers later.

For this discussion it is important to note that the Covid-19 crisis is different from any other crisis encountered for about a century. The situation is different and unusual and the needed policy intervention therefore also unusual. It is not clear why this experience gained during the pandemic is of much guidance in addressing future policy challenges. It is also worth being reminded of the optimism about the power of fiscal policy (demand management policies) in the 1970s and the rather dismal track record despite substantial policy activism. The brief but important answer is that the policy interventions were not well designed to address the problems arising from supply side changes (oil price hikes) and structural problems in the 1980s, see Chapter 2 and 3. This is not implying that fiscal policy is unimportant or not useful, but a reminder that no policy is omnipotent for all kinds of problems. Later developments and in particular the growth of populism are also a reminder that it is important to take a broad-based perspective on policy making focusing not only on the winners but also how to cope with the losers. A serious policy discussion starts by understanding the problem and why and how policy intervention is needed, and not by defining the solution.

Intergenerational distribution is a common denominator in many contemporary policy themes. The climate and environmental issues have important intergenerational implications. But so have aging and public debt. The agenda of structural reforms to strengthen employment and growth to reduce inequality and improve public budgets and to make pension systems more resilient has not become obsolete as a consequence of the Covid-19 crisis, if anything it has become more urgent. Projections show that aging is driving up public expenditures, causing financial problems, and it is not obvious that such increases should be passively accepted, leading to large governments. Increases in retirement ages – motivated by increasing longevity – and strengthening of private savings are part of the solution.

The degrees of freedom in fiscal policy depend critically on debt. The pandemic has taken public debt to record levels. At present interest rates are low, but so are growth rates, and interest rates may change quickly. It is therefore very risky to base policy making on an expectation that the current low costs of servicing public debt are permanent. The present situation strongly depends on central bank intervention, and a normalization of monetary and fiscal policy will change the situation. The current increase in inflation underlines the fact that central bank support for highly indebted governments may end sooner rather than later. Neglecting the debt issue may thus imply some short-term degrees of freedom at the risk of policies being severely constrained by debt problems in the future. Looking back, there are many examples of countries having lost room for maneuver due to high debt levels.

Prudence in fiscal policy and fiscal rules have not become irrelevant as a result of recent developments. Such rules play an important role as guidepost for ensuring fiscal sustainability and thus addressing the problems arising from aging. However, the current debate about fiscal rules is justified in particular because debt ratios have reached levels far beyond the 60 percent limit foreseen by the treaty of Maastricht. While fiscal rules have their limits and enforcement is difficult, they remain important benchmarks in conversations and negotiations about economic policy at the European level. Just making these rules laxer by increasing, e.g., the maximum debt ratio to 90 or 100 percent of GDP is not solving the problem. There is a need for a better balance between flexibility, incentives, and discipline. One way forward would be to combine higher debt limits with reform requirements like the introduction of equity requirements for banks holding domestic debt portfolios.

Regarding the future role of governments, the consequences of the pandemic are in fact limited. Most importantly, the pandemic is a highly unusual

situation, which requires unusual policies. The role of government in this crisis offers little guidance regarding its role when the situation is back to normal, as much as a surgeon may play a key role after an accident, but this does not mean the patient needs him permanently. Rather, there is a significant risk that the exit from the crisis mode, with government support for many individuals and companies, to bring back a situation where market forces are in play, may come too late. It would be highly problematic if the perceived role of government in the economy changed towards the expectation that government support shields companies and employees from any kind of pressure. The reallocation of human and physical capital which is needed to allow for structural change would be inhibited. This is why it is important that crisis related support measures are eventually phased out.

A rather straightforward consequence of the pandemic is that it has led to an increase in government debt, which will constrain government action in the future. The higher debt levels also underline the importance of structural and growth enhancing reforms, so that bearing the higher debt burden is easier. If there is a change in what is expected from governments, there may be a shift towards demand for competence. At the same time, populist politicians have not been very successful in this crisis. Whether this will reduce support for populism in the coming years remains to be seen.

Macroeconomic Conditions and Outlook

1.1 INTRODUCTION

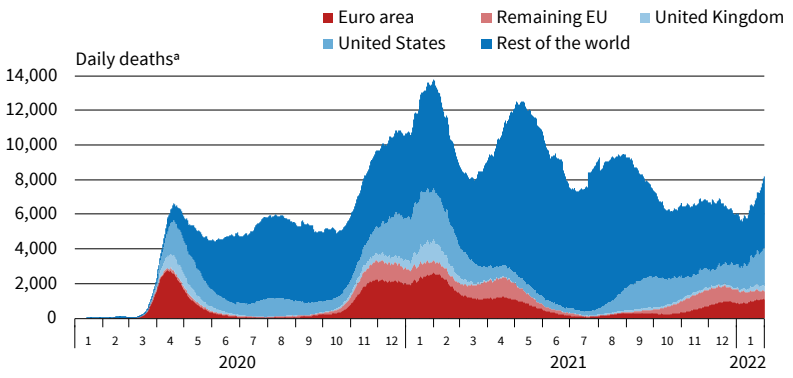
Since the beginning of 2020, the world has been under the shadow of the Corona pandemic. At the beginning of 2021, there was an expectation that humanity could quickly regain control with the availability of vaccines. Various mutations, the scarcity of vaccines in parts of the world, and the resistance of parts of society to vaccination made and still make it more difficult than hoped to end the pandemic quickly. Despite increasing immunization of the population through vaccination or booster shots, the more infectious new variant called Omicron has triggered a new wave this winter in large parts of the world. With the high baseline levels caused by the Delta variant in the summer and autumn of 2021, Omicron has already led to another major strain on health systems in many regions. The tightened containment measures this winter, as well as preventive behavioral changes in the population, again weigh on activities in sectors that have already been particularly affected by the pandemic in the past. In addition, staff shortages due to high infection rates lead more or less randomly to supply shortages in various areas.

Nevertheless, the impact on economic activity is likely to be less than the wave in winter 2020/21 and especially in the first "shock wave" in spring 2020, when there were few or no vaccinated people. Moreover, policymakers and society have to some extent learned to live with the virus and have chosen to be less restrictive in contact restrictions than in the earlier days of the pandemic. Whether this can be associated with more effective policies or differences in viral loads, or whether societal priorities have changed, is difficult to assess. The statistics on the number of deaths associated with Covid-19 do not provide clear evidence in either of these directions. In the last ten months of 2020, about 445,000 Covid-19-related deaths were recorded in the European Union and the United Kingdom, while in the first ten months of 2021 t estimates of excess mortality, these numbers are, on the one hand, partly higher, at 690,000 and 480,000 people overall, while on the other hand, there is a significant decrease (of 30 pcent) between these two periods (see Figure 1.1). The initially higher numbers suggest either measurement problems or strong indirect effects on mortality. Depending on the underlying factors, the interpretation of these numbers can be quite different.

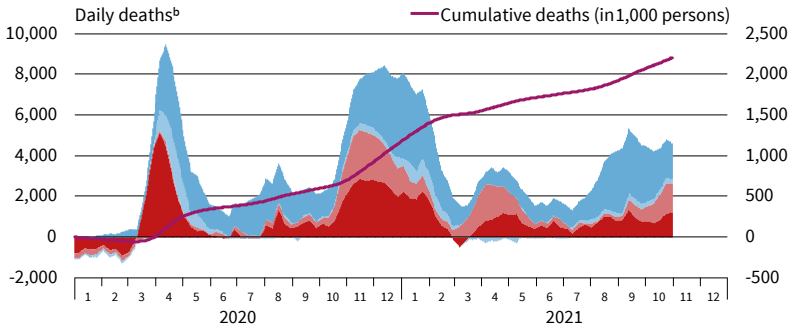
It is not yet possible to say whether the death toll during the current winter wave will be lower than in previous waves. However, most experts do believe, or at least hope, that, despite future variants, immunization of the population – either through vaccination or infection – will allow a slow return to a more social way of life from spring onwards and thereby a further recovery of the economy. Until then, however, social distancing and the wearing of masks indoors are still in order.

The two other, albeit very related, issues that are at the top of an economist's agenda today are supply chain problems and inflation. The epidemiological situation has led to consumers switching from services to goods. Together with the V-shaped recoveries after the closures, which in many industrialized countries were also made possible by strong government support, this led to a boom in industrial production and global trade, leading to supply chain problems and sharp price increases in relevant commodities and subsequently in producer and consumer prices. The move away from just-in-time production and the resulting desire to stockpile inputs has further exacerbated the situation. In principle, these inflationary pressures are likely to be temporary due to

Figure 1.1
Covid-19 Related Daily Deaths in the World



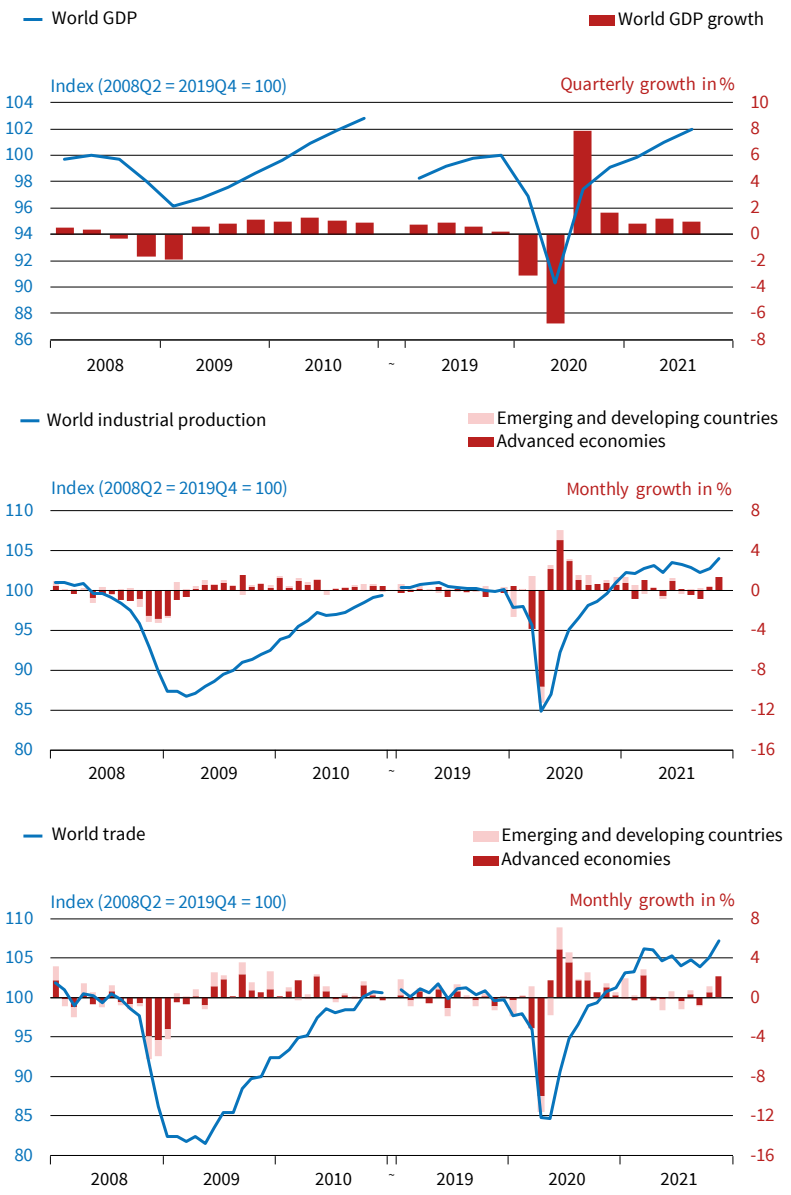
Daily Excess Mortality in Europe and the United States



[a] 14-days moving average of the daily number of deaths registered to be related to Covid-19.
[b] Weekly measures of excess mortality smoothed at a daily frequency.
Source: Our world in data; last accessed on 4 February 2022; EEAG calculations.

© CESifo

Figure 1.2
GDP, Industrial Production, and International Trade at the World Level



Source: CPB Netherlands Bureau for Economic Policy Analysis; IMF; KOF; last accessed on 4 February 2022; EEAG calculations.

© CESifo

the expected turnaround from the pandemic and the associated shift toward services, the reconstruction or reestablishment of value chains, and the only one-time albeit largely permanent increase in inventories. Nevertheless, some fear persistent inflation above the targets communicated by central banks because the fiscal burden built up over the last 13 years puts political pressure on central banks to maintain a low interest rate environment.

1.2 CURRENT SITUATION

1.2.1 Global Economy

Last year, the global economy increasingly recovered from the negative consequences of the first waves of the Corona pandemic: in the first half of the year world Gross Domestic Product (GDP) already exceeded pre-crisis levels again (see Figure 1.2). Compared to the Great Financial Crisis, the decline in global GDP during the height of the Corona crisis was much more pronounced. However, the speed of recovery was also much higher. Whereas during the financial crisis it took two years for global GDP levels to return to pre-crisis levels, during the Corona crisis this was the case within 1.5 years. This difference in the speed of recovery is even more pronounced when looking at either industrial production or trade at the world level. Back in the financial crisis it took 2 to 3 years to fully recover. This time around this was accomplished within about a year. Both the production of and international trade in goods developed very dynamically and reached new highs during spring, summer and early winter last year.

In the second half of 2021, the dynamic recovery of global GDP continued, albeit at somewhat weaker rates. Many countries scaled back their Covid-19 containment and infection control measures as infection rates fell and vaccination campaigns progressed. This allowed the service sectors in particular to recover, which had previously been constrained by lower levels of interpersonal contact. The goods-producing sectors, on the other hand initially lost momentum.

Sentiment indicators such as the Global Economic Barometers, which traditionally and mainly due to data availability focus on the development of industrial production, did start to cloud in summer (see Figure 1.3).[1] Reasons for this gloom were supply-side production-limiting factors, which further intensified during the second half of 2021. The dynamic recovery following the lifting of many protective measures in the summer, but also the attempt by companies to move away from the just-in-time production model and build up larger intermediate product inventories again, led to a strong increase in overall economic demand. However, supply could not keep up, which led to bottlenecks in intermediate products, raw materials, energy, transport capacities and in some cases also of employees. These bottlenecks led to very sharp price increases for raw material, which affected industry as well as the construction sector.

Both the excess demand in global merchandise trade and the supply-side problems are driving up prices. Raw material prices are well above levels seen in the years before the pandemic, but have not clearly surpassed peak levels witnessed in the recovery phase after the Great Financial Crisis (see Figure 1.4). In the area of industrial raw materials, the bull market was reached in the spring last year, and since then prices have in their tendency been declining.

[1] This indicator is based upon hundreds of economic tendency survey results conducted in countries all over the world. The index for each region is constructed such that it has a high correlation with contemporaneous world GDP growth. The index is constructed to have an in-sample average of 100 and a standard deviation of 10. See Abberger et al. (2022) for further information.

The cause of the current supply restrictions and the resulting price pressure is not so much the scarcity of the goods themselves, but rather bottlenecks in processing and transport and dependencies within supply chains. This includes the Covid-related closures of large Chinese ports and factories in other Asian economies, as well as the blockade in the Suez Canal in March 2021. As a result of the huge demand, container ships were jammed at cargo ports worldwide. Waiting times have increased significantly due to staff shortages at ports and clearance points. This has been further exacerbated by limited air capacity, which is why much of the air freight, in normal times often piggybacking on passenger transport, has had to be shifted from aircraft to ships.

An acute global energy shortage has further put pressure on fuel prices. For example, China decided to put some of its coal-fired power plants on standby in order to meet its emissions targets. This in turn had consequences for industrial production in Europe, which had to cut back on aluminum production due to a lack of magnesium produced in China. Furthermore, as the global economy recovered, demand for oil increased rapidly, while the Association of Petroleum Producing Countries (OPEC) continued to curb oil demand. This led to massive price increases in the energy component of consumer prices (see Figure 1.5). The current price level of fuel roughly corresponds to that before the introduction of shale oil extraction in the United States in 2014. While crude oil itself has not yet reached this historically high level, the price of natural gas is already far above it due to the massive price increases in recent months.

Supply bottlenecks are also occurring due to structural adjustments in the wake of the pandemic. This accelerated digitalization in many sectors and increased the demand for microchips. The shortage is particularly noticeable in the automotive industry as a result of the bottlenecks and is expected to continue until the second half of 2022.

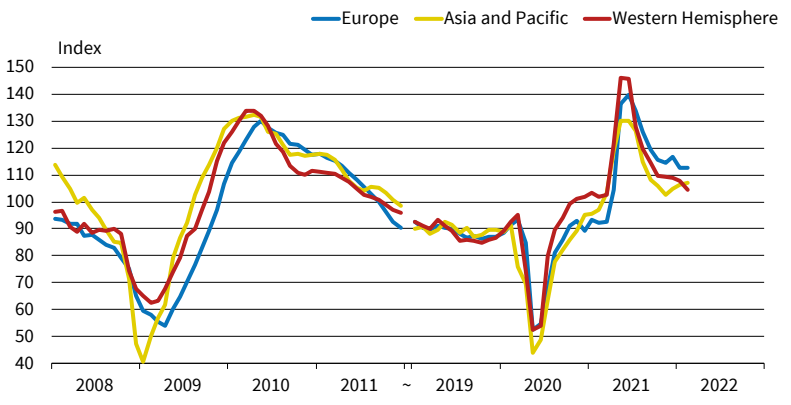
In short, the overall recovery was slowed by a flattening of industrial production that was already occurring before the Omicron wave of the pandemic was mapped out. Bottlenecks on the supply side, high inflation rates, and a renewed increase in new infections began to dampen the economy again in many countries towards the end of the year.

The individual regions of the world were affected differently by the current events regarding the pandemic and the supply bottlenecks. The European Union and the United Kingdom gained momentum in the third quarter and again expanded strongly. This was mainly due to the slowdown of the pandemic, which allowed most of the infection control measures to be lifted. The United States did not react with a tightening of infection control measures despite high infection figures during the winter of 2020/21, while at the same time providing fiscal stimulus. This prevented a clear drop in private consumption at the beginning of last year, allowing GDP to achieve pre-crisis levels before the euro area (see Figure 1.6). The subsequent slowdown in output growth in the United States was

Figure 1.3

Global Economic Barometers

Coincident composite indicators



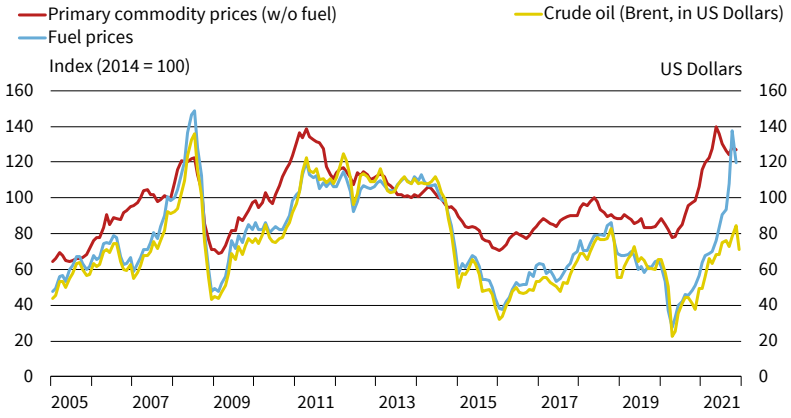
Note: Indicators with an in-sample average of 100 and a standard deviation of 10.
Source: KOF/FGV; last accessed on 10 February 2022.

© CESifo

Figure 1.4

Fuel and Primary Raw Material Prices

Price levels



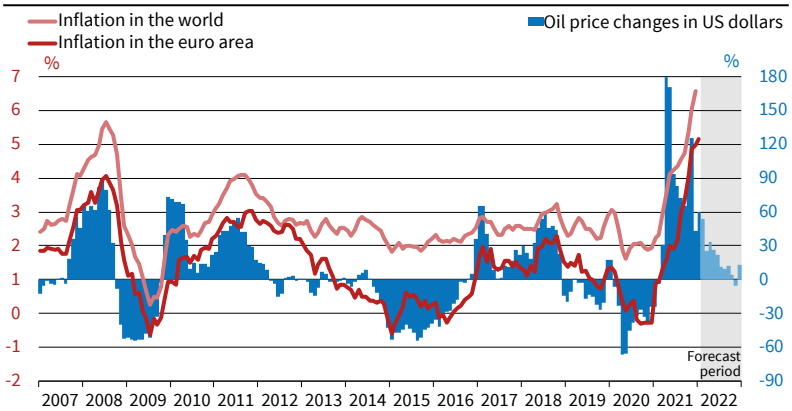
Source: HWWI; Intercontinental Exchange; last accessed on 4 February 2022.

© CESifo

Figure 1.5

Worldwide Inflation and Oil Price Movements

Percentage change overprevious year's month in %

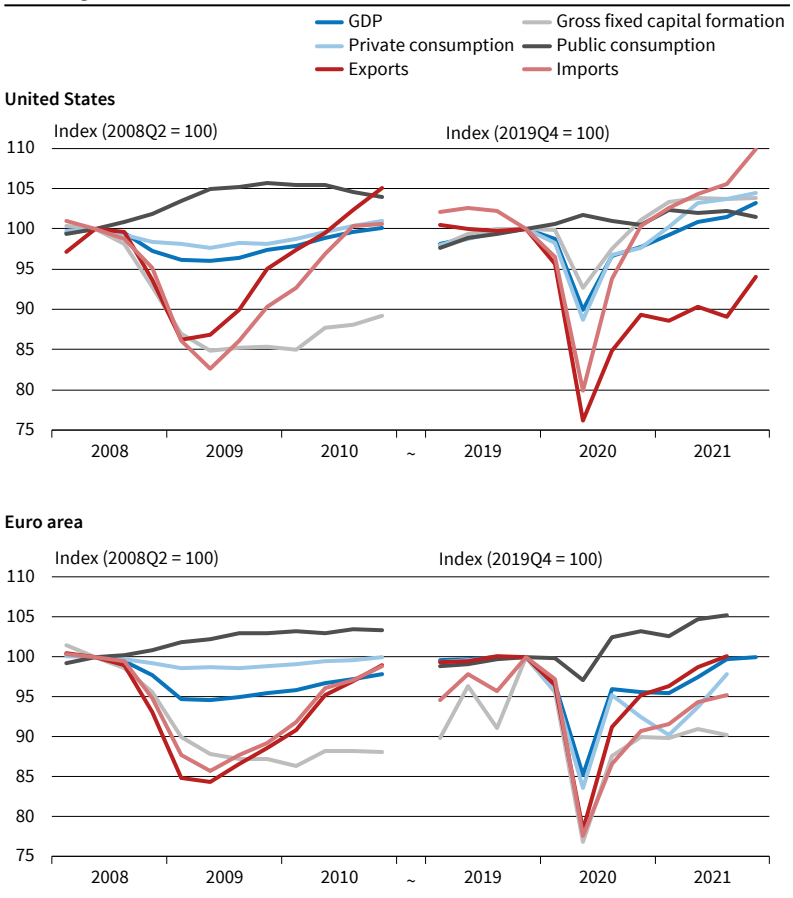


Note: Forecast based on the assumption that oil prices remain steady from January 2022 onwards.
Source: Eurostat; National Statistics; Energy Information Administration;
last accessed on 4 February; EEAG calculations.

© CESifo

Figure 1.6

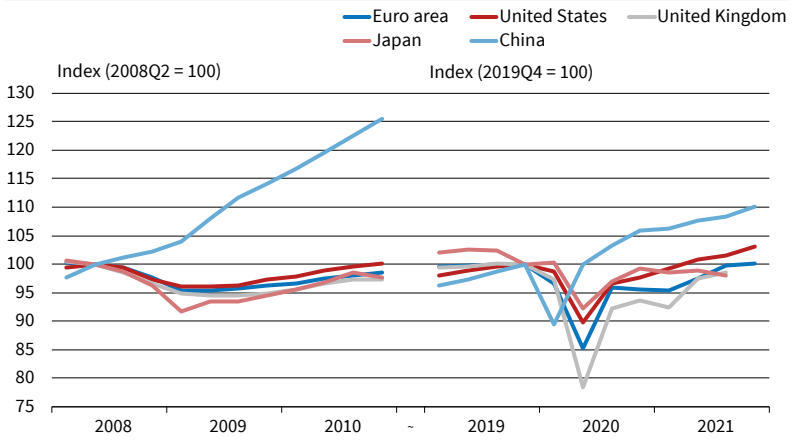
Spending Developments



Source: OECD; Eurostat; last accessed 4 February 2022. © CESifo

Figure 1.7

GDP Developments in Major Countries and Regions



Source: US Bureau of Economic Analysis; Eurostat; ESRI; National Bureau of Statistics of China; last accessed on 4 February 2022. © CESifo

probably due to the weakening of the fiscal stimulus, increasing problems in the procurement of intermediate goods in industry, and the effects of a hurricane, which severely affected oil production for a longer period. Accordingly, the United States experienced a stronger slowdown in growth during the second half of the year.

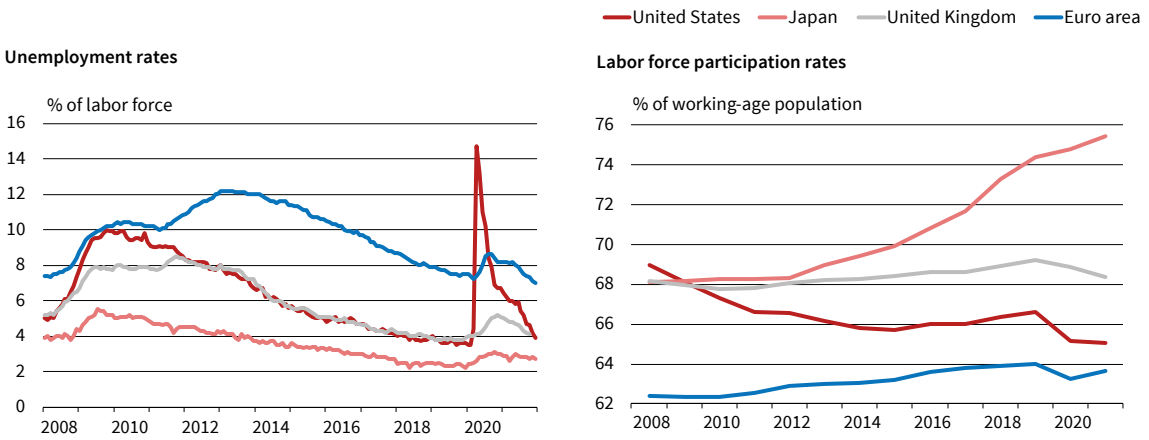
The expansion of the Chinese economy slowed down with the start of 2021 (see Figure 1.7). Production increased by only 0.3 to 1.6 percent in a quarter-over-quarter comparison; year-on-year growth was about 4 percent in the fourth quarter. This was not only considerably less than in previous quarters, whose high growth rates of 18.7, 7.8 and 5 percent were, however, largely due to the base effect of the corona-induced slump in production in the first half of 2020, but is also below the pace of growth recorded before the crisis. The weakness in the third quarter was driven by factors that are likely to be temporary. Economic activity was weighed down by the impact of local Covid-19 outbreaks and sharp containment measures on the services sector as a consequence of the strict zero-Covid policy pursued by the Chinese government. In addition, the economy in China was slowed down by problems in energy supply. In recent months, companies were repeatedly forced to shut down production in order to curb electricity consumption. Finally, payment difficulties of large companies in the real estate industry weighed on economic sentiment and led to a rapid slowdown in residential construction, which had a negative impact. In contrast to many of the challenges mentioned above, the financial difficulties in the real estate sector point to problems that are likely to weigh on China's economy for some time to come.

While the Indian economy recovered from the renewed pandemic-related slump in spring, in many other Asian emerging countries the infection figures rose sharply with the spread of the Delta variant and there were associated significant declines in economic activity. Within Latin America, economic developments are quite uneven. While the economies of the Andean countries Chile, Peru, and Colombia continued to expand strongly, production in the large countries of Brazil, Mexico, and Argentina started to decline again, although only in Mexico was this largely due to the pandemic. In Brazil and Argentina, on the other hand, the main reason was that agricultural production declined due to drought, and private consumption was slowed down by the fact that sharply rising prices reduced purchasing power.

The economic recovery has also been clearly noticeable in labor markets across the world. Whereas labor force participation rates mostly started to recover from drops experienced in 2020, unemployment rates have reached historically low pre-crisis levels again in many parts of the world (Figure 1.8). Of the bigger regions, the major exception has been the United Kingdom. Here, the aftermath of Brexit has caused the participation rate to deteriorate further and the unemployment rate to improve but remain somewhat above pre-crisis levels.

The increased prices of raw materials, energy, and intermediate goods have resulted in higher production costs for companies. This has translated into

Figure 1.8
Unemployment Rates and Labor Force Participation Rates



Source: OECD Main Economic Indicators; OECD Economic Outlook; last accessed on 4 February 2022. © CESifo

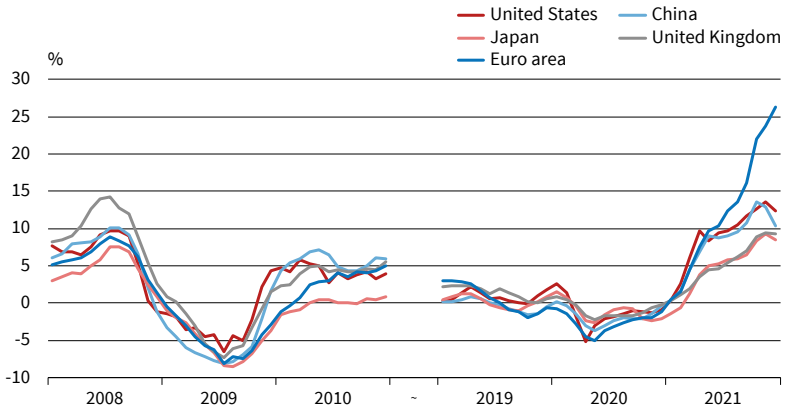
a strong increase in producer prices (see Figure 1.9). The higher production costs either result in profit losses or are passed on to consumers. In the latter case, this increases not only the energy price component but also core inflation. As a consequence, inflation in the euro area rose to 5 percent (core: 2.6 percent) in December 2021, in the United States to 7.1 percent (core: 5.5 percent), and in the United Kingdom to 5.4 percent (core: 4.3 percent). The main drivers in all countries were higher prices in the transport, housing, and food sectors due to higher energy and commodity prices. Only in Japan is consumer inflation still very low.

1.2.2 European Economy

The European economy has experienced a strong and broad-based recovery in recent quarters. The clearly above-average GDP expansion rates were due on the one hand to dynamic foreign trade and on the other hand to an increasing normalization of activities in the services sector. After the restrictions on – in particular contact-intensive – services were gradually lifted over the year, private consumption recovered strongly. For the euro area most sectors of the economy managed to get close to pre-crisis levels again during the second half of last year (see Figure 1.10). However, the sectors particularly affected by the pandemic, such as the event and entertainment industry, remained below the pre-crisis level throughout the year. The hospitality and transport sectors also continue to lag behind, despite a strong recovery during autumn.

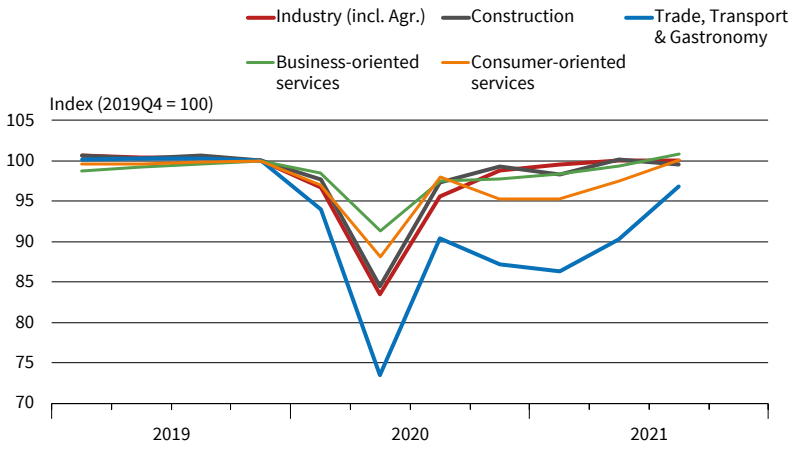
In the rest of the European Union, production has recovered considerably despite the pandemic and supply shortages. These economies are recovering comparatively steadily. In general, production growth remained strong during the second half of last year. Exceptions are Romania and Bulgaria, where the health system was particularly strained by Corona infections, and Hungary, where industrial production fell particularly sharply in the wake of supply bottlenecks in the automotive industry.

Figure 1.9
Producer Price Inflation
Percentage change over previous year's month



Source: US Bureau of Labor Statistics; Statistics Bureau of Japan; National Bureau of Statistics of China; Eurostat; last accessed on 4 February 2022. © CESifo

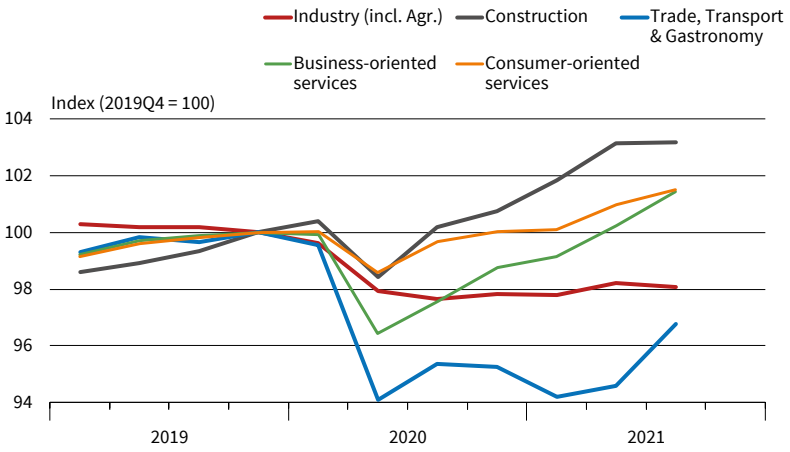
Figure 1.10
Sector-Specific Value Added in the Euro Area



Source: Eurostat; last accessed on 4 February 2022. © CESifo

Figure 1.11

Sector-Specific Employment Developments in the Euro Area



Source: Eurostat; last accessed on 4 February 2022. © CESifo

The UK economy continues to be burdened by the pandemic and the impact of Brexit. The economic recovery is less advanced in the United Kingdom than in the euro area. After the middle of last year, the previously strong economic expansion slowed down significantly, although the containment measures were largely lifted in July. While activity in the service sector continued to recover despite a renewed sharp rise in the number of infections, production in industry and construction declined. Beyond the supply bottlenecks for raw materials and intermediate products that could be felt worldwide, a serious shortage of truck drivers in particular made itself felt, which at times led to considerable logistical problems and is probably also a consequence of Brexit, which has made it much more difficult to fill positions with labor migrants.

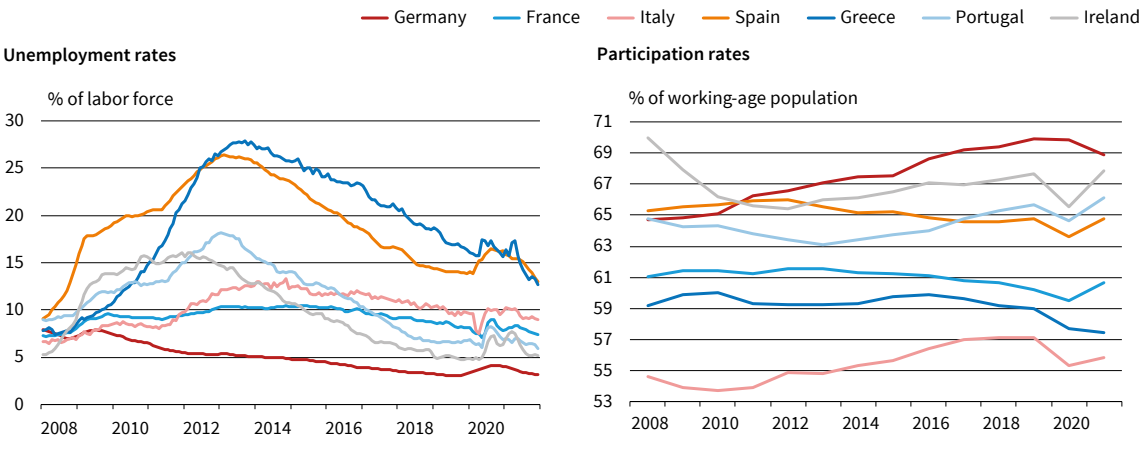
The economic recovery of the last few quarters has had a clear impact on the labor market. Employment increased strongly in the second half of the year and surpassed pre-crisis levels in the fourth quarter of 2021. However, the development between the sectors was uneven (see Figure 1.11). The worst development was in the hotel and restaurant industry, which nevertheless experienced a very strong increase in employment in the second half of the year. Even in this sector, companies are increasingly complaining about not finding enough staff. Despite the considerable increase in value added, employment in industry was not yet back to pre-crisis levels in the third quarter.

The strengthening of the labor market led to a considerable reduction in the unemployment rate. In the euro area, it returned to pre-crisis levels at the end of last year. In the individual member countries, the overall patterns were quite comparable (see Figure 1.12). Job retention measures, such as short-time work and wage subsidies, prevented unemployment rates from rising much more sharply during the pandemic waves and also enabled the subsequent strong and rapid recoveries. To the extent that the demand- and supply-side declines were temporary, these policy measures appear to have paid off.

Also in Europe, inflation has increased sharply over the course of 2021. In autumn last year, it was higher in many countries than it had been for several decades. In the euro area, it reached 5 percent in December (see Figure 1.13). Admittedly, it has probably reached its peak. The contribution of the energy component to inflation, which at the end of last year amounted to just under half, will decline significantly, on the one hand because the pressure coming from year-over-year oil price dynamics will abate, and on the other because the VAT normalization in Germany will wear out. Nevertheless, the core inflation rate, which is calculated without taking energy and food prices into account and therefore reflects the underlying inflation trend better than the rate with these volatile components, has also risen sharply in the course of this year. With 2.6 percent in December last year, it stands higher than the European Central Bank's inflation target.

Figure 1.12

Unemployment Rates and Participation Rates in Selected Euro Area Countries



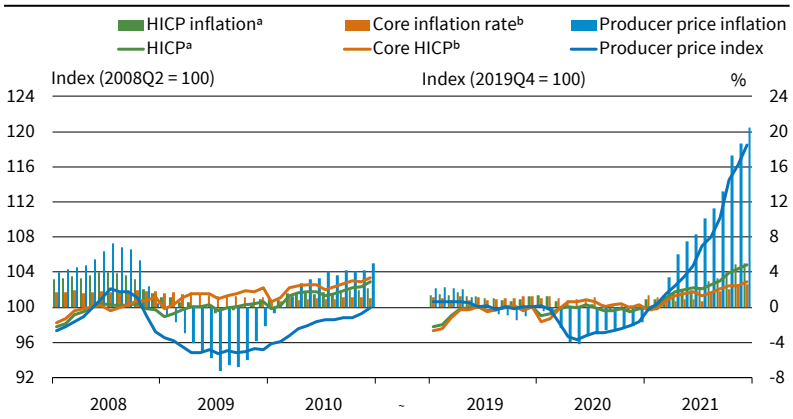
Source: Eurostat; OECD Economic Outlook; last accessed on 4 February 2022. © CESifo

During the last months of 2021, energy markets were characterized by a drastic increase in the price of gas. This was particularly pronounced in Europe. Europe is one of the regions that is most dependent on gas, whereby most of its supply comes from outside the European Union, in particular, from Russia. Here, supplies from Russia in the summer had not been sufficient to replenish stocks to a normal level before the heating season, so that prices exploded with emerging doubts about supply security. The low supplies from Russia are likely to be a major factor in explaining the soaring gas prices. On top of that, France had to temporarily shut down several reactors due to overdue maintenance and detected defects and is now importing electricity instead of exporting nuclear power to neighboring countries. Together with the general price pressure on commodities and energy, this explains not only the difference between core inflation and actual consumer inflation, but also the soaring producer prices.

Figure 1.13

Price Developments in the Euro Area

Percentage change overprevious year's month



[a] Harmonized Index of Consumer Prices (HICP). [b] HICP excluding energy, food, alcohol and tobacco.
Source: Eurostat; last accessed on 4 February 2022. © CESifo

1.3 FISCAL AND MONETARY POLICY

1.3.1 Fiscal Policy

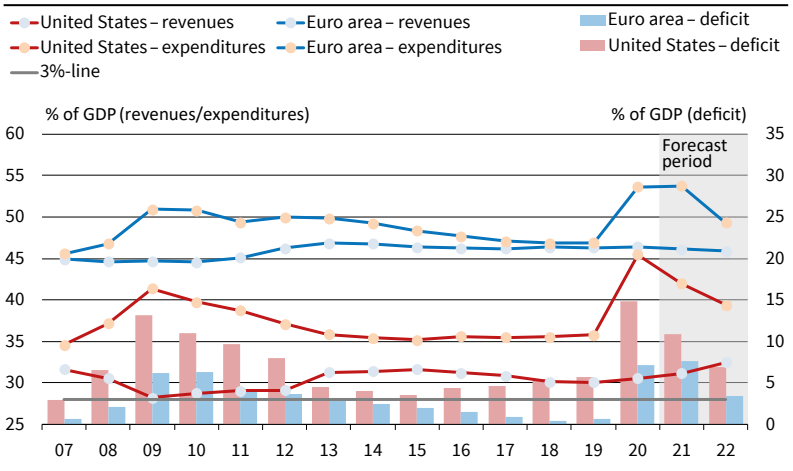
The corona pandemic continues to set the stage for the fiscal policy environment in most if not all countries in the world. Whereas in the euro area government revenues as percentage of GDP remained relatively stable, last year's fiscal policy continued to be shaped by high expenditures to combat the consequences of the pandemic (see Figure 1.14). Besides the automatic stabilizers, the pandemic-related additional expenditures consisted largely of transfer payments, for example through the assumption of short-time work compensation and participation in hardship assistance for companies that were particularly hard hit. Consumptive expenditures of the public sector also increased noticeably through the provision of social benefits in kind, due to the procurement of vaccines and the assumption of costs for diagnostic tests. As a consequence, public deficits overall stayed at historically high levels. Although this year's expenditures will be lowered substantially, government deficits will remain at high levels. In line with the assumption that pandemic-related constraints will decrease as immunization progresses, the use of support programs will also decrease. However, new expansionary fiscal stimuli will be put in place in the United States. The Infrastructure and Investment Act provides USD 550 billion in new spending over the next 10 years. Under the Build Back Better Act, which includes elements of the American Jobs Plan and the American Families Plan, further fiscal measures are being put in place. Nevertheless, according to IMF estimates, the United States realized a government deficit of 11.4 percent last year that will fall to 7.9 percent this year.

In almost all European countries, too, government activities to support the health sector and the overall economy will be gradually scaled back this year. However, this fiscal normalization is likely to be slow and it will take more than a year for government spending to return to pre-crisis levels. According to European Commission estimates, the deficit for the euro area and the European Union will fall from 7.1 and 6.6 percent, respectively, last year to 3.9 and 3.6 percent this year (see Table 1.1).

Part of this deficit reduction will be absorbed by the new Next Generation EU (NGEU) program. At a summit in December 2020, EU member states adopted the NGEU program as an extension to its regular budget to address the economic consequences of the coronavirus pandemic. This package includes EUR 750 billion (in 2018 prices), of which EUR 390 billion are direct transfers and EUR 360 billion are loans to be repaid. The loans and grants are intended to support Europe's recovery through post-pandemic reforms and investments across the European Union, while enabling digital and environmental transformation in a cohesive society across Europe. To access these

Figure 1.14

Government Budgets in the United States and the Euro Area



Source: IMF World Economic Outlook, October 2021; last accessed on 4 February 2022. © CESifo

Table 1.1

Public Finances

	Gross debt[a]				Fiscal balance[a]				Primary fiscal balance[a]				Cyclically-adjusted primary fiscal balance[a]			
	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022
Germany	67.0	68.7	71.4	69.2	1.2	– 4.3	– 6.5	– 2.5	2.4	– 3.7	– 5.9	– 2.0	2.2	– 1.5	– 4.5	– 2.1
France	97.0	115.0	114.6	113.7	– 3.2	– 9.1	– 8.1	– 5.3	– 1.4	– 7.8	– 6.9	– 4.2	– 1.0	– 3.3	– 5.6	– 4.1
Italy	134.7	155.6	154.4	151.4	– 2.3	– 9.6	– 9.4	– 5.8	1.6	– 6.1	– 5.9	– 2.9	2.4	– 1.5	– 4.6	– 3.1
Spain	98.5	120.0	120.6	118.2	– 4.0	– 11.0	– 8.1	– 5.2	– 1.2	– 8.7	– 5.9	– 3.1	0.1	– 2.2	– 2.5	– 2.0
Nether-lands	58.7	54.3	57.5	56.8	0.0	– 4.2	– 5.3	– 2.1	1.1	– 3.5	– 4.8	– 1.7	1.2	– 1.2	– 3.9	– 2.0
Belgium	102.8	112.8	112.7	113.1	– 1.9	– 9.1	– 7.8	– 5.1	0.7	– 7.1	– 6.1	– 3.7	0.1	– 3.9	– 5.2	– 3.5
Austria	79.1	83.2	82.9	79.4	– 0.9	– 8.3	– 5.9	– 2.3	1.1	– 7.0	– 4.7	– 1.4	1.3	– 3.7	– 3.1	– 1.5
Ireland	73.9	58.4	55.6	52.3	– 1.0	– 4.9	– 3.2	– 1.7	1.3	– 3.9	– 2.4	– 1.0	0.7	– 1.4	– 4.0	– 2.4
Finland	61.2	69.5	71.2	71.2	– 1.6	– 5.5	– 3.8	– 2.4	– 0.6	– 4.8	– 3.3	– 2.0	0.0	– 2.7	– 2.3	– 1.7
Portugal	126.6	135.2	128.1	123.9	– 2.8	– 5.8	– 4.5	– 3.4	1.1	– 2.9	– 1.9	– 1.1	2.4	1.0	– 0.4	– 0.9
Greece	180.7	206.3	202.9	196.9	– 1.1	– 10.1	– 9.9	– 3.9	2.3	– 7.1	– 7.3	– 1.4	7.3	– 2.1	– 5.4	– 0.9
Slovakia	51.2	59.7	61.8	60.0	– 1.9	– 5.5	– 7.3	– 4.2	– 0.4	– 4.3	– 6.1	– 3.1	– 0.5	– 2.9	– 5.3	– 3.2
Luxem-burg	21.3	24.8	25.9	25.6	1.9	– 3.5	– 0.2	0.2	2.2	– 3.3	0.0	0.3	2.5	– 1.3	0.8	0.7
Slovenia	75.2	79.8	77.7	76.4	– 1.5	– 7.7	– 7.2	– 5.2	1.1	– 6.1	– 5.8	– 3.9	1.8	– 4.8	– 6.2	– 4.9
Lithuania	38.6	46.6	45.3	44.1	0.1	– 7.2	– 4.1	– 3.1	1.3	– 6.5	– 3.7	– 2.9	0.5	– 6.1	– 3.6	– 2.5
Latvia	38.6	43.2	48.2	50.7	– 0.8	– 4.5	– 9.5	– 4.2	0.1	– 3.8	– 8.9	– 3.6	– 0.5	– 2.5	– 7.9	– 3.4
Estonia	9.4	19.0	18.4	20.4	– 0.1	– 5.6	– 3.1	– 2.5	0.0	– 5.6	– 3.1	– 2.5	– 0.3	– 3.0	– 3.7	– 2.3
Cyprus	100.3	115.3	104.1	97.6	– 1.6	– 5.7	– 4.9	– 1.4	1.1	– 3.6	– 3.0	0.2	4.7	– 2.3	– 2.9	– 0.2
Malta	50.6	53.4	61.4	62.4	0.7	– 9.7	– 11.1	– 5.8	2.7	– 8.4	– 10.0	– 4.7	0.9	– 5.6	– 8.0	– 3.9
Euro area	**90.5**	**99.3**	**100.0**	**97.9**	**– 1.3**	**– 7.2**	**– 7.1**	**– 3.9**	**0.7**	**– 5.7**	**– 5.7**	**– 2.7**	**1.1**	**– 2.1**	**– 4.3**	**– 2.6**
Sweden	40.9	39.7	37.3	34.2	0.4	– 2.8	– 0.9	0.3	0.9	– 2.5	– 0.8	0.5	0.8	– 0.2	0.3	0.8
Poland	50.3	57.4	54.7	51.0	– 1.8	– 7.1	– 3.3	– 1.8	– 0.2	– 5.8	– 2.2	– 0.8	– 0.4	– 4.8	– 1.7	– 1.0
Denmark	37.5	42.1	41.0	38.8	1.1	– 0.2	– 0.9	1.3	2.2	0.4	– 0.2	1.8	2.2	3.3	– 1.3	3.8
Czech Republic	35.7	37.7	42.4	44.3	0.1	– 5.6	– 7.0	– 4.3	1.0	– 4.8	– 6.2	– 3.5	0.8	– 3.1	– 5.0	– 3.1
Romania	36.6	47.4	49.3	51.8	– 2.4	– 9.4	– 8.0	– 6.9	– 1.0	– 7.9	– 6.4	– 5.1	– 0.9	– 6.1	– 5.5	– 4.6
Hungary	72.3	80.1	79.2	77.2	– 2.2	– 8.0	– 7.5	– 5.7	0.7	– 5.6	– 5.1	– 3.3	0.0	– 3.4	– 4.5	– 3.3
Bulgaria	24.9	24.7	26.7	26.7	– 0.2	– 4.0	– 3.6	– 2.8	0.5	– 3.5	– 3.0	– 2.2	1.1	– 2.4	– 2.5	– 2.2
Croatia	78.0	87.3	82.3	79.2	– 1.4	– 7.4	– 4.1	– 2.9	1.4	– 5.4	– 2.4	– 1.4	1.3	– 2.8	– 1.8	– 1.9
European Union	84.0	91.8	92.1	90.0	– 1.2	– 6.9	– 6.6	– 3.6	0.7	– 5.5	– 5.3	– 2.4	1.1	– 2.1	– 4.0	– 2.4
United States	106.3	127.0	129.3	128.6	– 5.4	– 15.8	– 11.4	– 7.9	– 1.5	– 11.9	– 8.1	– 4.7	– 2.0	– 8.6	– 7.1	– 7.0
China	48.7	66.3	68.9	72.1	– 3.7	– 11.2	– 7.5	– 6.8	– 3.0	– 10.2	– 6.6	– 5.9	– 2.8	– 8.6	– 6.0	– 5.5
Japan	232.2	253.9	256.8	253.9	– 3.6	– 10.9	– 9.1	– 5.0	– 1.9	– 9.3	– 7.6	– 3.6	– 2.9	– 8.5	– 7.5	– 3.3
United Kingdom	85.1	102.3	103.0	103.9	– 3.4	– 12.9	– 10.1	– 5.5	– 0.8	– 10.9	– 8.3	– 3.8	– 1.7	2.5	– 6.5	– 3.7
Switzer-land	40.7	42.4	42.7	41.6	0.7	– 2.8	– 1.0	– 0.3	1.1	– 2.5	– 0.7	0.0	0.8	– 1.9	– 1.4	0.2

[a] As a percentage of (potential) gross domestic product (in case of cyclically adjusted (primary) fiscal balances). For countries of the European Union, definitions are according to the Excessive Deficit Procedure. For the United States, China, Japan, the United Kingdom and Switzerland, definitions are according to the IMF. For the United Kingdom forecasts of the European Commission are shown.

Source: European Commission, Autumn 2021; IMF World Economic Outlook, October 2021.

special funds, member states must submit their recovery and resilience plan to the European Commission, which will verify consistency with EU priorities and specific country recommendations. With a few exceptions, most countries have submitted their proposals. Grants are committed after approval of the recovery and resilience plans. Member states must spend at least 37 percent on climate investments and reforms and at least 20 percent on digital transformation.

The NGEU program amounts to nearly 5 percent of euro area GDP of 2019 and is targeted at weaker countries. Countries are generally eligible for loans

of up to 6.8 percent of their Gross National Income. In 2021–22, 70 percent of the funds will be allocated according to a backward-looking formula that allocates more funds to countries who had lower GDP per capita, larger populations, and higher unemployment rates in 2015–19. More than half of the aid will thereby go to Italy and Spain, which were particularly affected by the pandemic and already had ongoing structural problems. Thirty percent of the funds will not be allocated until 2023. As a rule, the principle of additionality of EU-financed spending should be respected. However, countries could designate some already planned expenditures as part of the recovery and resilience plans, effectively opening the possibility of using some NGEU funds for debt reduction. While the total grants requested are above the maximum amount available, the loans requested are currently less than 20 percent of the maximum amounts available. This indicates that member states have so far been able to finance themselves independently thanks to the European Central Bank's extensive interventions, which have created favorable capital market conditions for them. National borrowing also offers the member states the advantage that they do not have to expose themselves to the reform requirements of the EU Commission.

The NGEU program enables the European Commission to issue bonds on a large scale backed by the EU budget to help member states fight the crisis and build resilience. To help repay the bonds, the EU institutions have agreed to introduce new own resources. The new own resources will prevent repayments under NGEU program from leading to cuts in other EU programs or excessive increases in member state contributions. It does, however, imply that parts of national deficits are raised to a supra-national level.

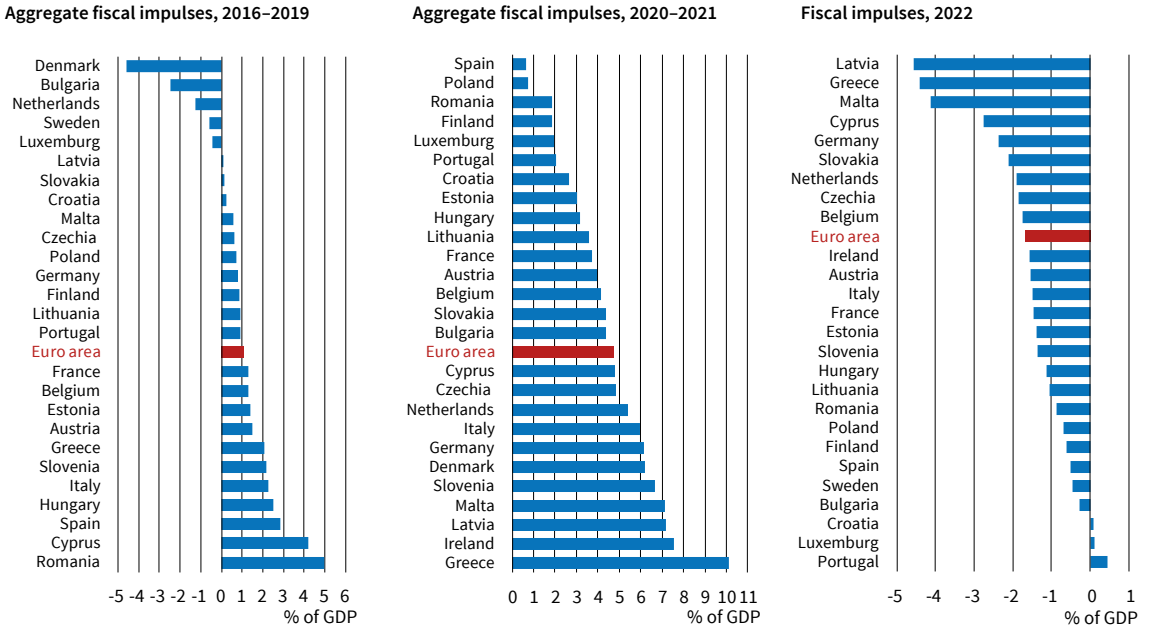
Late last year, the European Commission proposed three new revenue sources to finance the grant component of the NGEU program. The first is based on revenue from emissions trading, the second on funds generated by the proposed EU carbon cap adjustment mechanism, and the third on the share of residual profits of multinational companies allocated to EU member states under the recent OECD/G20 agreement on the reallocation of taxing rights.[2] These new own resources will also finance the Social Climate Fund, which is a key element of the Fit-for-55 package adopted in July 2021 and includes an overhaul of the EU Emissions Trading Scheme to support the transition to a low-carbon economy.

Fiscal policy continues to support the economy for the time being. In the advanced economies – and to a lesser extent in many emerging economies – substantial additional spending and tax deferrals were adopted during the past two years to mitigate the economic impact of the pandemic and the measures taken to combat it. In the face of the current new

[2] Last October, more than 130 countries agreed to reform the international tax framework toward a two-pillar system to combat tax avoidance and ensure that profits are taxed where economic activity and value creation take place. Under the first pillar, participating countries will receive a right to tax a portion of the residual profits of the world's largest multinationals with annual global sales of more than 20 billion euros and a profitability of 10 percent. The Commission proposes own resources equal to 15 percent of the share attributable to EU member states of the residual profits of companies covered by the scope. The second pillar stipulates that multinational groups with an annual turnover of more than 750 million euros must pay at least 15 percent in taxes.

Figure 1.15

Fiscal Impulses in EU Member Countries[a]



[a] Defined as the average annual changes in structural primary fiscal balances over the respective period under consideration. A positive value implies a deterioration of the structural primary fiscal balance position and thereby a positive fiscal impulse for the economy.
Source: European Commission; last accessed on 4 February 2022; EEAG calculations.

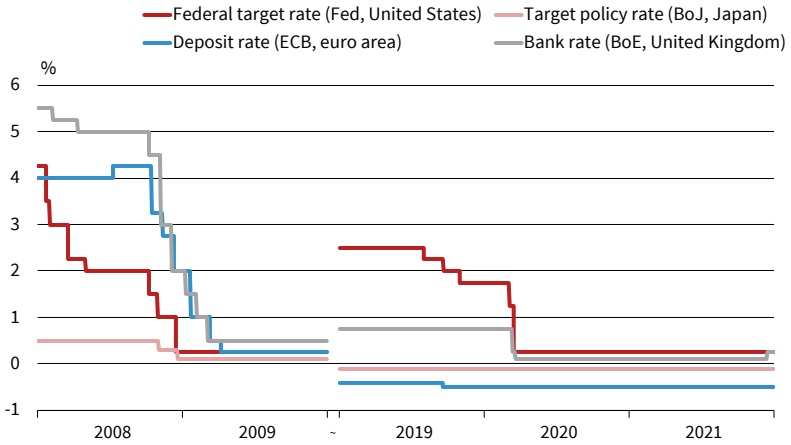
© CESifo

wave of infections, fiscal support programs remain at least to some extent effective this year. While expenditures to finance pandemic-related burdens are clearly declining as economic activity continues to normalize, the focus is more and more on public investments and programs aimed at addressing structural challenges such as climate change or demographic aging.

Overall, as a consequence of the expiry of the pandemic-related support programs, the negative fiscal impulse, as measured by the change in the cyclically-adjusted budget deficit, is likely to be moderate; policymakers are likely to act cautiously in possible consolidation steps so as not to jeopardize the economic recovery. In the European Union this is supported by the fiscal rules to remain suspended in 2022. Also supportive is that financing conditions remain very favorable. For the euro area at large, after two years with an average positive fiscal impulse of 4.7 percent of GDP, a negative fiscal impulse of around 1.7 percent is to be expected for 2022 (see Figure 1.15).

Figure 1.16

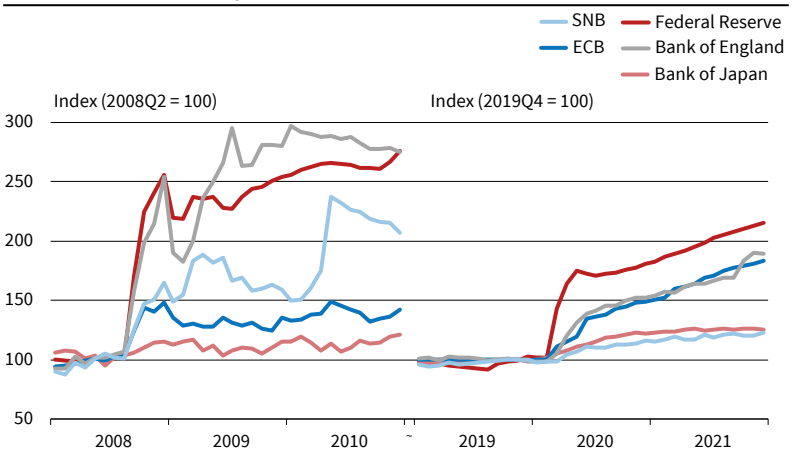
Central Bank Interest Rates



Source: European Central Bank; Federal Reserve Bank of St. Louis; Bank of England; Bank of Japan; last accessed on 4 February 2022. © CESifo

Figure 1.17

Balance Sheet Sizes of Major Central Banks



Source: Federal Reserve; Bank of Japan; European Central Bank; Bank of England; last accessed on 4 February 2022; EEAG calculations. © CESifo

1.3.2 MONETARY CONDITIONS AND FINANCIAL MARKETS

Internationally, inflation rates have risen beyond the implicit or explicit target ranges of central banks in many countries in recent months. Rising commodity and energy prices, catch-up effects from falling prices during the first year of the pandemic, supply bottlenecks, and pandemic-related special factors contributed significantly to rising prices. Many central banks are at a crossroads. For the first time since the outbreak of the financial crisis, inflation rates in the major currency areas are above their respective inflation targets. Although most central banks still consider the rise in inflation to be temporary, many of them has at least started announcing that they will reduce the strong degree of monetary expansion.

The US Federal Reserve indicated in December that its ultra-loose policy, pursued since the beginning of the pandemic, is coming to an end, responding to rising inflation. First, the central bank will reduce its monthly bond purchases at an accelerated pace. While it was still buying USD 120 billion worth of bonds per month in autumn last year, it will stop asset purchases completely by March this year. Second, the central bank expects to start raising interest rates thereafter. Current projections indicate that the Fed expects three to four hikes in 2022 and several more the following year. The Bank of England already increased its main interest rate by 15 basis points in mid-December last year (see Figure 1.16).

The European Central Bank will end its net asset purchases under the Pandemic Emergency Purchase Program (PEPP) by the end of March 2022 that has led to a further clear increase in the size of its balance sheet (see Figure 1.17). However, at the same time it extended the period for reinvesting maturing bonds by one year to the end of 2024.[3] Furthermore, bond buys under the Asset Purchase Programme (APP) will be ramped up to serve as a quantitative easing bridge through the end of the PEPP, having continued at a monthly pace of EUR 20 billion in conjunction with the PEPP until now. During the second quarter it will be raised to EUR 40 billion monthly and to EUR 30 billion during the third quarter. From the fourth quarter onwards, it will be scaled back to EUR 20 billion per month without defining an exact ending. The Governing Council expects net purchases to end shortly before it starts raising the European Central Bank's key interest rates, which is getting likely to happen this year. The European Central Bank has thus far struck a more dovish tone as compared to those of the Bank of England and the US Federal Reserve.

[3] The PEPP has been an important source of financing flexibility for Greece, whose government bonds are ineligible for other European Central Bank purchase programs due to their sub-investment-grade status. By the end of last year, the European Central Bank had bought the maximum amount of Greek government bonds allowed.

In Japan, where inflation is still low, there are no signs of an end to the extremely loose monetary policy. Smaller central banks – for example in Brazil, Chile, Czech Republic, Hungary, Mexico, New Zealand, Norway, Poland, South Africa, and South Korea – have already reacted to the economic recovery and higher inflation and have even raised their interest rates. In the emerging markets in particular, a cycle of interest rate hikes has already been underway since the middle of the year to counter downward pressure on exchange rates and curb inflationary dynamics. Further tightening of monetary policy in Central and Eastern European countries is likely but moderate given the continued extremely low interest rates in the euro area.

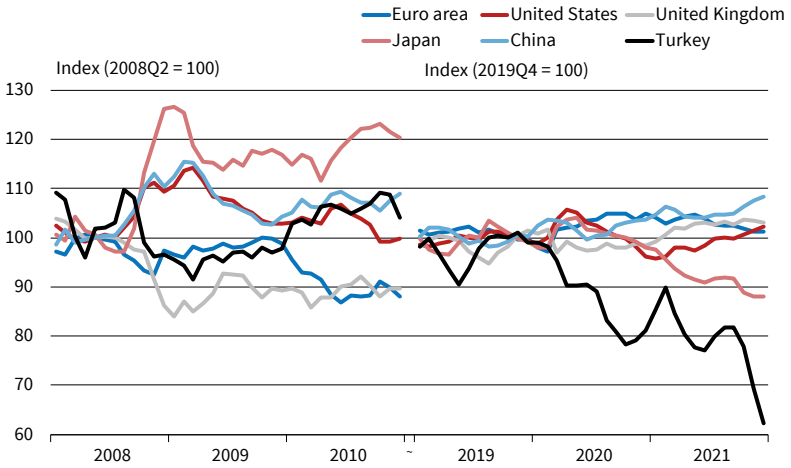
The tightening of monetary policy in advanced economies poses risks to the recovery in emerging markets. Economic activity in emerging markets has recently suffered, mainly from the effects of the pandemic. For the most part, however, financial conditions have remained favorable. High commodity prices are also a stimulating factor for many emerging markets. Thus, a fairly strong economic recovery in this group of countries is to be expected this year. However, the prospect of an upcoming tightening of monetary policy in the United States has put pressure on the exchange rates of most countries. Many central banks have now raised their interest rates, in some cases significantly, to avoid capital outflows and to limit the inflationary pressures resulting from devaluation. In the wake of interest rate hikes by the US Federal Reserve, the financial framework for emerging markets could tighten further and a more restrictive monetary policy could become necessary in order to stabilize the external value and avoid a situation such as can currently be observed in Turkey, where the external value of the currency is almost in a free fall (see Figure 1.18).

The currencies of the major economies remained largely stable in 2021. The one with the overall largest movement was the Japanese yen. In real effective terms, it depreciated by more than 10 percent over the course of the year. From a purchasing power parity perspective, the euro also depreciated. Given the real appreciation of the US dollar, this implies that is has now been undervalued against the US dollar since 2015 (see Figure 1.19). Currently, this is increasingly caused by the (expected) difference in monetary policy stance between the United States and the euro area.

Although government bond yields recovered somewhat relative to 2020, they remained historically low all around the world (see Figure 1.20). Japanese bonds and bonds of several European countries even continued to hover around zero yields. This behavior has contrasted with that of long-term government bond yields in the United States and the United Kingdom. In these two countries, yields on these safe assets increased significantly at the beginning of last year, only to fall again during summer to recover afterwards. Given the turn in monetary policy, it is to be expected that bond yields will slowly start to

Figure 1.18

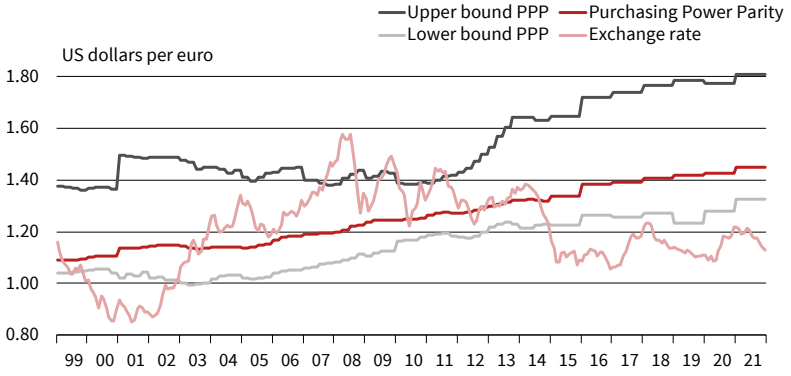
Real Effective Exchange Rates around the World



Source: Bank for International Settlements; last accessed on 4 February 2022. © CESifo

Figure 1.19

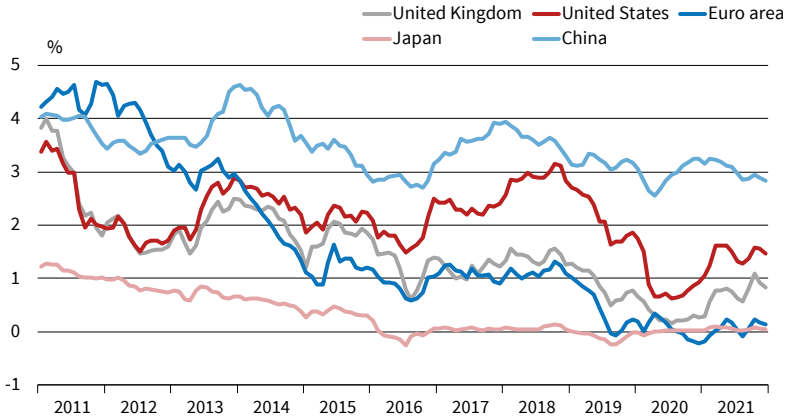
Exchange Rate of the Euro against the US Dollar and PPP[a]



[a] The nominal exchange rate is based on monthly data, while the exchange rate based on purchasing power parity (PPP) is given at a quarterly frequency. The US dollar-euro PPP rate is calculated as the GDP-weighted average of the euro country-specific PPP estimates vis-à-vis the US dollar. The PPP upper bound represents the 90th percentile of the euro country-specific PPP estimates vis-à-vis the US dollar; the lower bound the 10th percentile. In calculating these bounds the 11 euro area member countries with the largest GDP weights are used.
Source: OECD, OECD Economic Outlook; European Central Bank; last accessed on 4 February 2022. © CESifo

Figure 1.20

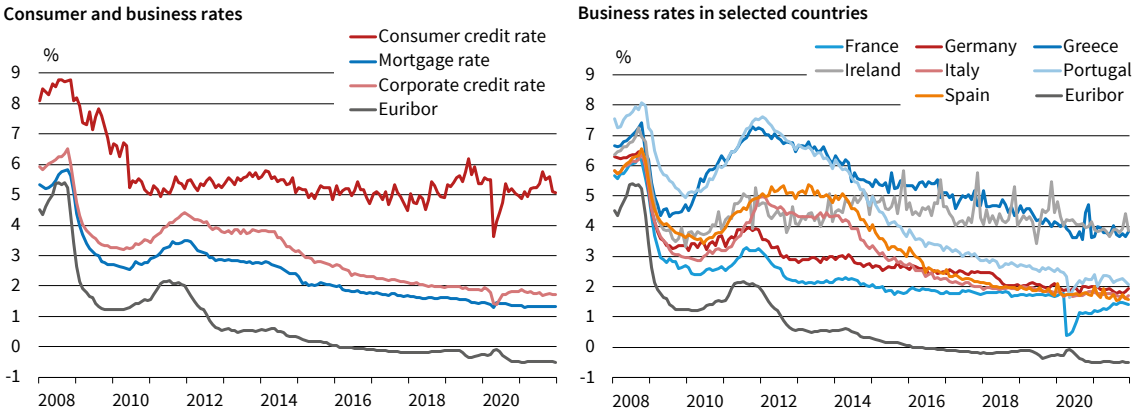
10-Year Government Bond Yields



[a] The synthetic euro area benchmark bond refers to the weighted average yield of the benchmark bond series from each Economic and Monetary Union member.
Source: Datastream; last accessed on 4 February 2022. © CESifo

Figure 1.21

Interest Rates on Loans in the Euro Area[a]

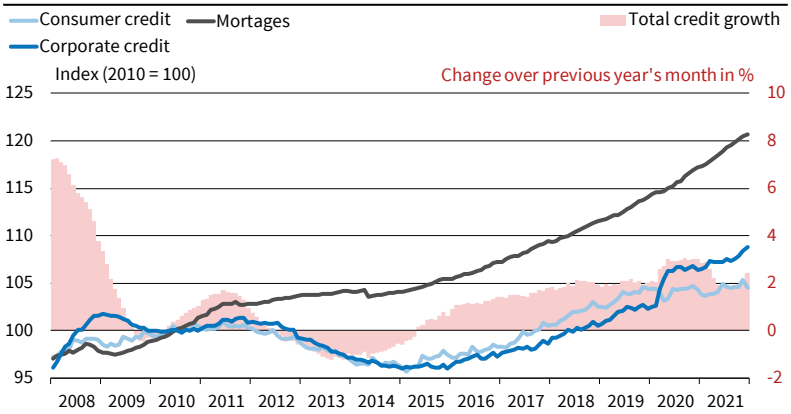


[a] New loans to households and non-financial corporates up to one million euros using floating rates or up to 1 year initial rate fixation. The Euribor rate is based on secured interbank loans with a maturity of one year.
Source: European Central Bank; last accessed on 4 February 2022.

© CESifo

Figure 1.22

Credit Developments in the Euro Area[a]

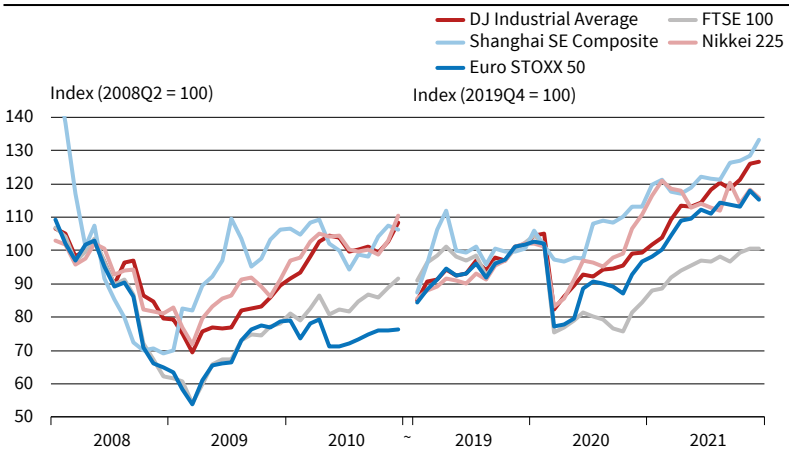


[a] These indexes of adjusted outstanding amounts are calculated according to $I_t = I_{t-1}(1+F_t/L_{t-1})$, where L stands for the outstanding nominal amount of credit and F the amount of transactions (credit granted). The transactions F are calculated from differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and other changes which do not arise from transactions (see European Central Bank, 2010, for details). A specific securitisation operation in France has led to a downward level shift in mortgages in May 2014.
Source: European Central Bank; last accessed on 4 February 2022.

© CESifo

Figure 1.23

Developments in International Stock Markets from a Euro Area Perspective[a]



[a] Stock market indices outside the euro area are first converted into euros.
Source: Datastream; last accessed on 4 February 2022.

© CESifo

rise again. Furthermore, financial market participants should start attaching less and less importance to the economic downside risk and further shift their portfolios from government bonds to equities.

While the overall funding costs of the banking sector continued to be historically low last year, as reflected by the Euribor rate, this was not necessarily the case for consumer credit rates (see Figure 1.21). A clear increase in rates has been observed for personal lending rates on new consumer credit loans with a maturity of less than one year. Like money market rates, interest rates on firm loans stayed stable and low. Also, average interest rates for newly granted real estate loans to private households kept in line with money market rates. As usual, the differences across euro area countries remained large.

Consumer credit growth remained subdued over the course of last year. The level shift in corporate credit that occurred during the first wave of the pandemic did not lead to a counter-reaction last year. On the contrary, especially in the second half of last year, corporate credit growth took on some positive momentum. At the aggregate level, overall credit growth in the euro area remained around 2 percent last year, driven in particular by the relatively steady growth dynamics in mortgage credit (see Figure 1.22).

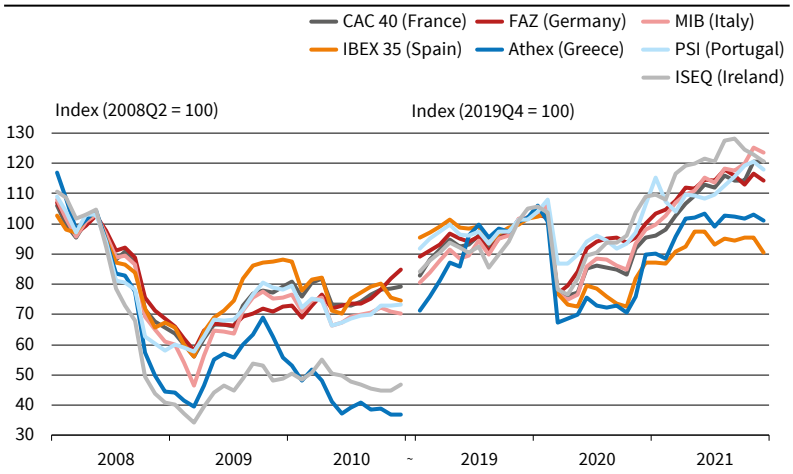
Although the private economy barely recovered from the initial waves of the pandemic, stock markets generally performed well last year (see Figure 1.23). Except for the Japanese Nikkei 225, which largely stagnated throughout the year, all major markets posted double-digit gains over the year from a euro area perspective, and performance differences between countries were relatively small. For example, the Euro STOXX 50 and the UK's FTSE 100 were up around 20 percent during 2020 when measured in euros. The Shanghai Stock Exchange Composite, like the major US and European stock market indexes, also surpassed the 15 percent mark last year. Part of these gains on the Chinese stock markets can be attributed to the appreciation of the Chinese currency during the year. The return on the FTSE 100, calculated in British

pounds, was also significantly lower – the roughly 6½ percent nominal appreciation of the British pound did offset part of this difference.

In Europe, too, stock markets were generally bullish last year (see Figure 1.24). The French CAC 40, which tracks the 40 largest public companies traded on the French stock exchange in terms of market capitalization, recorded a year-end return of almost 30 percent. While most stock market indices improved to levels well above pre-crisis levels, Spain's IBEX 35 and, to a lesser extent, Greece's Athex were clear exceptions. After a strong recovery, both stagnated at levels still below or just above those seen at the end of 2019.

Figure 1.24

Developments of Selected Stock Markets within the Euro Area



Source: Datastream; last accessed on 4 February 2022. © CESifo

1.4. MACROECONOMIC OUTLOOK[4]

1.4.1 Assumptions, Risks, and Uncertainties

As always, the forecast presented is based on various assumptions and thus involves various risks and uncertainties. For example, it is assumed that the price of a barrel of Brent crude oil will average around USD 71 this year (after on average USD 76 last year). It is also assumed that the euro will trade around an average of USD 1.13 this year (after USD 1.18 last year).

The pandemic situation is expected to gradually improve as spring approaches. The current Omicron wave will level off in the coming months, and social and economic activities will be able to return to a feasible level of normalcy. Continued vaccination and immunization of society, as well as warmer weather conditions in the Northern Hemisphere, will support this next phase of normalization. By summer, Covid-19 is expected to have become endemic in much of the Western world, meaning that large segments of the population have either been infected and/or vaccinated and have thereby gained a level of immunity, even to new variants, that will not overwhelm the health care system and other segments of society anymore. The further course of the pandemic and the associated social distancing and infection control measures remain the most critical assumptions for economic forecasts, as they are still associated with high uncertainty. The Omicron wave appears to be different as compared to previous waves.

The forecast risks are once again on the downside. While vaccination progress could accelerate due to, e.g., making vaccination compulsory in several European countries, emerging virus variants, such as the Omicron variant at present, pose new challenges for pandemic control. In particular, the spread of the Omicron variant, which is particularly contagious and against which the available vaccines appear to be less effective, harbors great uncertainties. Within many European countries with a highly vaccinated population, the risk to individuals of becoming seriously ill appears low and decreases significantly from previous waves, but the risk to society might be higher because of the increased demand for health care due to very high infection rates and the decline in the labor force that accompanies the wave. At the time of preparing this forecast, well-founded knowledge about the short- and long-run characteristics of the Omicron variant is still limited. Over time it will become clearer how dangerous the mutation is, how well existing vaccines do work, and to what extent governments have learned to deal with it. From an economic perspective, this new variant leads to an increase in the uncertainty of economic actors in the short term as it is unclear to what extent it will induce new infection control measures, behavioral adjustments, and workforce shortfalls. Even if there is no global return to government-imposed lockdowns, normalization steps such as opening national borders to tourism and resuming business travel could be withdrawn or postponed further into the future. In the process, there is a danger that the economic structures in the particularly affected service sectors will also be damaged in the longer term in the wake of ever new business slumps, especially since the fiscal capacities to counteract effectively may already be exhausted in some countries. Nevertheless, the new variant carries not only pronounced downside but also possible upside risks. Whereas higher transmissibility as well as a loss of efficacy of existing vaccines could further harm the economy, there is the possibility that an attenuated course of the disease together with a successful vaccination strategy could unexpectedly relieve the burden on the health care system, allowing the economy to pick up again faster than expected.

There are also downside risks from a sharp rise in inflation, geopolitics, the real estate bubble in China, and persistent supply bottlenecks. Further recovery will depend on how quickly supply-side shortages resolve. These might, however, also get exacerbated by

[4] The forecasts presented are updates of Wollmershäuser et al. (2021) and Abberger et al. (2021).

a strong Omicron wave creating personnel shortages in many parts of the economy. These could therefore last longer than expected, continue to weigh on industry, and create further upward pressure on prices. This in turn would pose difficult trade-offs for central banks, as tightening monetary policy would not only dampen inflation but also economic growth. Accordingly, the upswing is likely to take longer. Should production capacities even reach their macroeconomic limits, bottlenecks could not be resolved by expanding capacity and the pent-up demand could fizzle out as prices continue to rise. Postponed wage negotiations due to the pandemic carry the risk that the increased inflation will last longer than forecasted via second-round effects. Furthermore, so far it is difficult to assess whether consumers will continue to build up higher savings out of caution and exercise consumer restraint or whether savings will be reduced more than expected in the medium term. On a political level, there are risks regarding the negotiations between the European Union and the United Kingdom on the Northern Ireland Protocol as well as the foreign trade agreement between the United States and China in 2022. Other risks include a possible Russian invasion of Ukraine and a stronger than expected economic slowdown in China. The Chinese real estate market with its highly indebted players has been a risk factor for years. A sharp downturn in China or a war-like event in Ukraine could affect the entire global economy.

The upcoming withdrawal of loose monetary policy, especially in the United States, also poses the risk of negative spillover effects for emerging markets, as in previous tapering episodes. A rise in interest rates and thus bond yields in the United States results in global portfolio shifts. Capital is withdrawn from risky higher-yielding bonds, i.e., also from emerging market government bonds. This can lead to currency devaluation, an acceleration of national inflation rates, defaults on foreign currency loans, and even recession in the affected countries.

Furthermore, there is still uncertainty about how the solvency of crisis-ridden companies will develop once public support measures are scaled back and tax deferrals and other debt moratoria are ended. In the worst case, the volume of non-performing loans could increase significantly, reduce bank lending, and weigh on the public finances. This would not only have a negative impact on investment, but also on private consumption (especially of durable goods) and thus dampen economic growth.

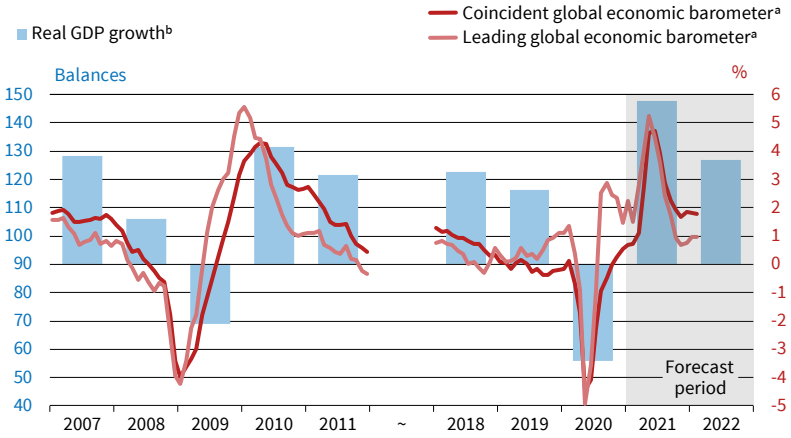
On the other hand, an expansion of commodity production volumes could sustainably dampen the currently very high prices. This could effectively weaken inflation, allow central banks to continue their loose monetary policy, and thus lead to stronger economic growth than forecasted, as there is a very high consumption potential in view of the strong increase in involuntary savings at simultaneously low interest rates.

1.4.2 Global Economy

The emergence of the Omicron variant, the uncertainty about its impact, and the existing problems in international supply chains will determine the development of the global economy this year and have led economic activity to be noticeably subdued this winter. The corona pandemic and supply shortages are affecting different regions around the world quite differently. In many countries, some health policy measures have been taken again to restrict economic and social activities. In those with high vaccination rates, the restrictions are less severe, provided that the decline in vaccination protection is compensated for by follow-up vaccinations. The resulting economic slump this winter will probably be followed by a strong recovery, as experience with previous pandemic waves have shown. The share of companies that perceive material shortages as hampering production is historically high. However, adjustments in production processes, an easing of the pandemic situation and price allocation mechanisms should alleviate the excess demand this year. This is also indicated by the fact that the majority of companies in most countries remain optimistic. Although the Global Barometers have been low for quite a while, the coincident version still stands at a level that signals above average growth and the leading version has – specifically because of particular developments in Asia and in industry at the start of 2022–picked up again (see Figure 1.25). The partly very high order backlogs should lead to a significant acceleration of industrial production and investment dynamics. Moreover, the robust growth of the global economy in the forecast period is supported by still accommodative monetary and fiscal policies. Hence, the outlook remains positive given the expectation of significantly lower contagion lev-

Figure 1.25

World Economic Growth and the Global Economic Barometers



[a] Both barometers have an in-sample average of 100 and a standard deviation of 10.
[b] Countries are weighted according to previous year's nominal GDP in US dollars and market exchange rates.
Source: National statistical offices; KOF/FGV; EEAG calculations; last accessed on 10 February 2022; GDP 2021 and 2022: EEAG forecast.

© CESifo

els again in the spring than in the wintry situation. Stronger momentum can therefore be expected again from spring 2022 onward. Support measures, however, cause a further push in public debt, which is therefore reduced much more slowly than was hoped for before the start of the winter. Overall, world GDP is likely to have seen an expansion rate of 5.8 percent in 2021 and facing one of 3.7 percent in 2022.

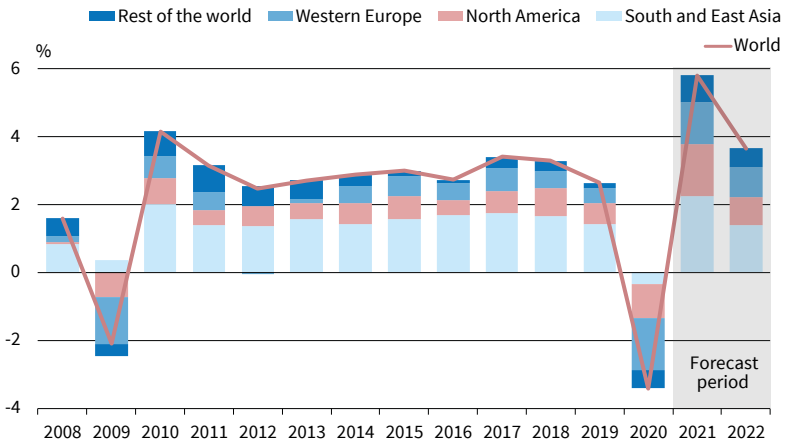
Whereas the decline in world economic growth in 2020 was strongly driven by developments in Western Europe, last year and again this year, we will see that the strongest contribution to world economic growth will stem from South and East Asia (see Figure 1.26). Nevertheless, while before the pandemic more than half of world's growth was coming from the Asian continent, in the current environment it is still North America and Western Europe that together contribute more strongly to world dynamics.

In the United States, momentum should continue to normalize in the coming quarters (see Figure 1.27). Despite rising infection figures, no new lockdown measures have been undertaken. However, consumer restraint is likely to have led to a slowdown in the service sector during the winter months. Another positive impulse comes from investments plans of USD 1 trillion to renew infrastructure and expand broadband internet access. This includes USD 550 million in new investments, in addition to those already budgeted. These are to be spread over the next few years and will support growth momentum in the medium term. Hence, fiscal policy remains expansive. Nevertheless, these plans provide less stimulus as compared to the programs of the past two years. Due to the far advanced recovery, the US Federal Reserve will end its purchase of securities this spring and start raising interest rates afterwards. This will first allow for a further improvement in the labor market situation. Although the crisis-induced rise in unemployment has virtually been reduced again to a pre-crisis level, the labor force participation rate in the United States is still significantly below that level.

The outlook for the Chinese economy remains fraught with great uncertainty. While the government's zero-tolerance Covid-19 strategy could lead to renewed local lockdowns at any time, tensions in the real estate market are likely to continue to weigh on economic development in the near term. The fact that further electricity rationing measures were suspended at the end of last year and exports have continued to recover is a relief for their development. While the energy crisis seems to be easing with the mobilization of additional fuel and improved incentives for electricity production, measures to contain local Covid-19 outbreaks are likely to continue to have a noticeable dampening effect on the economy for some time to come. Consolidation in the real estate sector is even likely to dampen overall economic production beyond this year. In order to support the economy, monetary and fiscal policy will become more expansionary. In

Figure 1.26

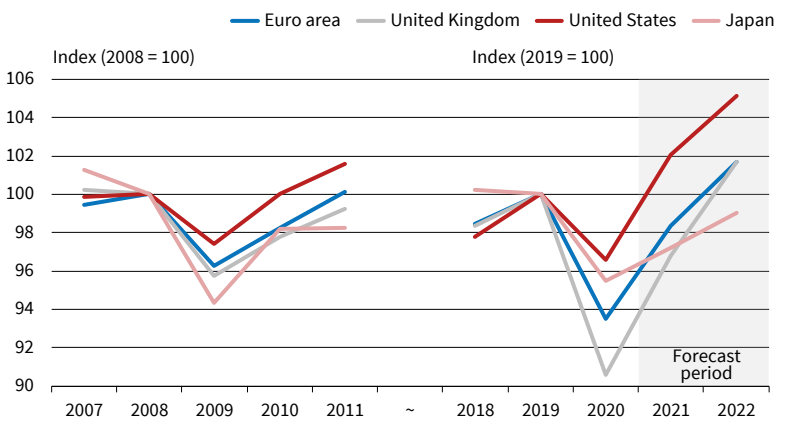
Regional Contributions to World GDP Growth[a]



[a] Based on market weights.
Source: National statistical offices; EEAG calculations and forecast. © CESifo

Figure 1.27

Economic Growth by Country and Region
Real GDP as an index



Source: US Bureau of Economic Analysis; Eurostat; ESRI; National Bureau of Statistics of China; last accessed on 4 February 2022; EEAG forecast. © CESifo

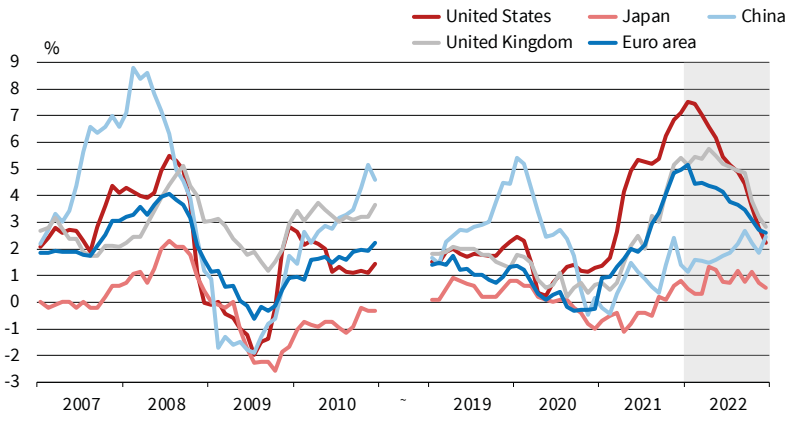
December and January, the central bank decided to lower the minimum reserve rate by in total 15 basis points. In addition, small and medium-sized enterprises are to be supported, for example by easing lending conditions and reducing taxes and fees. All in all, we expect the Chinese economy to pick up speed slowly. At 4.9 percent, the GDP growth rate will still be significantly lower this year than the from a historical perspective already low long-term figures recorded before the Corona crisis.

The current inflation dynamic in the world will subside as the demand overhang is reduced. Nevertheless, inflation rates in many countries around the world will remain clearly above the implicit or communicated inflation targets for quite some time (see Figure 1.28). Whereas inflation is expected to have peaked this winter and to decline significantly during the year, mainly because inflationary impulses from energy prices will cease, underlying inflation is expected to remain significantly higher than pre-crisis levels throughout the year. The rising overall eco-

Figure 1.28

Inflation Rates in Major Countries and Regions

Percentage change over previous year's month



Source: US Bureau of Labor Statistics; Statistics Bureau of Japan; National Bureau of Statistics of China; Eurostat; last accessed on 10 February 2022. © CESifo

nomic capacity utilization will contribute to price increases remaining higher than these inflation targets. For the United States we expect the average inflation rate to on average marginally change from 4.7 percent last year to 4.9 percent this year. However, at the end of the year, inflation will thereby have dropped to around 2 percent again. Consumer prices in China will rise only moderately in the forecast period, also because energy prices on the consumer side are – to a greater extent than elsewhere – regulated by the state.

1.4.3 European Economy

The Omicron variant has led to stricter entry restrictions and increased testing requirements in many places in Europe. In some cases, entry bans have also been imposed again. Individual countries have already adopted a general vaccination requirement or introduced a partial vaccination requirement for individual occupational groups and institutions. In addition to the measures taken to reduce contacts, this renewed uncertainty shock is likely to pose an increased risk to companies' ability to plan ahead and cause many of them to postpone their investment plans. In addition, endogenous behavioral adjustments in consumer behavior are likely to weigh again on economic development. On the supply side, the biggest bottlenecks are likely to be in the area of personnel. Healthcare personnel in particular are reaching the limits of their capacities after almost two years of crisis.

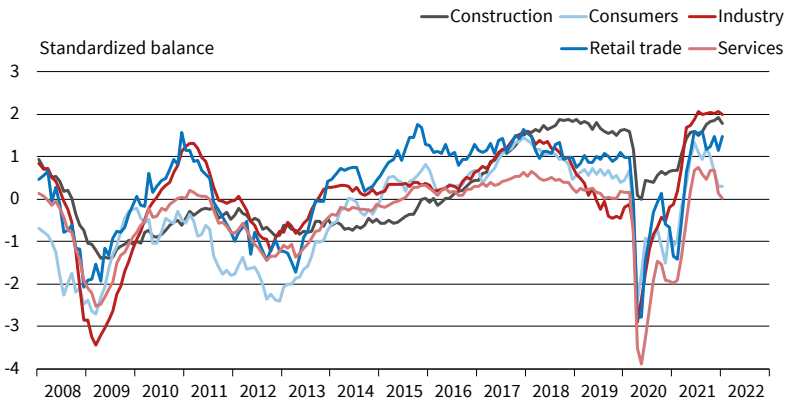
Both voluntary behavioral changes and tighter restrictions will reduce demand in the contact-intensive service sectors and can to some extent cause intertemporal substitution through increased savings. In transport, too, the home office recommendation and stricter travel regulations will lead to losses again. However, these demand-driven losses will be significantly lower than during the winter of 2020/21, as the measures will be less drastic as the immunization of the population progresses. This will make supply-side reductions related to shortfalls in labor more noticeable. Demand in the tourism sector will be supported by domestic tourism, although not quite as strongly as in the previous summer and autumn months. The recovery in the hospitality sector is still likely to be partly held back, as the guests from long-distance markets are likely to remain absent for longer. The return of intercontinental guests is significantly delayed compared to inner-European guests, also because their tourist trips have significantly longer lead times and are currently subject to restrictions. In the long run, the reduced business tourism will leave its mark especially in urban areas.

Despite the next wave in the pandemic, most economic sentiment indicators for the euro area remained at high levels or did not decline to clearly below-average values (see Figure 1.29). The overall outlook therefore remains quite positive and after a setback in the winter half-year, the recovery in the euro area will pick up speed again in spring. Gradually dissipating supply bottlenecks will allow for strong value-added growth in the manufacturing sector over the course of the year. After growing by 5.2 percent in 2021, GDP in the euro area is likely to increase by 3.4 percent this year.

The construction sector continues to be supported by the low interest rate environment and public financing for transport infrastructure investments. The retail sector, which has benefited from consumer substitution from pandemic unavailable services to goods since the beginning of the pandemic, will return to normal this year due to the continued increase in availability of services and saturation in goods consumption. Therefore, some decline in retail trade is to be expected this year. The accelerated structural change towards online trade is likely to be permanent to rather a high degree. Since the beginning of the pandemic, an unusually high number of business start-ups have been recorded in this sector.

Figure 1.29

Confidence Indicators[a] for Different Sectors in the Euro Area



[a] Selected (seasonally adjusted) balances on business and consumer tendency survey questions. Balances are the differences between the percentages of positive and negative replies. These are subsequently normalized to have an average of 0 and variance of 1 for the period from 1985 onward.

Source: European Commission; last accessed on 4 February 2022; EEAG calculations. © CESifo

Table 1.2

Labor Costs[a]

	Compensation per employee[b]				Real compensation[c]				Labor productivity				Unit labor costs				Relative unit labor costs[d]				Export performance[e]			
	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022	2014–2019	2020	2021	2022
Germany	2.8	0.4	3.1	3.9	1.0	1.2	−2.7	−0.2	0.7	−4.1	2.8	2.5	2.4	4.9	0.4	1.1	1.1	1.4	−0.2	−0.9	−0.2	−1.7	−1.2	−1.5
France	1.2	−2.9	5.4	4.4	0.3	−1.4	−3.6	4.4	0.7	−7.1	5.0	3.2	0.4	4.5	0.1	1.1	−1.1	0.6	−0.2	−0.6	−0.3	−7.5	−0.2	2.0
Italy	0.9	−5.2	5.5	2.3	−0.1	−0.3	−6.6	3.6	0.1	−7.1	5.6	3.0	1.3	2.4	0.7	−0.6	0.1	−0.7	0.4	−3.0	−0.4	−6.1	4.1	1.2
Spain	0.9	−1.4	3.1	3.2	0.2	−0.2	−2.9	0.4	0.3	−7.0	1.9	3.1	0.9	5.9	0.9	−0.4	−0.3	2.9	0.6	−2.3	0.1	−11.1	3.5	4.3
Netherlands	1.5	4.7	1.5	2.0	0.1	−0.8	2.3	−0.9	0.6	−3.4	2.9	1.9	0.9	7.6	−1.2	0.0	−0.1	5.9	−1.6	−3.2	0.2	5.2	−0.8	−0.7
Belgium	1.2	−1.5	3.8	4.6	−0.3	0.0	−4.8	1.6	0.5	−5.6	4.7	3.0	0.6	4.0	−0.9	1.5	−0.7	1.0	−0.6	−0.4	−0.1	4.4	2.3	−0.9
Austria	2.3	1.9	2.8	2.8	0.5	0.0	0.3	0.0	0.4	−5.3	1.3	2.8	2.1	7.2	2.3	0.5	0.1	2.9	1.8	−1.0	−0.1	−3.0	1.3	2.5
Finland	0.8	0.8	3.1	3.3	−0.5	−0.5	−1.9	0.9	0.6	−0.8	1.7	1.4	0.3	1.6	1.0	1.9	−0.1	−1.4	−0.2	−1.4	−0.2	1.7	−5.2	0.4
Greece	−0.8	0.0	0.0	1.9	−0.4	0.1	−2.6	−3.1	−0.3	−7.8	5.4	0.5	0.8	8.9	−5.9	1.8	−0.3	6.6	−6.3	−0.9	1.9	−13.8	6.4	7.4
Ireland	2.3	2.1	1.5	3.3	0.1	3.6	2.7	−0.6	6.3	7.4	12.0	2.2	−3.2	−5.2	−9.2	0.5	−4.7	−10.3	−10.0	−1.8	9.0	21.4	7.8	−0.5
Portugal	1.8	2.0	3.2	2.5	0.2	−0.2	1.1	1.8	0.5	−6.7	2.6	4.4	1.8	9.8	−0.1	−1.8	0.6	6.0	−0.7	−3.1	1.2	−8.2	1.0	3.8
Slovakia	4.3	3.6	4.9	4.9	3.5	1.9	1.4	1.4	1.3	−2.5	3.8	3.7	3.3	6.3	0.3	1.0	1.4	2.8	−1.3	−1.0	−0.3	0.9	1.0	−3.2
Slovenia	2.9	3.4	6.8	4.0	1.6	1.7	0.9	3.8	1.4	−3.7	4.5	3.4	1.7	7.1	1.7	0.0	0.0	4.5	1.1	−1.8	2.2	0.3	0.9	0.6
Estonia	7.1	4.7	6.4	8.3	4.2	7.6	3.0	1.8	2.5	−0.4	8.7	2.4	4.3	5.3	−1.6	7.1	3.4	2.8	−3.0	3.4	0.1	2.7	6.7	1.9
Sweden	1.6	2.6	4.0	3.0	0.9	0.1	−0.5	1.5	1.1	−1.6	3.2	1.5	0.6	4.2	1.5	1.7	−0.6	1.7	4.4	1.2	0.0	4.4	0.1	−1.4
Denmark	5.0	2.3	4.0	3.1	3.7	2.7	0.9	2.5	3.3	−2.1	2.7	1.1	2.1	4.5	1.5	2.0	0.4	1.3	0.4	−0.3	3.0	1.2	−3.9	−2.5
Poland	5.4	3.7	5.5	5.6	3.3	1.3	−0.2	1.5	2.5	−2.4	4.1	5.2	3.2	5.5	2.9	1.5	1.6	−1.3	−0.6	−1.8	0.9	10.2	2.8	−1.7
Czech Republic	4.2	3.2	4.4	2.6	0.7	−0.2	−1.6	−1.1	1.4	−4.2	2.3	2.2	2.7	7.6	3.2	0.7	−0.8	0.5	6.0	0.5	1.5	2.0	−1.1	−2.2
Hungary	2.4	1.9	7.1	8.9	0.8	−3.6	−5.3	−0.8	0.7	−3.9	5.1	4.0	1.5	5.7	2.4	5.1	−0.3	−5.9	−0.4	2.2	−1.6	3.0	0.2	0.8
United Kingdom	2.7	2.2	5.0	4.6	0.7	−3.1	1.4	2.7	1.0	−8.9	7.4	3.7	1.9	13.6	−1.1	1.1	−2.8	9.9	1.4	−0.6	0.7	−7.0	−7.2	−0.2
Switzerland	0.3	−0.7	3.3	1.6	0.7	0.9	−1.9	2.0	0.7	−2.1	2.7	1.4	−0.1	1.6	0.4	−0.2	0.2	2.2	−0.7	0.0	−2.2	3.3	−2.2	0.1
Norway	2.7	1.6	5.0	2.5	1.7	6.3	−13.4	−0.8	0.5	0.6	2.9	2.3	2.3	0.8	1.9	0.3	−2.6	−10.7	6.4	0.4	−2.2	9.3	−0.3	2.1
Iceland	6.7	−2.3	6.0	7.5	3.3	3.5	−6.6	2.9	1.7	−3.6	1.6	1.1	4.6	5.2	1.7	3.3	6.4	−9.6	2.9	1.2	0.3	−22.5	5.4	9.8
United States	2.6	7.2	5.8	4.7	1.0	1.4	3.2	2.1	0.7	2.3	2.7	0.9	2.0	4.7	2.8	3.7	3.5	2.1	−1.9	3.6	−1.1	−4.1	−4.8	−1.2
China																	1.0	−0.3	5.9	3.1	0.3	12.2	5.0	−2.6
Japan	0.8	−0.8	1.3	0.0	0.0	0.0	−0.2	0.7	−0.2	−3.9	1.8	3.0	1.3	3.4	−0.5	−1.2	−0.1	3.1	−8.0	−6.1	0.2	−4.9	0.7	0.4

[a] Growth rates for the total economy. [b] Compensation per employee in the private sector. [c] Compensation per employee in the private sector deflated by the GDP deflator. [d] Competitiveness: weighted relative unit labor costs. [e] Ratio between export volumes and export markets for total goods and services. A positive number indicates gains in market shares and a negative number indicates a loss in market shares.

Source: OECD Economic Outlook No. 110, November 2021.

The high number of vacancies in many sectors and the related recruitment problems of staff should also have supported wage settlements for next year. However, the willingness of employers to accept wage demands is likely to be quite low in many sectors due to the poor earnings situation in recent years. Therefore, a strong wage growth this year is not to be expected in Europe at large (see Table 1.2).

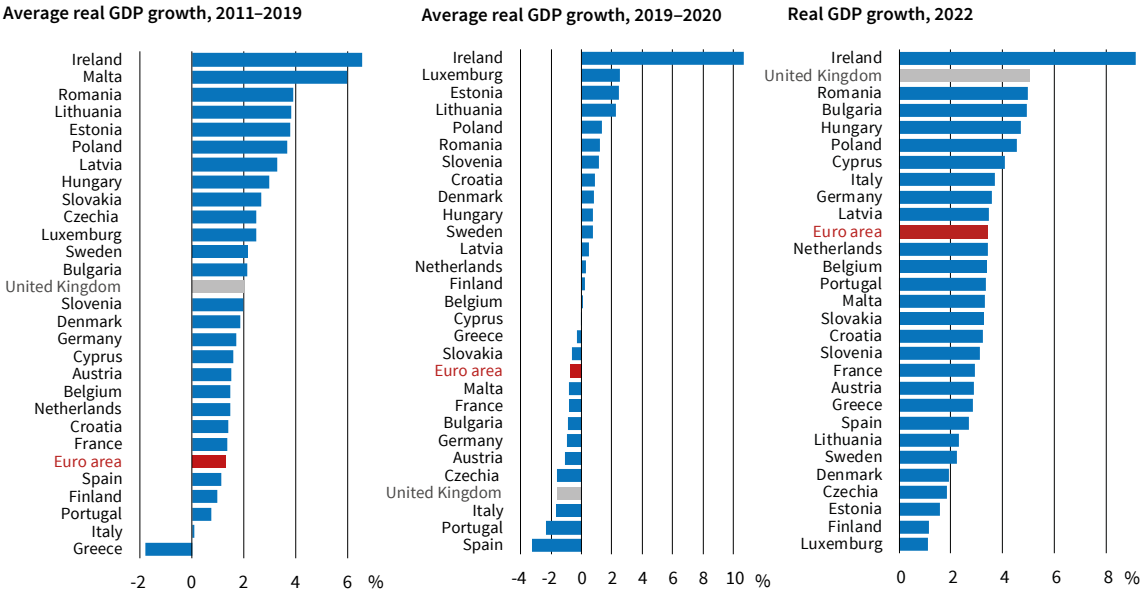
After consumer price inflation peaking this winter with rates slightly above 5 percent, price pressure from in particular energy prices will ease. It will take somewhat longer before the upward pressure on prices for industrial goods will also start to reduce. In the euro area, consumer price inflation is expected to be 3.8 percent this year: once again well above the inflation target. The euro area's unemployment rate of 7.0 percent by the end of last year already reached pre-crisis levels again and is expected to fall further during the year.

For the winter half-year, the EU countries outside of the euro area also face a temporary slowdown in overall economic expansion. In addition to the effects of the pandemic, the withdrawal of purchasing power due to the particularly high inflation in the Central and Eastern European countries will have a dampening effect. With strong wage growth, however, the consumption-driven upswing will reassert itself in the course of the year as the energy price-related inflationary push subsides. In addition, substantial additional EU funds will help finance an increase in investment. Thus, output is expected to rise strongly this year (see Figure 1.30).

The overall labor shortage is increasingly becoming a restraining factor for the UK economy: the number of job vacancies rose to a record level last year. The pandemic is again likely to have had a strong dampening effect on the UK economy this winter, as containment measures were again taken in view of the

Figure 1.30

Economic Growth in EU Member Countries and the United Kingdom



Source: Eurostat; European Commission; last accessed on 4 February 2022.

© CESifo

rapidly rising number of infections with the Omicron variant and the staff shortage problem was at least temporarily exacerbated. At the same time, some fiscal support measures are expiring. The fact that the economy has to realign its foreign trade after leaving the European single market is likely to continue to act as a brake this year. Nevertheless, GDP in the United Kingdom is expected to rise quite strongly this year at a rate of 5.1 percent.

REFERENCES

Abberger, K., Y. Abrahamsen, M. Anderes, J. Bamert, M. Daniele, F. Eckert, A. K. Funk, M. Graff, P. Kronenberg, H. Mikosch, N. Mühlebach, A. Rathke, T. Reinicke, S. Sarferaz, P. Seiler, M. Siegenthaler, S. Siegrist, S. Streicher, A. Stücker, and J.-E. Sturm (2021), "Konjunkturanalyse: Prognose 2022/2023. Pandemie bremst konjunkturelle Erholung", *KOF Analysen,* 2021:4, 1–28, Zurich: KOF Swiss Economic Institute, ETH Zurich.

Abberger, K., M. Graff, O. Müller, and J.-E. Sturm (2022), "Composite Global Indicators from Survey Data: the Global Economic Barometers", *Review of World Economics*, https://doi.org/10.1007/s10290-021-00449-8).

European Central Bank (2010), "Euro Area Statistics, Technical Notes", Monthly Bulletin, December.

Organisation for Economic Co-operation and Development (2020), "OECD Economic Outlook" 110, 2021/2, December.

Wollmershäuser, T., P. Brandt, S. Ederer, F. Fourné, M. Lay, R. Lehmann, S. Link, S. Möhrle, R. Šauer, S. Schiman, K. Wohlrabe, and L. Zarges (2021), "ifo Konjunkturprognose Winter 2021: Lieferengpässe und Coronawelle bremsen deutsche Wirtschaft aus", *ifo Schnelldienst,* 73, Sonderausgabe, December.

APPENDIX 1.A

Table 1.A1

GDP Growth, Inflation and Unemployment in Various Regions and Selected Countries

	Share of total GDP in %	GDP growth			CPI inflation[a]			Unemployment rate[b]		
		in %						in %		
		2020	2021	2022	2020	2021	2022	2020	2021	2022
North America	27.5	– 3.5	5.3	3.0						
United States		– 3.4	5.7	3.0	1.2	4.7	5.2	8.1	5.4	3.9
Canada		– 5.2	4.8	3.2	0.7	3.3	3.4	9.6	7.4	5.9
Western Europe	23.7	– 6.3	5.2	3.6						
European Union		– 5.9	5.2	3.4	0.7	2.9	3.8	7.2	7.0	6.2
Euro area		– 6.4	5.2	3.4	0.3	2.6	3.8	8.0	7.7	6.8
United Kingdom		– 9.4	6.8	5.1	0.9	2.6	4.7	4.5	4.6	4.4
Switzerland		– 2.5	3.6	3.0	– 0.8	0.5	1.0	4.8	5.2	4.5
Norway		– 3.0	3.8	2.4	1.2	3.9	3.3	4.6	4.4	3.8
South and East Asia	35.4	– 1.0	6.3	4.1						
China		2.3	8.1	4.9	2.5	0.8	1.9	4.0	4.1	3.7
Japan		– 4.5	1.8	1.9	0.0	– 0.3	0.8	2.8	2.8	2.5
India		– 7.3	7.3	8.5	6.6	5.1	5.5	10.3	7.8	6.3
Eastern Europe and Central Asia	2.0	– 2.5	6.3	9.3						
Russia		– 2.3	6.6	10.3	3.4	6.7	6.8	5.8	4.9	4.5
Latin America	5.7	– 6.7	6.9	2.8						
Oceania	2.0	– 2.0	4.5	3.6						
Africa and the Middle East	3.7	– 2.2	6.1	4.3						
OECD countries		**– 4.7**	**5.2**	**3.2**						
Advanced economies		– 4.5	4.9	3.1	0.7	3.3	4.1			
Emerging markets		– 1.3	7.4	4.8	3.5	3.5	4.5			
World	**100.0**	**– 3.4**	**5.8**	**3.7**	**1.6**	**3.4**	**4.2**			

Notes: Aggregates are weighted with the 2020 level of GDP in US dollars; [a] Where possible harmonized inflation rates are shown. [b] Where possible standardized unemployment rate are shown.

Source: EU; OECD; IMF; ILO; National Statistical Offices; 2021 and 2022: EEAG forecast.

Table 1.A2

GDP Growth, Inflation and Unemployment in the EU Countries

	Share of total GDP in %	GDP growth[a]			Inflation[b]			Unemployment rate[c]		
		in %								
		2020	2021	2022	2020	2021	2022	2020	2021	2022
Germany	25.1	– 4.6	2.8	3.6	0.4	3.2	4.3	3.9	3.5	3.1
France	17.2	– 7.9	6.7	2.9	0.5	2.1	2.8	8.0	7.9	7.3
Italy	12.3	– 8.9	6.1	3.7	– 0.1	1.9	4.5	9.3	9.5	8.7
Spain	8.4	– 10.8	5.0	2.7	– 0.3	3.0	4.5	15.6	14.8	12.9
Nether-lands	6.0	– 3.8	4.5	3.4	1.1	2.8	3.7	4.9	4.2	3.7
Belgium	3.4	– 5.7	6.2	3.4	0.4	3.2	3.2	5.6	6.3	5.4
Austria	2.8	– 6.7	5.0	2.9	1.4	2.8	3.3	6.1	6.1	4.7
Ireland	2.8	5.9	15.8	9.1	– 0.5	2.4	3.7	5.8	6.3	5.3
Finland	1.8	– 2.8	3.4	1.1	0.4	2.1	2.8	7.8	7.6	6.8
Portugal	1.5	– 8.4	4.2	3.3	– 0.1	0.9	2.7	7.1	6.6	5.7
Greece	1.2	– 9.0	9.3	2.9	– 1.3	0.6	5.2	16.4	14.8	12.6
Slovakia	0.7	– 4.4	3.3	3.3	– 0.7	0.8	1.4	6.7	6.8	6.3
Luxem-bourg	0.5	– 1.8	7.0	1.1	0.0	3.5	3.2	6.6	5.6	5.0
Lithuania	0.4	– 0.1	4.8	2.3	1.1	4.6	4.8	8.5	6.9	5.6
Slovenia	0.3	– 4.2	6.9	3.1	– 0.3	2.0	3.4	5.0	4.8	4.6
Latvia	0.2	– 3.6	4.7	3.5	0.1	3.2	4.2	8.1	7.5	7.0
Estonia	0.2	– 3.0	8.2	1.6	– 0.6	4.5	4.8	6.9	6.2	4.9
Cyprus	0.2	– 5.2	5.5	4.1	– 1.1	2.3	2.5	7.7	7.5	6.3
Malta	0.1	– 8.2	7.2	3.3	0.8	0.7	2.0	4.4	3.6	3.4
Euro area	**85.1**	**– 6.4**	**5.2**	**3.4**	**0.3**	**2.6**	**3.8**	**8.0**	**7.7**	**6.8**
Poland	3.9	– 2.5	5.3	4.5	3.7	5.2	5.8	3.2	3.4	2.9
Sweden	3.6	– 2.9	4.6	2.2	0.7	2.7	2.8	8.3	8.8	7.4
Denmark	2.3	– 2.1	3.8	1.9	0.3	1.9	2.8	5.7	5.2	4.7
Romania	1.6	– 3.7	6.5	5.0	– 0.2	0.5	0.9	6.0	5.5	5.2
Czech Republic	1.6	– 5.8	2.8	1.9	3.0	3.2	4.3	2.6	2.8	2.1
Hungary	1.0	– 4.7	6.5	4.7	3.3	5.1	5.9	4.1	4.1	3.5
Bulgaria	0.5	– 4.4	2.8	4.9	1.2	2.8	4.0	5.2	5.3	4.8
Croatia	0.4	– 8.1	10.8	3.2	0.0	2.7	3.1	7.9	7.9	6.8
Non-euro area EU	**14.9**	**– 3.4**	**4.9**	**3.3**	**1.7**	**3.2**	**3.8**	**4.7**	**4.7**	**4.1**
EU 27	**100.0**	**– 5.9**	**5.2**	**3.4**	**0.7**	**2.9**	**3.8**	**7.2**	**7.0**	**6.2**

[a] GDP growth rates are based on the calender adjusted series except for Ireland, Slovakia and Romania for which EUROSTAT does not provide working-day adjusted GDP series. [b] Harmonized consumer price index (HICP). [c] Standardized unemployment rate.

Source: Eurostat; 2021 and 2022: EEAG forecast.

Table 1.A3

Key Forecast Figures for the European Union (EU27)

	2020	2021	2022
	Percentage change over previous year		
Real GDP	– 5.9	5.2	3.4
Private consumption	– 7.3	3.8	4.5
Government consumption	1.3	3.5	1.9
Gross fixed capital formation	– 6.3	3.4	1.1
Exports of goods and services	– 8.5	9.2	5.2
Imports of goods and services	– 8.3	7.4	4.5
Net exports[a]	0.2	1.0	0.5
Consumer prices[b]	0.7	2.9	3.8
	Percentage of nominal GDP		
Government fiscal balance[c]	– 6.9	– 6.6	– 3.6
	Percentage of labor force		
Unemployment rate[d]	7.2	7.0	6.2

[a] Contributions to changes in real GDP (percentage of real GDP in previous year). [b] Harmonized consumer price index (HCPI). [c] 2021 and 2022: forecast of the European Commission. [d] Standardized unemployment rate.

Source: Eurostat; 2021 and 2022: EEAG forecast.

Table 1.A4

Key Forecast Figures for the Euro Area

	2020	2021	2022
	Percentage change over previous year		
Real GDP	– 6.4	5.2	3.4
Private consumption	– 7.9	3.4	4.6
Government consumption	1.3	3.8	1.7
Gross fixed capital formation	– 7.0	3.2	0.8
Exports of goods and services	– 9.1	9.6	5.5
Imports of goods and services	– 9.1	6.8	4.2
Net exports[a]	– 0.3	1.5	0.8
Consumer prices[b]	0.3	2.6	3.8
	Percentage of nominal GDP		
Government fiscal balance[c]	– 7.2	– 7.1	– 3.9
	Percentage of labor force		
Unemployment rate[d]	8.0	7.7	6.8

[a] Contributions to changes in real GDP (percentage of real GDP in previous year). [b] Harmonized consumer price index (HCPI). [c] 2021 and 2022: forecast of the European Commission. [d] Standardized unemployment rate.

Source: Eurostat; 2021 and 2022: EEAG forecast.

The Rise of Market Liberalism

To understand what might happen in the current circumstances, which are highly unusual, it is useful to review how policy and circumstances interacted in the stagflation episode of the 1970s and in the disinflation, international integration, and market liberalization developments of the 1980s and 1990s. We examine three principal areas of policy change or reorientation: the search for an answer to inflation, including institutional changes and the move to central bank independence; the deregulation of labor markets as an answer to persistently high levels of unemployment; and attempts to limit the growth of government expenditure and of government debt. In each case we attempt to answer the question about whether the move was driven by international exposure, global competition, and a pressure for institutional emulation. Did market liberalism follow from globalization (and, conversely, might a retreat from globalization necessarily imply a cutting back of market liberalism)?

Bad economic performance and ideological shifts often trigger sharp policy changes. What is now frequently, if perhaps inaccurately, termed "neoliberalism" emerged as a response to the economic and political crises of the 1970s. Reduced growth, high inflation, and the challenge of the oil price shocks seemed to offer a fundamental challenge to democracy, one that was elegantly summed up in Jean-François Revel's influential study on *How Democracies Perish*. The malaise of the 1970s, a combination of a threat to growth, concern with limited resources, higher inflation, and challenges to democracy, all look quite contemporary again. It is in consequence worth revisiting the experience of the 1970s, at a moment when the world seems to be denouncing, reviling, and moving away from neoliberalism. A famous aphorism of George Santayana holds that "Those who cannot remember the past are condemned to repeat it." Why did the 1970s generate a new philosophy of public sector management, and what problems did that approach generate?

In a longer-term perspective, the 1970s started the most intense phase of globalization – as measured by the share of trade in output – that the world ever experienced (Catão and Obstfeld 2019). The elements of a new liberalism included combating inflation, deregulation, and a reduction of trade union power. The movement was most dramatic in the US and the UK, and in consequence the outcome was often associated with Anglo-American society; however, continental Europe adopted some of its precepts. Though the turning point is often associated with the highly ideological figures of Ronald Reagan and Margaret Thatcher, in reality the fundamental shift already began under their predecessors, Jimmy Carter and James Callaghan. The latter told the Labour Party Congress in 1976: "We used to think that you could spend your way out of a recession, and increase employment by cutting taxes and boosting Government spending. I tell you in all candour that that option no longer exists, and that in so far as it ever did exist, it only worked on each occasion since the war by injecting a bigger dose of inflation into the economy, followed by a higher level of unemployment as the next step. Higher inflation followed by higher unemployment." These programmatic statements anticipate many of the developments of the following decades – until the outbreak of the Global Financial Crisis.

The extent to which there was a rhetorical embrace of the new liberalism varied from country to country. In the United States and the United Kingdom, the initial impetus may have come from the right, but the major parties of the left eventually, in the 1990s and later, took up the new philosophy. Bill Clinton saw the move as part of the process of "triangulation," taking winning themes away from the other side. In the 1990s in the United Kingdom, Tony Blair and Gordon Brown remade the Labour Party as "New Labour," and explicitly took up some of the market-oriented themes of Thatcher. In Germany, SPD leader Gerhard Schröder designed a wide-ranging welfare reform.

The practical outcomes of new approaches to a new challenge of globalization, however, were not dissimilar, although there were time lags. A substantial convergence took place, constituting one of the major phenomena of late twentieth century globalization. In all countries, inflation fell, with a broad convergence that by the 2000s included many non-Western countries as well. Countries increasingly embraced trade liberalization. They deregulated many markets, and those countries that hesitated were chastised as laggards. Trade union membership and labor conflicts both fell away.

2.1 ATTACKING INFLATION

2.1.1 Supply Shocks

The inflation of the 1970s, sometimes styled the Great Inflation, is popularly attributed to the oil price shocks, the quadrupling of prices in the last months of 1973 in the aftermath of the Yom Kippur war. The OPEC move occurred against a background of currency disorder: the par value system had collapsed in August 1971, and the attempt to restore it in December 1971 at the Smithsonian conference was unconvincing. Since petroleum prices were conventionally quoted in dollars, oil producers at first wanted to protect the real value of their exports, and then

in March 1973, when the restored par value system finally disintegrated, realized that increasing oil prices could be employed as an economic and also a political weapon. Initially it was tempting to think that the oil producers were "the clear and central villain of the piece." On this account, a one-time move, even if it was very dramatic, would only provide a temporary surge of inflation, not permanently adjusted expectations. A more realistic view, however, sees the oil price as responding to global supply and demand, and in particular to the general economic expansion of the late 1960s and the early 1970s. The higher oil price might be regarded as the imposition of a new (wealth and income reducing) tax; the industrial countries mostly decided not to adjust immediately. The immediate response in most countries was to accommodate the shock. That monetary and fiscal accommodation pushed inflation, which rose to 11.0 percent in the United States in 1974 (and then, after a second oil shock, to 12.0 percent in 1980), and to higher levels in some other countries: in the United Kingdom, CPI inflation in 1975 was 24.2 percent, and in 1980 18.0 percent.

Some countries chose to take a different path, and to accommodate the shock less. In Europe, especially in France and Germany, inflation was understood largely as imported from the outside, through the international monetary system, and the answer was thought to lie in a move to more European monetary cooperation. In May 1973, the Bundesbank saw an opportunity to end the fixed exchange link with the dollar and to embark on a course of monetary control. The banking sector disliked the move intensely, and feared that there might be bank failures. From 1974, the Bundesbank operated with a target range for central bank money, a narrow measure of the money supply, which it saw as a way of communicating an appropriate inflation goal to markets and to the parties in coordinated wage bargaining processes. Later, with much lower rates of inflation than the United States, and lower interest rates in consequence, Germans argued that the initial success allowed them to treat the oil price increase that followed later in 1973 as a genuinely once-off event, accommodate it, and in consequence experience a milder version of the general world downturn in 1975.

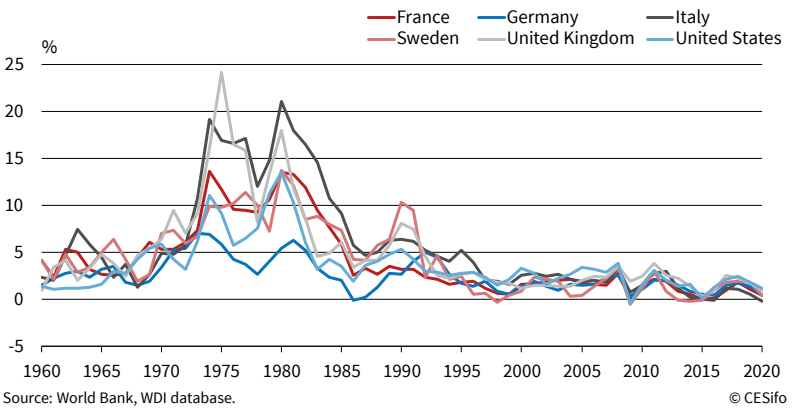
The countries that did not want to adjust immediately to higher oil prices did so not because they wanted higher inflation, but rather because they were gripped by a fallacious analysis that allowed them to downplay the risks of inflation. They fully saw the problem posed by the combination of high inflation with high unemployment and low growth, but believed that there might be a policy solution to the dilemma. The driver of the mistaken policy regime was a widespread belief in the capacity of economic growth to raise productivity, make more growth, and push down prices as a consequence of productivity gains. An influential model evolved by Nicholas Kaldor looked at the long-term relationship between technical progress and the rate of growth and derived a "technical progress function." An increased manufacturing sector would lead to a self-sustaining virtuous cycle of higher rates of growth and hence also of higher wages (Kaldor 1957; Kaldor 1967). The influential economist Roy Harrod (1972) then drew the logical consequence that stronger demand growth might reduce inflation. These optimistic expectations were severely disappointed.

Previously, policymakers had supposed there was a trade-off between inflation and growth, defined by a Phillips curve, the relationship identified by the New Zealand economist William Philipps. In the original version, the relationship was between wages and employment. High growth or rising employment would generate a shortage of workers and wage pressure that would be translated into rising prices. An economic shock would reduce the demand for employment and lead to a wage mitigation and a lower rate of price increases. For the world's major industrial economies, this relationship could be clearly empirically demonstrated through the 1960s. In the 1970s, however, wages continued to move up even though there was substantial unemployment, resulting in stagflation. The prevailing theory depended on irrational or arbitrary behavior of wage-earners, who in the original vision suffered from a "nominal wage illusion:" they did not notice that inflation was eroding their real incomes, and the lower real wages generated higher levels of employment. If the nominal illusion faded with higher levels of inflation, and also plausibly with unionization (discussed below), a new answer would be that wage settlements could only be constrained by discipline by the imposition of guidelines or even controls. The rise of inflation drove down real interest rates below any historic trend, and deep into negative territory.

The 1970s was thus a decade of diverging views about inflation but also of different inflation outcomes in the major industrial countries (see Figure 2.1). Germany looked like an outlier, with only 7.0 percent in 1974. Italy was at 19.2, the United Kingdom at

Figure 2.1

Consumer Price Inflation



Source: World Bank, WDI database. © CESifo

15.9 percent, and the United States at 11.0 percent. Even in stability-oriented Switzerland, the inflation rate was higher than in Germany.

The divergence between countries only started to change with a dramatic reorientation of US policy that followed from an intellectual reassessment of monetary policy, but also from the sense that the weakness of the dollar undermined the US position in the world. The major initiative came from the United States. On October 6, 1979, the Chairman of the Federal Reserve Board, Paul Volcker, announced a reorientation of policy "emphasizing the supply of reserves and constraining the growth of the money supply through the reserve mechanism" in order to obtain "firmer control over the growth in money supply in a shorter period of time." The nominal federal funds rate target was raised sharply from around 11 percent in September of 1979 to around 17 percent in April 1980. The result was a sharp recession, to which the Fed responded with a cut in rates. In 1981, there was a new tightening and another recession, after which the Fed brought the nominal federal funds rate down, from 19 percent in the summer to the 14 percent range by the end of the year. In the summer of 1982, there was a further reduction to around 10 percent.

The United Kingdom, under the new government of Margaret Thatcher, turned in March 1980 to a Medium-Term Financial Strategy in order to squeeze out inflation, with the specification of a series of declining target ranges for the major monetary target (£M3) over a four-year period on the principle that "control of the money supply will over a period of years reduce the rate of inflation." Both the US and the UK approaches initially prompted widespread criticism, not least because of surges of monetary growth that occurred in the process of disinflation and that followed from financial sector liberalization, with a large consequent expansion of bank lending. Later Volcker (1990) gave a retrospective view of the successes of central banks and monetary policy in promoting stabilization, explaining that "the record is quite clear that, despite varied efforts here and abroad, central banks did not discover any monetarist holy grail. In the end, no country in which inflation had become embedded seemed able to moderate that inflation without a painful transitional period of high unemployment, recession, and profit squeeze."

When was the convergence complete? Inflation rates were internationally much closer by the mid-1980s, although the rates in Germany and Japan were still substantially below those in France, the United Kingdom, and the United States; especially Spain, Italy and Sweden continued to have higher rates. A second wave of convergence occurred in the mid-1990s, after a period in which the French rate was lower than that of post-unification Germany. The convergence is often ascribed to the constraints imposed by the Maastricht Treaty and its convergence criteria, which included measures of inflation performance as well as fiscal and debt criteria. But while differences never disappeared completely, the process of convergence is equally discernable in countries which did not join the monetary union but which devised new strategies of inflation management, notably inflation targeting by independent central banks.

2.1.2 Independent Central Banks

The origins of the modern discussion about central bank independence or autonomy lay in clashes in the high-inflation environment of the 1970s, when monetary policy was the subject of acute political controversies. During the 1980s, a substantial academic literature also developed concerning the inflation performance as well as macroeconomic stability and growth. The new consensus suggested that in industrial countries, but also more generally, central bank independence was closely correlated with lower rates of inflation but also with better economic performance. It was already well known that monetary authorities were frequently subject to political pressures that produced higher levels of monetary growth. The newer literature initially developed on the basis of an appreciation that establishing firm commitment mechanisms was an essential element in the establishment of policy credibility. The approach emphasized the contractual element of the position of central banks, and consequently focused on the explicitly defined terms of contracts or laws establishing central banks.

By the 1990s, central bank independence was often thought to be a prerequisite for sound policy. The academic literature as well as the practice of the highly regarded central banks (Germany and Switzerland were at the top in nearly all surveys of central bank independence) led to a widespread recognition that independence would bring improvements in the policy environment. Central banks became more willing to listen to academics, and academics consulted more freely with the central banking community.

The general political climate also mattered in the discussion of the legal position of central banks. In 1989–90 the issue of institutional redesign suddenly seemed an urgent priority for some of the countries making the transition from the planned economy to the market. In the Czech Republic, Poland, and Hungary, central bank independence was a major part of the reform package designed to secure a stable macroeconomic framework. At the same time, in 1989 the Bank of Japan's position relative to the government was strengthened, and New Zealand in 1990 dramatically increased the independence of the Reserve Bank. These new developments gave impetus to a trend that was already well under way. The struggle for increased independence for Europe's central bank had already started before the intellectual revolution in economic thinking on the subject in the late 1980s and before the political upheavals of 1989–90 created

a new framework for conceptualizing the relationship of political institutions and rules to political and social processes. In some notable cases, the debate was associated with the beginnings of the European Monetary System (EMS): in particular, the Bundesbank and the Banca d'Italia used the negotiations over Europeanized money in the late 1970s to increase their own political autonomy.

There were additional twists to the Central Bank Independence (CBI) doctrine when put into practice. First, there should be a different approach to a one-off challenge than to persistent or endemic inflationary pressures. At the Bank of England, Mervyn King saw inflation as determined by occasional shocks that needed to be accommodated, with the consequence that what was important was the distribution of inflation outcomes rather than occasional peaks. In this way, the central bank might deliver a better performance than that of an "inflation nutter," as he characterized the "conservative" central banker (in a paper originally and provocatively given at the very conservative Swiss National Bank). Second, central banks often emphasized that they were acting in conformity with an international trend: this was the action of a coordinated "brotherhood of central banks." Or, as Mervyn King put it, "It is, after all, easier to lose weight when one's own family members are on the same diet" (James 2020). Third, advocacy for CBI involved a rejection of what is now known as fiscal dominance, but also of financial dominance. A central bank would have its sole role in monetary policy and should not be involved in financial supervision and regulation, as such involvement might create illegitimate pressure to use expansive monetary policy to aid its client banks: this would be, as the Bundesbank liked to put it, a pollution or contamination of pure monetary policy.

The move to CBI involved a concept of delegation for a specific and narrowly defined purpose – monetary stability – that meant that central banks necessarily had to slough off their former multifunctionality: their long-standing and very traditional engagement in financial stability, but also in industrial policy, which had been a core concern of many traditional central banks as a legacy of the Great Depression era. The logic should also have contained – as it did in Sweden and Norway in particular – a parallel process of delegation for fiscal policy to independent groups of experts, fiscal councils, committed to following a fiscal rule that might (like the monetary target) be set through a political process.

2.2 MARKET STRUCTURE DEVELOPMENTS

2.2.1 Trade Liberalization

Besides macroeconomic developments, structural changes played a role in the liberalization phase of advanced economies. It appears paradoxical that the oil shock (and other commodity shocks) created more globalization rather than a turn to economic nationalism. One mechanism that drove the new linkages was a financial revolution, which transferred the large surpluses accumulated by oil producers into lendable funds in big international banks. The development of international capital markets, offshore and thus largely free of direct government control, was the major financial innovation of the period. The availability of money made resources available for governments all over the world that wanted to push development and growth, and international demand thus surged. The alternative strategies, such as the proposal of an autarkic siege economy by some parts of the UK Labour Party in the 1970s or by some French socialists in the early 1980s, looked like a mechanism that would cut off access to markets and hence prosperity.

The possibility of increased trade depended on technology as well. The basic innovation that revolutionized international commerce, the standardized container with the possibility of speeding up loading and unloading in ports and then allowing direct transportation to users and distributors, had been introduced in the 1950s. But the traffic in containers only took off in the 1970s: it was 1973 when containers transported more of the US cargo trade than traditional breakbulk ships. And then in the 1970s increased competition, and the pressure of shippers on the carriers, drove down prices. The big surge in size of container ships only occurred in the 1990s, however.

Oil prices and technological change were a major trigger of the wave of globalization that occurred in the last decades of the century. The most obvious and immediate victors of the energy crisis were Japanese automobile producers. A relative outsider to the industry, the motorcycle maker Honda, created a new "stratified change" engine in 1973 that allowed a higher ratio of air to gasoline and thus substantially fueled economies. Japan, a country with a much more obvious energy constraint than the United States, rapidly became the foremost source of fuel-efficient cars, which now clearly outcompeted American "gas guzzlers." By 1980, 200,000 American automobile workers were unemployed, a direct response to the surge in Japanese imports: from 1975 to 1980 the annual sales of Japanese cars in the United States rose from 800,000 to 1,900,000. In Europe too, Japanese automobile sales took off and eventually spurred the European competitors to modernize in order to compete. Automobiles provided the most obvious instance of the new dynamic: business had to learn to compete effectively in quality and innovation, and that would occur only with open markets. But the same dynamic was evident more generally. By the mid-1980s, the insight about trade liberalization formed the center of the European Commission's ambitious program realized through the 1986 Single European Act.

A further boost to globalization came from an appetite for market liberalism that led to a considerable reduction in protectionism, as we will see in the next chapter, and also to deregulation of domestic markets.

2.2.2 Deregulation

The first significant push to deregulate came in the United States. The initiative came from the administration of Gerald Ford and was continued by Jimmy Carter. The control policies applied by Nixon were increasingly complex and perverse in their consequences. William Simon, who ran Nixon's energy control program stated that "the kindest thing I can say about it is that it was a disaster." Ford promised action to improve competition and reduce consumer prices in airlines, trucking, railroads, and financial institutions. The push took time, as until 1979 the influential Interstate Commerce Commission was headed by a Nixon appointee opposed to deregulation. The quickest action occurred in aviation, where the Civil Aviation Bureau was more sympathetic and allowed new types of cheap fares that dramatically slashed the cost of air travel. Carter signed the Motor Carrier Act in 1980.

Competition policy was altered in the 1980s by the application of a consumer welfare standard: the argument that bigness did not matter if it resulted in gains for consumers. This was an argument that had already been at the center of anti-trust litigation in the early twentieth century: it was the core of the defense of Standard Oil, which demonstrated conclusively that the trust substantially lowered petroleum product prices for consumers. It was revived in the University of Chicago by theorists of the firm such as Ronald Coase, and above all by the legal scholar Aaron Director, who established the *Journal of Law and Economics* as a way of promoting a new synthesis of the disciplines. The most forthright statement of the case probably came in Robert Bork's *The Antitrust Paradox.*

The European counterpart to the US discussion was the leadup to the 1986 Single European Act, which included major governance reforms but also specific processes to create a genuine single market. The Act included 272 unitary-market mechanisms, provisions for strengthening of its economic and social cohesion (Article 130 of the Treaty) as well as the enactment of standards for workers' health and safety, a launching of European research and technology development strategies, and policies for environmental protection. Article 70 was modified to specify that the European Council "shall endeavor to attain the highest possible degree of liberalization. Unanimity shall be required for measures which constitute a step back as regards the liberalization of capital movements." There was a timetable to achieve that liberalization by 1992. The Act also contained a headline (without further elaboration) on monetary union.

By the 1980s and 1990s, a great deal of the effort at liberalization or deregulation focused on financial markets. The United Kingdom's 1986 Big Bang was a precedent here, with a breaking down of traditional restrictive practices. The move had originally begun as a response to a legal case brought under the Restrictive Practices Act: the London stock exchange would drop fixed commissions, end the single capacity principle that separated stockbroking (for retail customers) from market-making (stock-jobbing), and open itself to competition. The result in 1986 was generally called "Big Bang." Foreign acquisitions of major City firms became a central part of the preparations for Big Bang, and of the aftermath.

In many ways, "deregulation" is a misnomer. There had been little formal regulation while capital movements were controlled and financial functions were specialized. Old-style financial systems relied largely on self-regulation. Stock markets, for instance, had incentives not to be seen to defraud customers and accordingly policed exchange members. In countries such as Great Britain and the United States, where financial activity was split up into specialized functions performed by different institutions (stock jobber and stock brokers, clearing banks, merchant banks, discount houses), each specialized institution had an immediate self-interest in assessing the financial strength and viability of the institutions with which they did business. The rise of large financial institutions raised for the first time in the United States – but not in Europe, with its tradition of universal banking – the possibility of institutions that were too big to fail, and that consequently required more regulation.

In 1986, the direct cost of financial regulation in the United Kingdom was estimated to be GBP 20 million; this rose to around GBP 90 million by 1992 and GBP 673 million by 2014. The compliance costs are generally thought to be four times that amount. In 1979, the number of people employed in bank regulation in the United Kingdom was about 80. The number involved in financial regulation rose five times by 1990, and by 2010, there were around 3,500 financial regulators. Just one rule book relating to one aspect of regulation that was developed as a result of the 1988 Act weighed around two kilograms. In Germany, the financial regulator Bafin, whose predecessor in 1995 employed 490 people, employed 2602 in 2017. As liberalization proceeded, more rather than less regulation was required.

2.3 LABOR MARKET PERFORMANCE AND REFORMS

The interplay of economic and political factors in shaping reform experiences is particularly clear when inspecting the implications and determinants of in-

stitutions and policies in one of the most regulated sectors in all economies: wages and employment conditions are stringently regulated in Europe, and even American antitrust legislation exempts union activities, since the "labor of a human being is not a commodity or article of commerce" (Section 6 Clayton Act, 15 U.S.C. § 17).

2.3.1 The Rise and Divergence of Unemployment

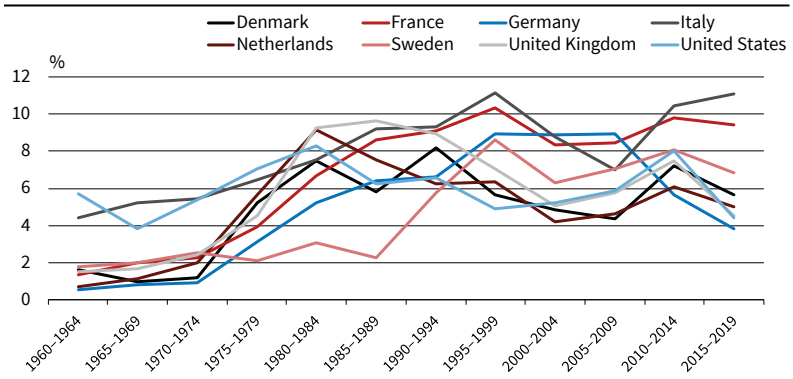
Figure 2.2 displays unemployment data on 5-year periods for large European countries and for the United States as well as for Denmark, the Netherlands, and Sweden which, as we shall see, had interesting reform experiences. Unemployment and stagflation in the 1970s led to a reassessment and suggested the argument that more competition might create new jobs and more employment.

Employment is in theory and was in practice reduced by collective contracts, as well as by other labor market rigidities discussed below. The push-back against trade union power was originally envisaged, especially in the United States and the United Kingdom, as part of the fight against inflation. Union membership in the United Kingdom peaked in 1980 at 12.2 million. The critical measure in the United Kingdom was the 1980 Employment Act, with restrictions to closed shop arrangements, limit picketing and particularly secondary action, and requirements for balloting the membership on industrial action. A further Act in 1982 provided for more restrictions on closed shops and limits to trade unions' legal immunities, with the result that they became liable for damages and injunctions. In 1984, existing closed shops were subject to balloting. The critical turning point was the defeat of the coal miners' strike of 1984–85, possible in large part because of successful legal action that imposed penalties on the union and led to the seizure even of assets sent abroad. The inspiration was the 1981 defeat of the air controllers' strike in the United States: controllers were given 48 hours to return to work or be sacked. 1,300 out of 13,000 strikers went back. Those who stayed on strike never returned to their former jobs. The union, the Professional Air Traffic Controllers Organization, was decertified. The number of strikes and days lost from strikes fell abruptly. The push against unionization soon became international.

Figure 2.3 shows declines of union density starting in the 1970s. It was low to begin with in France, where union contracts cover almost all employment throughout, but even there it declined in the 1980s and 1990s. Union membership fell persistently across most countries, and in countries where it remained high, wage bargaining became less centralized. Workdays lost due to strikes declined dramatically starting in 1990 in the United Kingdom, Ireland, Italy and other countries where they were previously high; in France, a lesser decline started only after 2000 (OECD 2017).

Figure 2.2

Unemployment Rate



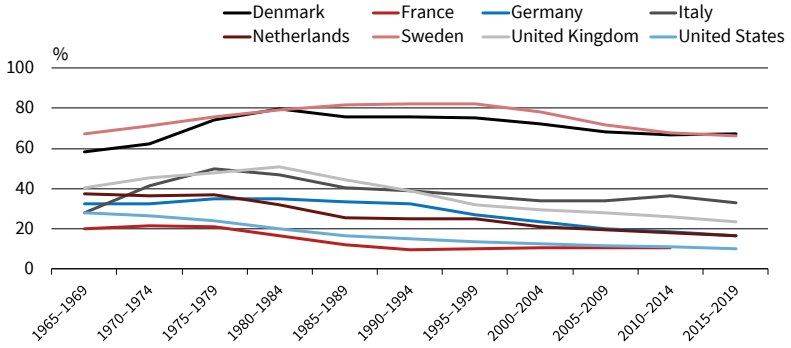
Note: Five-year period averages of available data.
Source: AMECO.

© CESifo

Figure 2.3

Union Density

Membership as a proportion of employees



Note: Five-year period averages of available data.
Source: OECD.

© CESifo

2.3.2 The Mechanics of Labor Market Regulation and Deregulation

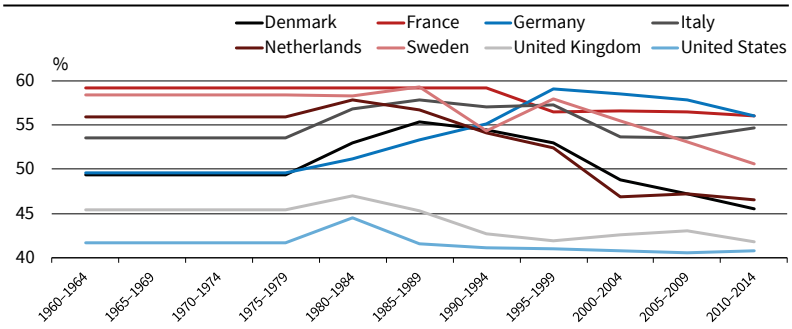
Other aspects of labor market regulation also imply higher unemployment for low productivity workers. When unemployment or disability benefits or early retirement are available, or labor taxes are high, the net market wage can easily fall below the reservation wage of workers at the bottom of the pre-tax wage distribution.

A vast empirical literature in the 1990s used institutional information, in particular that collected and harmonized by the OECD, to try and explain unemployment patterns, specifically the contrast between its low and declining trajectory in English-speaking countries and continental Europe's high and persistent unemployment (Bertola, Blau, and Kahn 2002). Figures 2.4, 2.5, and 2.6 display the institutional indicators used by Blanchard and Wolfers (2000), updated to more recent periods by Bertola (2017). Available policy indicators are mostly those collected and homogenized by the OECD Economics department, which in the 1990s advocated deregulation as the most promising cure for unemployment in member countries. Because the data is not available every year, the observations are averages over 5-year periods. These are unavoidably imprecise and imperfect

Figure 2.4

Labor Taxation

Proportion of income taxes and contributions at average wage



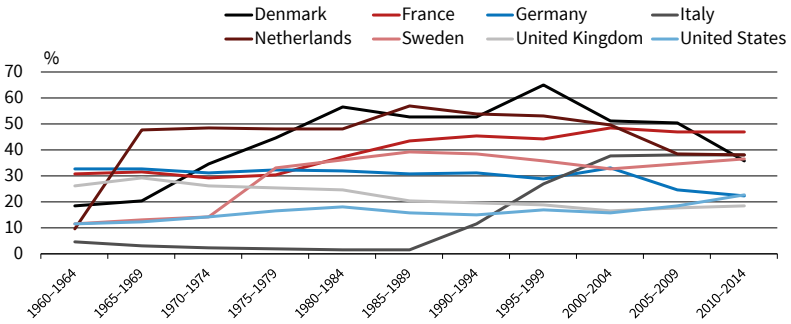
Note: Five-year period averages of available data.
Source: See Blanchard and Wolfers (1999) and Bertola (2017) for details of computations on various OECD data series.

© CESifo

Figure 2.5

Unemployment Insurance Benefits

Average replacement rates over the first 5 years of unemployment



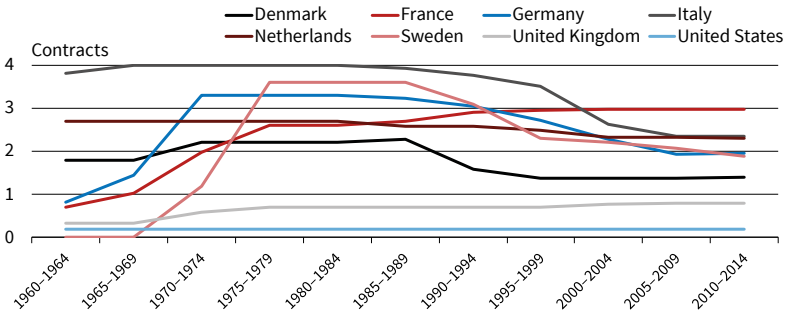
Note: Five-year period averages of available data.
Source: See Blanchard and Wolfers (1999) and Bertola (2017) for details of computations on various OECD data series.

© CESifo

Figure 2.6

Employment Protection

Indicators of regular and temporary employment protection stringency



Note: Five-year period averages of available data.
Source: See Blanchard and Wolfers (1999) and Bertola (2017) for details of updates using recent OECD data series.

© CESifo

indicators and employment protection is typically reduced only for new and non-standard contracts, so as not to perturb the democratic majority of employed regular workers.

Labor market regulation – along with macroeconomic conditions – affects employment, wage inequality, and productivity. Union-bargained or legal minimum wages increase the level and decrease the inequality of wages and hence increase unemployment, especially that of low-productivity workers: to bring productivity up to wage aspirations, training programs need to be deployed, as they expensively are in Nordic countries. Labor taxation increases labor costs and reduces employment. Unemployment insurance reduces search intensity and increases unemployment. Employment protection slows down reallocation and adjustment to aggregate shocks, reducing employment at given wages, with ambiguous unemployment effects as both hiring and firing flows decline.

Observed labor market performance can indeed be explained by labor market regulation over time and across countries: in regressions, the coefficients of institutional indicators have the sign predicted by theory if each varies and all else remains fixed. Other relevant factors do vary in the data, both across countries and over time: a negative relationship between wage inequality and unemployment can only be detected when they are measured as deviations from country means and interactions of institutional differences with demographic and economic growth trends and shocks play a particularly relevant empirical role. Unemployment increased and employment declined in labor markets that had become rigid when growth was taken for granted at the peak of the post-War Golden Age, but proved unable to cope with difficult macroeconomic conditions and with the reallocation required by technological innovations and international trade.

In the 1970s the United States had higher unemployment than the European countries shown in Figure 2.2, despite its lower unionization, due to its relatively poor economic performance at a time when Germany (and Japan) were heralded as technological and socio-economic world leaders. Low unionization and a more competitive and flexible labor market explain why the United States also had higher wage inequality, as shown in Figure 2.7. In the 1980s and 1990s, new economic circumstances plausibly contributed to rising unemployment in Europe and rising inequality in the United States (Krugman 1994). Technological progress and international integration of financial, goods, services, and labor markets plausibly increased the dispersion and reduced the mean of labor productivity in all advanced countries. Declining unionization did make wages easier to adjust, especially at the low end of the earnings distribution. However, the extent to which union-bargained wages are binding for workers who are not members of the union depends on government legislation, such as the provision in France that the wage agreements bargained by unions with a membership as low as in the United States apply to all workers. This differs across countries, as do other union activities: in Scandinavia and in the Netherlands, unions administer unemployment insurance schemes and negotiate wages at the national level with employers and the government, which can ease adjustment to country-level shocks.

2.3.3 Determinants of Labor Market Regulation

The employment outcomes of labor regulation may be the consequence of a political decision to shift the distribution of employment and income. Unions do not increase wages aiming to increase unemployment: they mean to obtain higher worker welfare as the higher income of employed workers more than compensates their smaller number. The labor taxes and contributions that reduce employment can fund unemployment benefits, which dampen the income implications of job loss and, decreasing the search effort and increasing the reservation wages of the unemployed, prevent wages from falling in response to negative shocks. Employment protection legislation reduces job destruction by declining firms and sectors and job creation by expanding ones, and collective wage-setting between broad unions and employer confederations (rather than at the firm or individual level) reduce the extent to which wages may fluctuate in response to local shocks.

Such employment and wage rigidities together increase and stabilize labor income, make profits and other non-labor income flows lower on average as well as more volatile, and reduce productivity as they prevent replacement of low-productivity jobs with high-productivity jobs. Rigid labor markets that imply high and stable labor incomes have obvious political appeal for the many households that draw most of their income from labor. That appeal, however, also depends on their side effects on productivity, which can be more or less serious in different circumstances.

Income stability is beneficial when underdeveloped financial markets and incomplete social insurance make it difficult for workers to make consumption smoother than labor income. Tradition and administrative capacity may determine whether labor market rigidities are introduced by constraining private employment contracts or by administering taxes, contributions, and subsidies. The appeal of labor market regulation also depends on macroeconomic conditions and market structure. The productivity losses caused by rigidity are less affordable in poorer countries and larger when more frequent and larger shocks call for intense reallocation. Because financial market access reduces the appeal of labor income stability, US workers are as familiar with credit card debt as with frequent job changes, and financial deregulation was very much an element of Thatcher's reform strategy.

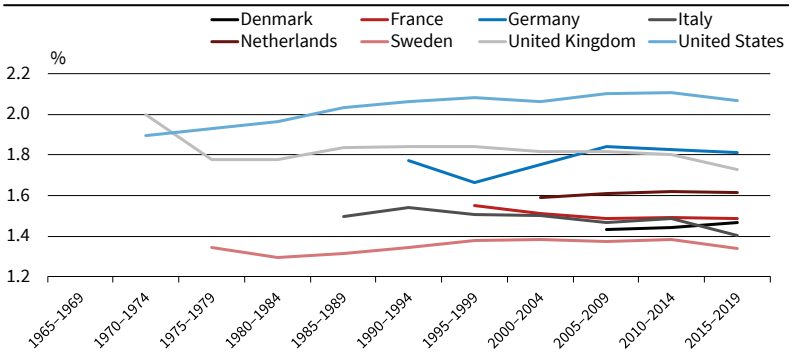
2.3.4 Patterns of Labor Market Regulation

Because structural characteristics of the economy influence the costs and benefits of rigid labor markets, new developments can trigger reforms. The wave of deregulation that started in Margaret Thatcher's United Kingdom and Ronald Reagan's United States in the 1980s had political motives, but alongside those

Figure 2.7

Wage Inequality (Median to 10% Ratio)

Ratio of the median to the first decile of the earnings distribution



Note: Five-year period average of available data.
Source: OECD.

© CESifo

leaders' strong personalities poor economic performance did play a key role in easing liberalization. Without the same ideological emphasis, many other countries' reform trajectories in the 1990s responded to changing circumstances.

Not only political but also economic factors explain why labor markets are more regulated in some countries than in others and why many economists' advocacy of deregulation is not equally well received everywhere. Between the 1960s and 1970s tighter regulation was plausibly driven by Golden Age prosperity, which made productivity slowdowns more affordable and empowered workers in democratic countries. Later, globalization and European market integration, driven by development of transport and communication technologies (de facto) or complementary trade liberalization policies (de jure), made labor demand more elastic. Technology also can make labor demand more elastic, as some workers become more easily substitutable by machines. Flatter labor demand worsens the trade-off between higher wage and lower employment, reducing the positive (for workers) effects of labor market policies, and the productivity effects of labor market rigidities are more damaging when the economy needs to adjust to trade shocks. Hence, international economic integration should in theory lead to labor market deregulation (and more inequality) or worse labor market outcomes (at given levels of regulation).

While plausible, this "race-to-the-bottom" perspective on the determinants of labor market regulation is certainly not its only explanation and is difficult to empirically detect it in data where all else is never equal. The desirable and side effects of regulation change over time and are different across countries in ways that are very hard to control, as potentially relevant factors are more numerous than country-level observation. The indicators plotted in Figures 2.4, 2.5, and 2.6 suggest that deregulation was neither widespread nor pervasive in decades of increasingly strong trade integration. For indicators other than union density, period-specific averages vary little over time, and considerable cross-country

dispersion dwarfs the effects of country-specific reforms, which do not always tend towards deregulation. A pattern of decreasing employment protection and increasingly generous unemployment insurance, as in Italy, may be an attempt to preserve worker welfare in a changing environment, where "flexicurity" unburdens firms exposed to international competition from the productivity losses entailed by protecting their workers from job loss.

The choice between rocks and hard places is political, often myopic, and depends very much on country-specific circumstances. Policy trajectories followed by specific countries suggest that deregulation incentives are stronger for countries experiencing worse economic performance and/or more elastic market responses to relative policy differences. Countries do not always heed those incentives, however. The case of Italy offers a useful illustration of the interplay of global and European integration and the need for unimplemented reforms. Italy's stagnation since the early 1990s is largely due to slow structural adjustment, rooted in political support for status-quo policies and institutions that could not cope with technological and economic integration challenges (EEAG 2019). Throughout decades when European integration and globalization required structural changes, the increasingly apparent inefficiency of labor market rigidities was addressed in Italy by temporary employment in traditional sectors, rather than business expansion in new sectors. A political majority that still enjoys a good standard of living easily disregards the need for change, unless made obvious by a crisis, and prefers waiting for better times to return to enacting reforms perceived to be adding risk to an already complicated situation.

The Netherlands in the 1980s shows a decline of unemployment as sharp, if not sharper, than that observed in the United States and the United Kingdom. When that country found itself the smaller partner of an essentially complete economic and monetary union with Germany, it was logical for it to adopt wage moderation and deregulation implemented by the 1982 Wassenaar agreement, which is apparent in the declining labor taxation and unemployment insurance generosity in the figures above. Availability of plentiful natural gas revenues made it possible to compensate redundant workers with generous benefits. North Sea oil played a similar role in Thatcher's 1980s reforms, which decreased unemployment insurance and labor taxes while employment protection remained low. The German "Agenda 2010" reform framework only took a similar path in the first half of the 2000s, as shown by declining employment protection and unemployment insurance after the country's reunification, euro adoption, and Eastern enlargement had changed the trade-off between high wages and idle labor on the one hand, and better competitiveness on the other.

Higher wage inequality and lower employment could both be avoided only by "active" labor market policies meant to increase the productivity of workers, albeit at the cost of higher public expenditures (as in Denmark, Sweden, and other Nordic countries). The relevance of macroeconomic and public finance factors is well exemplified by Sweden's reaction to its crisis in the 1990s: a housing market and banking market collapse preceded by a period of overheating and strong wage growth. Generous unemployment insurance and a decline in labor taxes contributed to debt accumulation in the crisis. As it became clear that the welfare model was not financially viable, reforms of these policies and (especially) of active labor market policies expenditure played a role, alongside the cyclical upswing, in the decline of public debt in the latter part of the period. This was not without cost in terms of the wage inequality that labor market policies are meant to keep under control. If the United Kingdom achieved low unemployment and high employment by accepting higher wage inequality in the 1980s, Sweden followed a similar path (around its different labor market configuration parameters) during the 1990s. More generally, along the 1980–2000 public debt and interest-rate stabilization cycles the debt service burden, interacting with country-specific policy indicators, was sensibly associated with labor market policy changes (Bertola 2010b). When in debt, governments reduce the generosity of unemployment benefits, and the fact that unemployment is nevertheless higher is due to bad macroeconomic developments. Labor taxes were positively related to government indebtedness, inducing a negative relationship between high debt and low employment. Reduction of employment protection was often accompanied by more generous unemployment insurance to preserve worker welfare and motivated by increased exposure to product- and capital-market competition not only domestically, but also internationally.

2.4 THE SIZE OF GOVERNMENT

At the beginning of the Thatcher revolution, the government argued that public spending was "at the heart of Britain's economic difficulties." A follow-up white paper on spending explained that the government was "determined not merely to halt the growth of public expenditure but progressively to reduce it." Did those and similar views in other countries actually result in smaller governments?

Figure 2.8 provides a long-run perspective on the issue displaying government revenues as a percentage of GDP for a few countries and for the OECD as a whole (government expenditure follows similar trends aside from public debt developments; both are discussed below).

While the starting point in the mid-1950s was roughly the same, during the 1960s and 1970s governments grew everywhere at different paces, resulting in different public sector sizes that fit the classification of welfare regimes discussed in the political

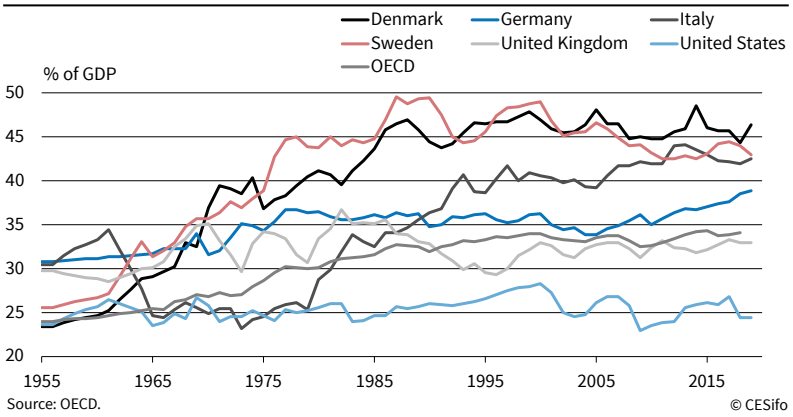
science literature based on Esping-Andersen's (1990) classification of welfare regimes: the government's role is most pervasive in Scandinavian countries, where the ratio of social transfers to total government expenditures is generally much higher than in Continental Europe and very much higher than in the United Kingdom and United States, where the government's role is limited.

Over recent decades there has neither been convergence at the top or the bottom of the government's size distribution across countries. EEAG (2019) examined public sector size across all EU countries and similarly found that little convergence occurred, except for an upward trend among Eastern European countries where economic growth made public service more affordable and useful in richer and more complex economies. Figure 2.9 supports our discussion of phenomena explaining other country-specific developments displaying 5-year averaged government expenditure as a percentage of GDP for the same countries discussed above. In the 1980s the size of the government's budget did stop growing but, despite the rhetoric about shrinking government that is often thought to be at the core of the neoliberal turn, there was no general reduction of government taxes and expenditures since then. The United Kingdom shows a clear downward trend in the 1980s, partially reversed in the 1990s, and Italy has had an upward trend over the period.

Changes in the size of government can be attributed to policy decisions and ideological preferences, cyclical developments, the increased demand for public services as societies became more affluent, changing demographics, as well as international pressures. We discuss each in turn below.

Figure 2.8

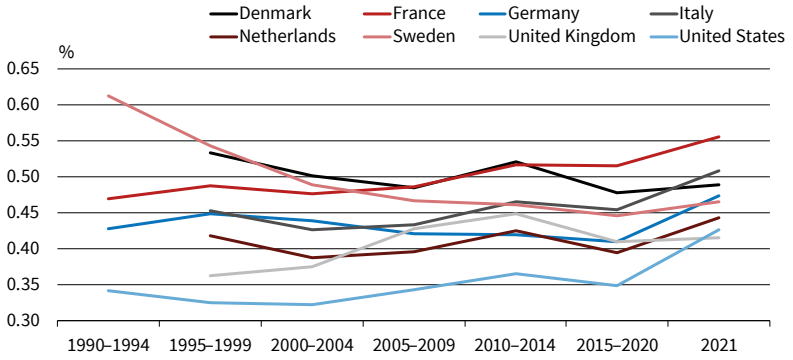
Government Revenues



Source: OECD. © CESifo

Figure 2.9

Government Expenditure-to-GDP



Note: Five-year period averages of available data.
Source: AMECO and OECD (UK). © CESifo

2.4.1 Political Shifts

Politics do matter: in the United Kingdom, the public employment-to-population ratio lost 4 percentage points when Thatcher and then Major were in power, recovered 2 percentage points in the 1996–2011 Labour governments, and as Conservatives regained power had again lost more than 2 percentage points by 2018 (Authors' calculations based on the Office for National Statistics 2019). But changing needs and trade-offs are key to understanding broad and country-specific trends. We proceed to inspect them for the same countries considered when examining labor regulation developments, aggregating the relevant data over 5-year periods to reduce the impact of cyclical variation in GDP and automatic stabilizers on the revenue and expenditure sides of government budgets.

2.4.2 Macroeconomic Fluctuations and Government Size

The stability of public sector sizes at different levels can be explained by the interplay of political and ideological factors with cyclical developments. In the most ideological years of the Thatcher revolution the UK government's revenues remained almost constant as a share of GDP during 1980–85, also because the denominator shrank in the recession of the early 1980s. The ratio fell sharply after 1985, in part because Chancellor of the Exchequer Nigel Lawson launched an inflationary boom that substantially raised GDP. The Danish, Swedish, and UK ratios all rise considerably in the deep recession of the early 1990s. For many of these countries, government expenditure-to-GDP ratios kept on growing after 1980 and spiked upwards in the Great Recession and in the Covid-19 pandemic. The exceptions are Denmark and Sweden, where the ratio fell substantially from its very high level at the beginning of the 1990s. Other dynamics have contingent explanations: the German ratio grew in response to the challenge of German unification.

It is much more interesting, however, to examine the evolution of structural factors in recent decades. A changing structure shaped the government's size and role in advanced economies because policy choices depend not only on political preferences, such as inclination to privilege the cons over the pros of regulation and redistribution, but also on needs and trade-offs implied by the economic environment in which those choices are made.

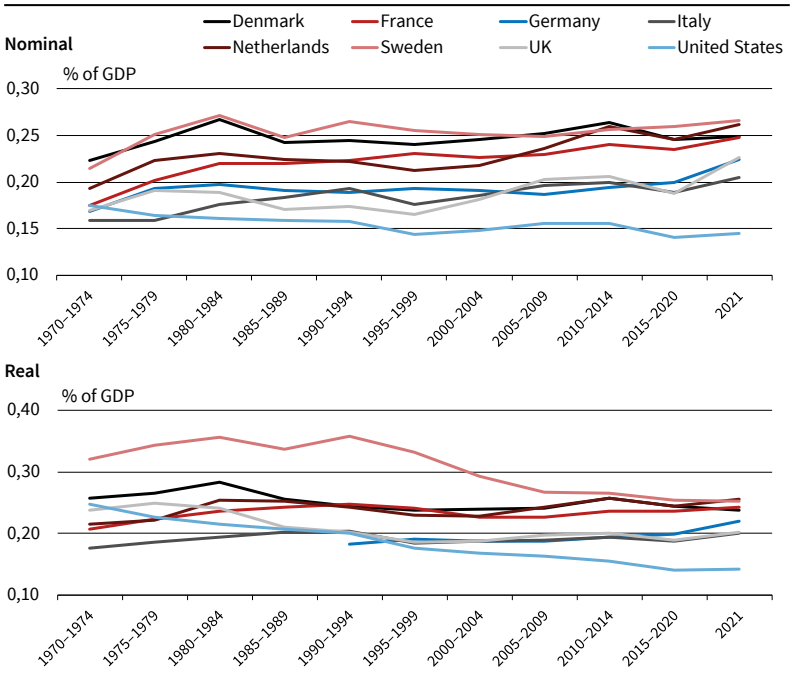
2.4.3 Supply and Demand of Public Services

A larger government may be more useful and affordable in more sophisticated and richer economies, which can afford to produce public luxuries and administer taxes and subsidies that diminish incentives to work. The idea that demand for publicly provided services (for example, health) is stronger at higher income levels, known as the "Wagner effect," implies that expenditure should have grown over time as a share of GDP. If it did not, it can be that it was offset by political shifts.

But economic growth, which over the period of interest was more or less intense in developed countries, has implications for the supply of as well as the demand for public "luxuries." Providing services such as defense, health, and education becomes relatively more expensive over time if productivity growth is slower in those sectors than in the rest of the economy. Then, a constant supply of public goods and services in real terms would require an increasing share of expenditure, a phenomenon known as "Baumol's cost disease," and an increasing rate of taxation. Of course, digitalization has had beneficial productivity effects in all sectors, including those administered by governments, and other forms of technological progress have undoubtedly reduced the cost of, for example, health services (which, whether publicly or privately provided, tend to increase anyway because of the Wagner effect). While it is not easy to measure productivity in the public sector, where much output is by lack of better alternatives valued at cost, available data do suggest that while public provision of services has been roughly constant as a share of nominal GDP, it has declined in real terms since the 1980s in most of the countries shown in Figure 2.10 (and in many others), though not in the Netherlands (since the mid-90s) and in Germany.

Figure 2.10

Government Consumption



Note: Five-year period averages of available data.
Source: AMECO (linked series).

© CESifo

2.4.4 Demographic Trends

A third important structural development is demographics. Public expenditures are strongly age dependent (the young require care and education, the old health services, pensions, and care). Hence, unchanged provisions at a given age produces a constant expenditure share only if the age composition of the population is constant. Other things being equal, an increasing number of young (old) will increase expenditures and vice versa. If expenditures are constant and the number of young (old) is increasing, it follows that there is a decline in provision seen from an individual perspective. Likewise with aging populations, if expenditures are constant, it may be considered equivalent to a retrenchment. On average, for developed countries since 1960 the dependency ratio has shown a declining trend, and these developments are roughly the same across all OECD countries. For given total expenditures, the demographic developments have made it possible to increase per capita expenditures for the youth and elderly age that benefit most from public activities. But this general demographic tailwind is now turning into a headwind for governments (see Chapter 4).

2.4.5 Public Debt Dynamics and Implications for Government Size

Government debt in industrial countries on the whole shows no tendency to fall in the period when there is often supposed to have been a retreat of government. The overall tendency is a constant rise.

But there are some examples of national debt consolidation. The most dramatic occurred in the United Kingdom, from 1978–83 at the beginning of the Thatcher administration, when gross government debt fell from 50.5 percent of GDP to 42.2; in the United States with the peace dividend at the end of the Cold War and in the Clinton presidency (often considered to have been neoliberal) from 1993–2001 with a fall from 70.2 to 53.0 percent; in Italy, as part of the fiscal consolidation that preceded and accompanied initial membership of the Euro in 1994–2004, falling from 117.9 to 100.0; and in Germany in the period of the *Schuldenbremse*, from 2010 to 2019, from 81.0 to 59.2. Apart from that episode, German debt saw a more or less continuous rise, with only a very short consolidation phase in 1988–89, on the eve of German unification.

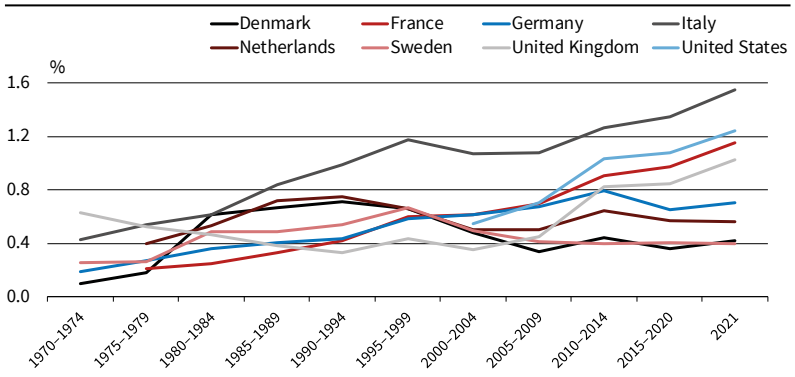
For other countries, including some smaller economies that were often hailed as stars in terms of fiscal and economic performance, there have been

some successful episodes of debt reduction, driven by a mixture of fiscal consolidation and high growth and occurring over relatively long time periods: Sweden from 1996 to 2008 (falling from 84.4 to 36.7 percent), or the Netherlands in a similar time frame, 1993–2007 (78.5 to 42.4 percent), as shown in Figure 2.11. The most dramatic of these small country adjustments was Ireland, from 1994 to 2006, with a reduction from a dangerous 94.1 percent that would not qualify for membership in the currency union to 25.0 percent in 2006: the latter figure was the product of strong growth, foreign direct investment, and of a wild property boom that pushed up real estate tax revenue.

These consolidations were in large measure owed to an increase in the primary balance, which, however, is not the only way out of high public debt. The debt-to-income ratio can also be lowered by periods in which growth exceeds the interest rates and also by a stock flow adjustment (when debt is in a foreign currency and there are exchange rate alterations; or after debt defaults or restructuring). In recent times, the only debt reduction by restructuring occurred in the case of Greece in 2011. But historically, high rates of inflation in which the real interest rate is low or negative contribute significantly to lowering the debt burden. The most dramatic incidents of this type in the chart occurred in the United Kingdom in 1969–75, when the gross debt to GDP ratio fell from 82.8 percent to 46.7 percent, with surging inflation; and a milder variant of the same experience in France 1970–74, with a fall from 50.5 to 42.2 percent. These 1970s episodes are only the tail-end of a long historical development since 1945, when exceptionally high levels of debt built up in the Second World War were reduced to sustainable levels: debt to GDP for the United States in 1946 had been 121.2 percent, and in the United Kingdom 269.8 percent. In contrast, German debt had been largely wiped out by the currency reform, and in 1950 the gross debt level stood at 17.8 percent of GDP and rose consistently after that date.

These extraordinarily high levels in the United States and the United Kingdom were gradually reduced in the so-called Keynesian period, or the "golden years" (in France *les trentes glorieuses*, and the German *Wirtschaftswunder* and Italian *Miracolo Economico*) when strong growth brought down the debt ratios. But there had been other factors at play. The United Kingdom was still reducing its debt significantly in the 1970s, with very high rates of nominal GDP growth but much lower real rates, and in this case it was inflation not growth that was doing most of the heavy lifting in reducing debt. These episodes bring very substantial debt reductions, with much sharper declines than in the case of fiscal adjustments increasing the primary balance, particularly when inflation is unexpected and market participants do not realize the extent of their likely losses on fixed income

Figure 2.11
Government Debt-to-GDP Ratio



Note: Five-year period averages of available data.
Source: AMECO.
© CESifo

securities (and when they are constrained by restrictions on capital movement).

The market-oriented policies of the 1980s and 1990s included liberalization and internationalization of financial markets, which allows mobile capital to flee from low real returns, and accompanied by disinflation which, if not immediately credible, increases real rates and at least partly explains increasing public debts: debt reductions through an effective inflation tax are less likely in the resulting environment. In Italy, high real rates on government debt included a hefty risk premium, and only the credibility achieved with the euro made stabilizing the debt possible without very high primary surpluses, which were politically unsustainable and gave way to some fiscal profligacy and (again) high interest rates due to default risk premia.

High public debt-to-GDP ratios and tight budgets, whether due to market pressure or legal obligations such as the Maastricht criteria, might in principle have implications for the size and structure of the public sector. Deficits are often politically attractive for all incumbent governments, but the resulting debt constrains future incumbents: total expenditures less debt servicing equal the expenditures on popular core activities of the public sector (education, health, transfers), tight budgets resulting from previous accumulation may in fact be tools of a political agenda to attain a leaner public sector. However, it is difficult to detect a clear negative relation between debt service and the size of the public sector, which is rather stable for most countries even as debt-to-GDP ratios vary substantially over time. The simple view that generous welfare policies are associated with debt financing is also not apparent, because not only benefits but also taxes and contributions are high in countries that provide generous benefits: the Nordic countries known for their extended welfare states have some of the lowest debt levels.

Tight budgets may also bias public activities away from forward-looking investment and towards more (politically or economically) urgent spending

needs, such as pensions. High debt and debt servicing costs may crowd out some expenditure types for a given size of the public sector measured by total expenditures or tax revenue. For countries like Italy, Greece, and Hungary, expenditures on debt servicing exceed those on education. This is suggestive that debt may have implications for the structure of the public sector.

2.4.6 International Integration

Increased international market integration, especially since 1990, influenced government policies in two distinct ways. On the one hand, it generally improves aggregate efficiency but, in the absence of compensatory transfers, impoverishes some workers, and exposes many to new cross-border shocks: this may lead open countries' governments to be more deeply involved in economic matters (Rodrik 1998). On the other hand, international market interactions make it easier for individuals and firms to escape taxation and seek subsidies, hence making it more difficult for policies to shape individual choices differently from what would be implied by unavoidably imperfect market mechanisms. Depending on whether demand or supply influences dominate, integration may in practice increase or decrease the intensity of collective redistribution and other interferences with laissez-faire markets at the country level.

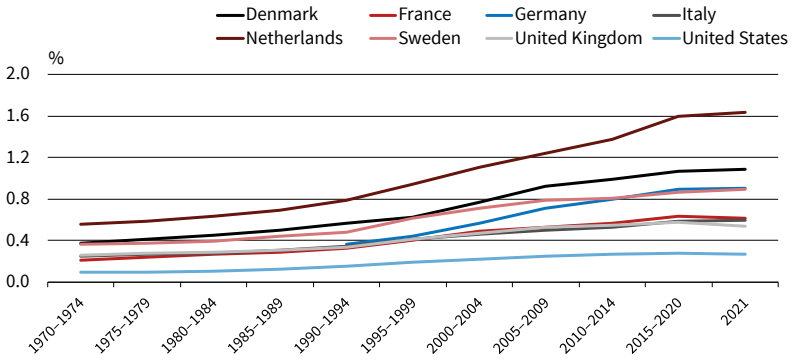
There is no doubt that since the 1980s international market integration increased very strongly, especially after 1992 in the European Union (see for example the 5-year averaged data in Figure 2.12). It is, however, difficult to detect the role of international market integration in determining government size, both because more intense trade is itself endogenously determined by country-specific policy choices, and because countries are heterogeneous in many difficult-to-measure and interrelated dimensions. In cross-section, countries have larger or smaller governments for historical, political, and structural reasons, and there is no particular relation to average trade openness, which depends on size and geography. On average, Nordic countries offer much more and Mediterranean countries much less social protection but there is no particular relation to openness within and across these groups.

Also in time-series data a negative impact of internationalization on government powers to interfere with market mechanisms is theoretically plausible and subjectively clear to many citizens and politicians, but empirically elusive. It is difficult to establish causal relationships in data where variation of globalization and spending indicators is driven by a variety of factors, including fluctuations of the output measures that normalize both. The panel regressions of Dreher, Sturm, and Ursprung (2008) include a number of control variables and find no evidence of an average relationship between globalization and social spending.

Government size is driven by many partly offsetting factors (aging, political shifts like in the United Kingdom, real estate booms and crises, unsustainable public debt). As the need for government action is increased by aging and instability, but action is more difficult in the absence of international coordination, the net effect can be small and statistically insignificant even as at least some segments of society feel that governments should do much more but are constrained by international competition.

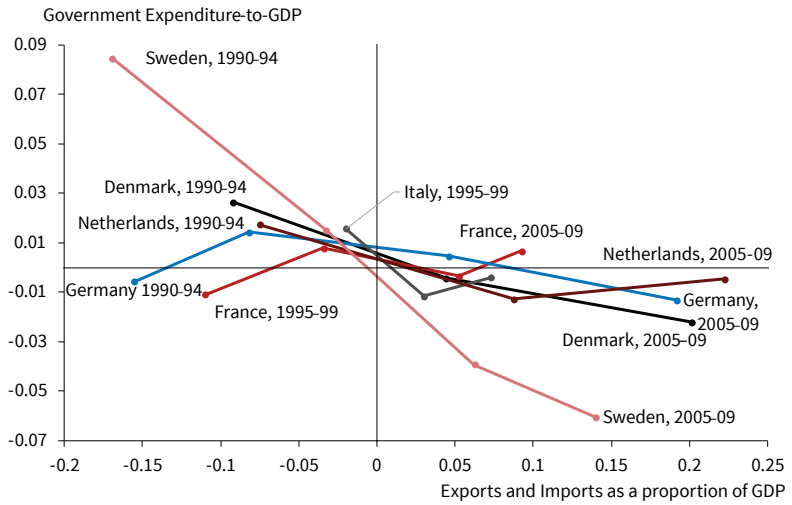
Different countries have persistently different levels and composition of government expenditure – over time for each country government size is plausibly associated with international economic integration in periods when globalization and market liberalism are the main source of policy variation. Figure 2.13 illustrates the 5-year averaged data of Figures 2.9 and 2.13 in the 1990s and 2000s plotted against each other, subtracting from each its country-specific means for continental EU and Scandinavian countries.

Figure 2.12
Exports and Imports as a Proportion of GDP



Note: Five-year period averages of available data.
Source: AMECO.
© CESifo

Figure 2.13
Government Expenditure and Exports and Imports from 1990–95 to 2005–09



Note: Deviation from country mean of the data in Figures 2.9 and 2.12 for Denmark, France, Germany, Italy, Netherlands, and Sweden. Five-year period averages.
Source: AMECO and OECD.
© CESifo

Large increases of international market integration are associated with changes in government expenditure that are very small, except for Sweden, but broadly negative overall and in each country (with the exception of France, where the size of government grows slightly over the period). Government expenditure is broadly stable but still negatively correlated with changes of total imports and exports for the countries shown as examples, and more broadly, in a period when globalization and EU market integration greatly increased international trade. It is possible that a taste or demographic shock, or just the realization that a generous welfare state is not affordable in the aftermath of a crisis, shrinks the portion of the non-tradable sector that is directly produced by the state. This releases labor and other factors to the tradable sector, resulting as in Sweden in growing exports and imports at the same time as government activities shrink. Also, 5-year periods do not completely smooth out GDP movements in this period (and certainly fail to do so in periods when they are deep and prolonged, as in the Great Recession and the Covid-19 pandemic).

It is, however, plausible that this pattern is at least in part a consequence of the state's limited power in more open economies. The theoretically ambiguous but plausible role of economic integration is more clearly apparent when comparing otherwise similar countries that did and did not join the euro area in the 1995–99 and 2000–04 periods (Bertola 2010a). The tighter economic integration implied by "One Market, One Money" was significantly associated with substantially faster deregulation of their product markets, some deregulation of their labor markets, and lower social policy expenditure. As a result, disposable income inequality grew faster in countries adopting the single currency, and these differences were completely accounted for by differences in social policy and other policy indicators, rather than by economic integration directly. These uneven developments, and evidence that social spending decreased, and inequality increased when EMU tightened economic integration across some European countries, are relevant to the next Chapter's discussion of populist backlash against liberalization and international economic integration, perceived as a cause of instability and blamed for the financial crisis and the Great Recession.

REFERENCES

Bertola, G. (2010a) "Inequality, Integration, and Policy: Issues and Evidence from EMU", *Journal of Economic Inequality* 8:3, 345–365.

Bertola, G. (2010b), "Fiscal Policy and Labor Markets at Times of Public Debt" in T. M. Andersen and S. Holden, eds., *Nordic Economic Policy Review* 1, 111–147.

Bertola, G. (2015) "What Is Natural About Unemployment? Policy Sources and Implications of Labor Market Rigidities", in: Re-evaluating Labor Market Dynamics, Federal Reserve Bank of Kansas City, 421–460.

Bertola, G. (2017), "European Unemployment Revisited: Shocks, Institutions, Integration", *Research in Economics* 71, 588–612.

Bertola, G., F. D. Blau, and L. M. Kahn (2002), "Comparative Analysis of Labor Market Outcomes: Lessons for the US from International Long-Run Evidence" in A. B. Krueger and R.M.Solow, eds., *The Roaring Nineties: Can Full Employment Be Sustained?,* New York: Russell Sage Foundation, 159–218.

Blanchard, O. J. and J. Wolfers (2000), "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence", Economic Journal 110 (462), C1–33.

Catão, L. and M. Obstfeld (2019), "Introduction", in L. Catão and M. Obstfeld, eds., *Meeting Globalization's Challenges: Policies to Make Trade Work for All,* Princeton: Princeton University Press.

Dreher, A., J.-E. Sturm, and H. W. Ursprung (2008), "The Impact of Globalization on the Composition of Government Expenditures: Evidence from Panel Data", *Public Choice* 134, 263–292.

EEAG (2019), "The EEAG Report on the European Economy – A Fragmenting Europe in a Changing World", CESifo, Munich.

Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*, Princeton University Press.

Harrod, R. (1972), "Imperfect Competition, Aggregate Demand and Inflation", *Economic Journal* 82, 325, 392–401.

James, H. (2020), *Making a Modern Central Bank: The Bank of England 1979–2003*, Cambridge University Press, Cambridge, UK.

Kaldor, N. (1957), "A Model of Economic Growth", *Economic Journal* 67(268), 591–624.

Kaldor, N. (1967), *Strategic Factors in Economic Development,* Ithaca, NY: New York State School of Industrial and Labor Relations, Cornell University.

Krugman, P. (1994) "Europe Jobless, America Penniless?", *Foreign Policy* 95, 19–34.

OECD (2017), Industrial Disputes, https://www.oecd.org/els/emp/Industrial-disputes.pdf.

Office for National Statistics (2019), Long-Term Trends in UK Employment: 1861 to 2018, https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/compendium/economicreview/april2019/longtermtrendsinukemployment1861to2018#public-and-private-sector-employment.

Rodrik, D. (1998), "Why do More Open Economies Have Bigger Governments?", *Journal of Political Economy* 106 (5), 997–1032.

Volcker, P. (1990), "The Triumph of Central Banking", Per Jacobsson Lecture, September 23, 1990, Washington, DC: International Monetary Fund, Per Jacobsson Foundation.

From the Global Financial Crisis to the Covid-19 Pandemic: The Rise of Populism

Economic policy in the period between the outbreak of the Global Financial Crisis in 2008 and the outbreak of the Covid-19 pandemic in late 2019 was characterized by a number of developments that distinguish it from the policies which had dominated before the crisis. The most remarkable policy shift is the rise of populism and the most striking example the election of Donald Trump to the US Presidency in 2016. Earlier in the same year, the Brexit referendum surprised the world and ended six decades of deepening political integration in Europe. In the debate before the referendum, arguments frequently used by populist politicians played a key role.

In other European countries, populist movements also gained influence. In Italy, the Five Star Movement and the Lega Nord, both parties with different variants of populist leanings, formed a government. In France, the extreme right wing populist party Front National has played a role for a long time, but it enjoyed increasing support during the years after the Financial Crisis, against the backdrop of sluggish economic growth and growing conflicts about immigration. The migration wave in 2015 boosted the right-wing populist party AfD in Germany. The party was originally founded as a reaction to the Eurozone Debt Crisis but was elected to the Bundestag only after the immigration wave boosted its support. In the same period, leaders with populist leanings also gained influence in other European countries, including Poland and Hungary.

This chapter outlines what was perceived as the dark side of market liberalization's economic implications – higher inequality and instability – and how they have been linked to the rise of populism.

3.1 POLICY BEFORE AND AFTER THE GREAT RECESSION

As we entered the 21st century the twin trends of increased globalization and reduced regulation were in full swing, leading to a period of considerable macroeconomic stability known as the Great Moderation. Then, the Great Recession hit. To understand to what extent the recession was a shock, both in terms of economic outcomes and social tensions, we start by focusing on the evolution of several key magnitudes. Two of them, the size of government and labor market regulation, have been discussed in Chapter 2, and here we focus on the changes observed during the Great Recession. We also describe the policy changes concerning product market regulation and international trade, as, while policy changes were already well underway in the last two decades of the 20th century, change accelerated in the years before the Great Recession.

3.1.1 The Size of Government

The data presented in the previous chapter indicates that both the Great Recession and the Covid-19 shock implied a major change in not only the size of public budgets and consequently government debt, but also in terms of attitudes towards the role of fiscal policy in periods of crisis.

The relative stability of fiscal policy observed after the Great Recession hides large and heterogeneous changes in its economic impact. The Great Recession was a demand-driven recession and called for expansionary fiscal policy. As this expansion took place in economies where the consequences of the crisis were uneven across individuals, and in the absence of international coordination, fiscal policies had considerable distributional impacts across and within countries. In 2010, there was a turn away from previous coordinated fiscal stimulus, with the reasons differing across the United States (mid-term election), the United Kingdom (general election), and the European Union, where the Greek debt crisis and the lack of fiscal coordination in existing treaties were the main reasons for its withdrawal. The fiscal conservatism displayed by Germany and other Northern countries in Europe (and by Republicans when not in power in the United States) deepened and prolonged the recession and concentrated its negative effects on those segments of the population with the lowest incomes and on peripheral countries with high debt. As discussed in the next chapter, the pandemic crisis elicited a very different response that was perhaps driven by what was learned from previous problematic developments and was certainly supported by different political narratives. Notably, unlike the financial crisis which could be blamed on lax supervision and lack of frugality, the coronavirus was perceived to be an exogenous shock. As a result, the European Union engaged in completely unprecedented international fiscal policy coordination and loss sharing, which proved politically feasible as an emergency response.

The persistence of total expenditures and revenues documented in Chapter 2 conceals their implications seen from an individual perspective. Clearly, total expenditures on welfare depend on benefit generosity and a number of eligible persons. In the Nordic countries, generosity is relatively high, but so are employment rates; in Southern Europe less generous transfers are accompanied by higher shares of the population receiving passive transfers. In a similar way, the increase in expenditure we saw during the Great Recession, in which welfare dependency rates rose dramatically, may hide a reduction in generosity, which in many countries was the driver of the subsequent decline observed between the Financial Crisis and the onset of the Covid-19 pandemic.

With hindsight, the fiscal stimulus of 2009 should have remained in place for longer than it did, but EU countries with the fiscal space to engage in expansionary fiscal policy were reluctant to do so, and fiscal consolidation took precedence over support to the economy, leading to feelings that the shock was distributed unfairly.

3.1.2 Inflation

The lack of fiscal coordination implied that monetary policy was the only policy option available, resulting in low interest rates. These have likely been one of the causes of asset price rises, which in turn worsened wealth inequality in several countries (see below). Low interest rates also made it easier and more attractive (and less immediately catastrophic) to expand public spending and, as described in Chapter 2, government debt grew.[1]

After the Global Financial Crisis, central bankers saw the institutional dangers and frequently expressed their frustration at being at the center of the effort to shore up against economic collapse. Greater fiscal effort was required. Nowhere was the demand articulated more insistently than in Europe, where the Maastricht Treaty had constructed the world's most independent – or in the eyes of its critics, least accountable – central bank. Mario Draghi in particular pushed insistently for more fiscal coordination, although his predecessor, Jean-Claude Trichet, had made the same kind of argument though less emphatically. Leaving the ECB, Draghi concluded: "Monetary policy can still achieve its objective, but it can do so faster and with fewer side effects if fiscal policies are aligned with it."[2] Europe is again the guinea pig for the development of a theory of central banking that fits with current policy concerns. The ECB standpoint is not, however, singular, as evidenced by the Federal Reserve's Chair, Ben Bernanke, making similar arguments to those of Draghi.

[1] Note that private debt also increased considerably, which is the result of disinflation, low interest rates, and financial deregulation; see, for example, OECD (2016).

[2] See https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp191028~7e8b444d6f.en.html.

The logic of eroding Central Bank independence was also pushed to the limit as the role of central banks once again became more complex and varied. The background to the extraordinary range of criticism of central banks in the 2010s was that policy had become more complicated, and that many of the practical steps to combat the crisis involved elements where distributive spillover effects were much clearer than in the case of monetary policy. Rescuing banks obviously involved a fiscal element, and the major initiatives came from the government, from treasuries, and particularly from the prime ministers and presidents. Policies that required buying certain classes of assets on the central bank balance sheet also changed relative prices. As central banks moved back more into financial regulation and made judgments about what sorts of lending might be desirable, their actions were clearly also favoring and hindering specific sectors of the economy. When distribution is at stake, the choice looks political and the logic of delegation weak. By the end of the 2010s, and on the eve of the Covid-19 pandemic, this view had become a practical policy-consensus.

As we discuss in the next chapter, there is more uncertainty about a future inflation trajectory in response to Covid-19. Are there inflation dangers that would lead us to push for more Central Bank independence, or will deflation risks in a crisis indicate a need to continue the post-2008 course?

3.1.3 Labor Markets

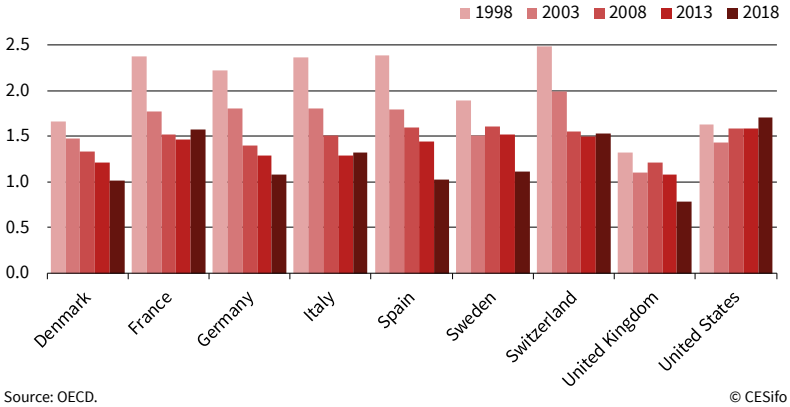
Integration of capital markets was a global phenomenon in the 1980s and 1990s, but was significantly accelerated in Europe with the adoption of the euro, which was followed by unprecedented intra-European current account deficits and surpluses. At the same time, labor mobility increased within the Union, questioning the differences and the objectives of labor market policies. Since 2000, labor market policy deregulation patterns were uneven across EMU member countries, not always conforming to the "race to the bottom" paradigm, and, interestingly, related to internal and external macroeconomic developments instead. Between 2001 and 2007, Germany and other core countries with capital outflows and trade surpluses deregulated their labor markets, and the opposite was the case in peripheral countries experiencing trade deficits and growing external debt. One might interpret this evidence as a causal relationship running from reforms to competitiveness and trade balances: maybe countries gained or lost competitiveness because politically motivated reforms made their labor market more or less flexible. Another reading of the evidence, however, explains the pattern of labor reforms without invoking political shifts. Labor market regulation benefits the many individuals who in each country draw most of their income from labor. As EMU allowed capital to flow from rich to poor countries with inde-

pendent labor policies, the politically decisive individual in a capital-rich country, like Germany, remained capital-poor relative to the German average, but was less capital-poor relative to the newly integrated European factor market. Upon integration, the politico-economic equilibrium in Germany should swing towards deregulation more strongly than in (say) Spain, where the politically decisive individual becomes even more capital poor in the relevant market and may in fact favor stronger regulation (Bertola 2016). As a result of these reforms, and of wage and capital returns convergence as wealth is more unequally distributed than labor income, inequality should in theory (and did empirically, see below) increase in countries that like Germany experienced capital outflows and decrease in countries that, like Spain, accumulated negative international imbalances. It is also interesting to note that unemployment and employment moved in the direction opposite to the one that would be expected as a result of reforms. The labor markets that experienced deregulation (but also capital outflows and lower labor demand) performed worse that those that experienced more regulation (but also capital inflows and stronger labor demand), illustrating the fact that labor reforms and outcomes are not observed in all-else-equal conditions, but are both driven by circumstances.

After the Great Recession and Eurozone Debt Crisis, labor market reforms patterns across EMU countries tended to reverse their previous dynamics. When capital ceased to flow in, and public budgets were constrained by financial markets' diffidence towards peripheral countries' public debt, those countries tended to make their labor markets more flexible. This was partly a result of "Troika" policy prescriptions, but also a response to new economic circumstances. Debt service obligations became a constraint on policy choices in peripheral countries (as discussed in Chapter 2, labor market regulation has favorable consequences for many workers and tends to reduce inequality, but is less affordable when indebted governments need revenues and productivity growth), and the necessary reduction of imports and consumption made capital effectively abundant. In a monetary union, this pattern of labor reforms may address the same competitiveness issues that would otherwise result in exchange rate movements. Before the crisis, divergent reform patterns helped decrease imbalances; but after the crisis labor deregulation was associated with negative labor demand shocks, increasing unemployment and declining employment. This unhappy situation triggered anti-integration populist sentiment and nostalgic looks back at times when labor markets were rigid, highways were state-owned, and public debt was not a problem.

Figure 3.1

Economy-wide Product Market Regulation



Source: OECD.

© CESifo

3.1.4 Market Regulation

A cornerstone of neoliberal policy making was enhancing competition by removing regulations that were seen as artificial barriers which resulted in rent-seeking and reduced consumer welfare as measured by higher prices. While much of the focus during the 1980s was on labor market deregulation, the regulation of product markets became a central aspect of economic policy in the 1990s. The move to deregulation started in the United Kingdom and the United States, while in Europe the bulk of the changes occurred during the 2000s.

Figure 3.1 presents the available time series for the OECD indicators of Product Market Regulation (PMR). These are a comprehensive and an internationally comparable set of indicators that measure the degree to which policies promote or inhibit competition in different areas of the product market, all of them considered to be aspects in which competition is viable. Starting in 1998, consistent surveys have been conducted every five years. A wide array of aspects is measured and then combined into subcategories and eventually into a measure of economy-wide regulatory and market environments.[3] The index of economy-wide PMR is displayed in Figure 3.1 for selected countries. The data indicates that over the past two decades all European economies in our sample have reduced, to a greater or lesser extent, the degree of PMR. In contrast, PMR has remained broadly stable in the United States, which in 1998 exhibited a much lower degree of regulation than all but two economies in our sample, the United Kingdom and Denmark. The data also indicates considerable convergence across countries, yet important differences remain. First, Denmark is surprising in that regulation was already low in 1998 and has declined consistently, being the second least regulated country in our sample after the United Kingdom. More generally, by 2018 all countries except France and Switzerland had a lower PMR index than the United States. Second, while strong regulation is often associated with the large Southern European economies, Switzerland stands out as

[3] For further details see Koske, I., I.Wanner, R. Bitetti, and O. Barbiero (2015), "The 2013 Update of the OECD Product Market Regulation Indicators: Policy Insights for OECD and Non-OECD Countries," OECD Economics Department Working Papers 1200.

Figure 3.2

Cross-Country Correlation between Employment Protection and Product Market Regulation



Note: Employment protection indicators are the same as in Figure 2.6. Product Market Regulation are 5-year averages of OECD overall indicators.
Source: Blanchard and Wolfers (1999); Bertola (2017); OECD.

© CESifo

a highly regulated economy, with a trajectory that closely mimics that of its large neighbor, France.

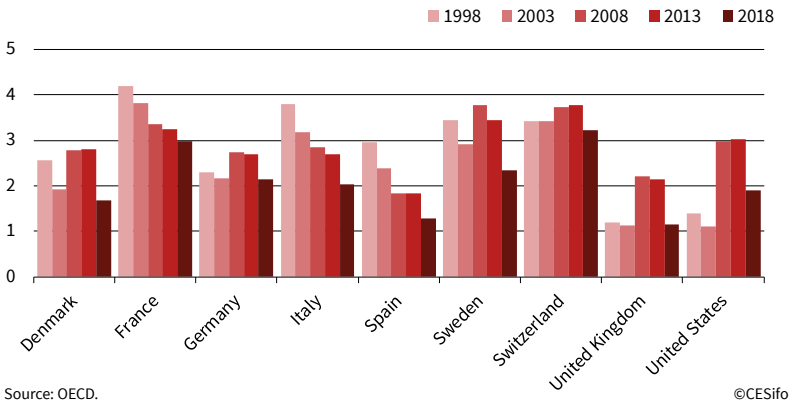
Interestingly, while, as discussed in Chapter 2, deregulation patterns are spotty in labor markets, product market deregulation is quite homogeneous across countries. Also notable is the positive (but decreasing) cross-country correlation between employment protection and product market regulation shown in Figure 3.2. Firms can protect their employees from job loss without going out of business only when they in turn enjoy protection from competition. In domestic markets, such protection can be provided by product market regulation, which, however, is eroded by international competition in integrated economies with independent regulatory policies.

The consistent reduction in PMR displayed in Figure 3.1 contrasts markedly with the evolution of some of its components. This is most noticeable when looking at public ownership of firms. Figure 3.3 presents the index for "Public ownership" constructed by the OECD and which is one of the components of the PMR index shown above. The former combines four key measures – the scope of state-owned enterprises, the structure of governance of these enterprises, government involvement in network sectors, and the degree of direct control over enterprises.[4]

The experience of France, Italy, and Spain contrasts with that for the United Kingdom and United States. The former exhibit a reduction in the index of "Public ownership," consistent with the pattern of the economy-wide measure. The United Kingdom and the United States witnessed a considerable increase in the index in 2008 and 2013, a change due to the considerable extent of intervention in the financial sector during the crisis. This pattern also appears, though to a lesser extent, in Denmark, Germany, and Sweden (there is also an increase in Switzerland, but it is rather small, amounting to a change of only 9 percent between 2003 and 2008, compared to an increase in the index of 44 percent in Denmark, a doubling in the United Kingdom, and almost trebling in the United States).

Figure 3.3

Regulation: Public Ownership



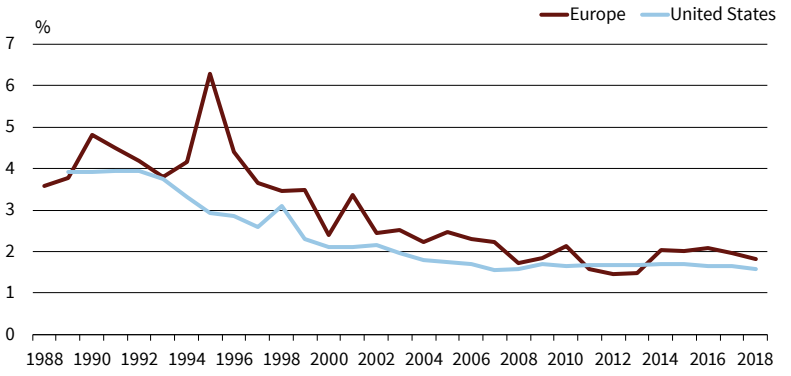
Source: OECD.

©CESifo

[4] For further details, see Koske et al. (2015). Four indicators make up the *public ownership* component. The first is the scope of state-owned enterprises, which considers whether (national, state, or provincial) government controls at least one firm in the sector. The second is the degree of government involvement in network sectors, measured by the percentage of shares in the largest firm that are owned by government (the sectors are electricity, gas, rail air, postal, and telecom). Third, direct control over business enterprises is measured through both general constraints (the government controls at least one firm and there are legal constraints to the sale of the stakes held by the government) and whether it has special voting rights. Lastly, governance of state-owned enterprises is measured by the degree of insulation from market discipline and the degree of political interference.

Figure 3.4

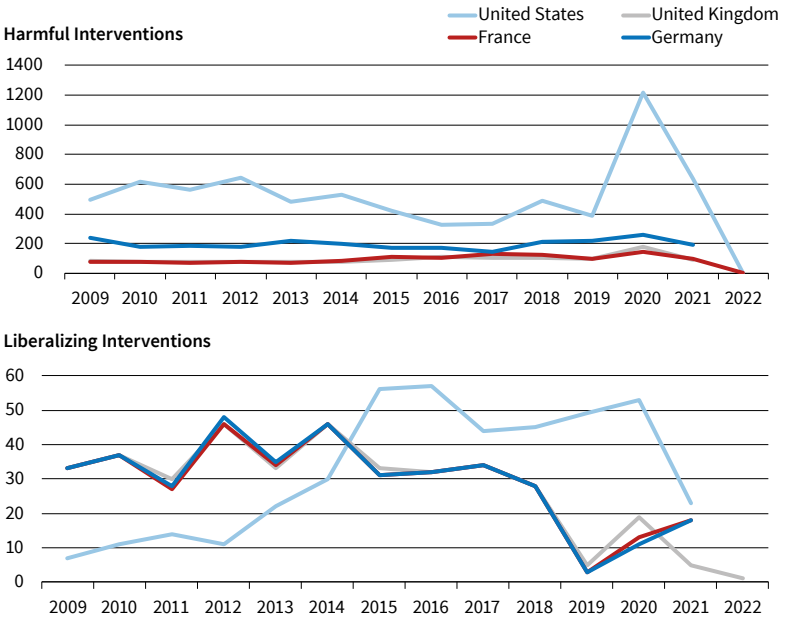
Protectionism: Effective Tariff Rate



Source: Worldbank. ©CESifo

Figure 3.5

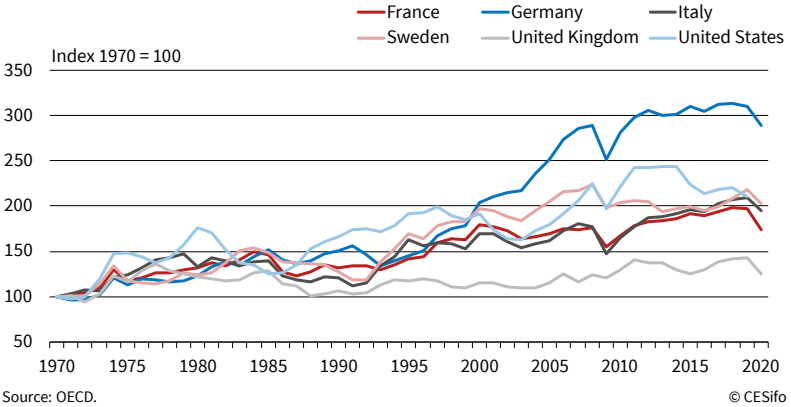
Liberalising and Harmful Trade Policy Interventions



Note: The data document all policy decisions that can affect non -tariff trade barriers. They are classified as liberalizing or harmful, depending on their expected impact on trade. The classification is further supported with data on international flows of goods, services, migration and investment.
Source: Global Trade Alert. © CESifo

Figure 3.6

Import of Goods and Services Relative to GDP



Source: OECD. © CESifo

3.1.5 International Trade

The removal of trade barriers that started in the 1980s has been a key element in the massive expansion of international trade over the past four decades. Figure 3.4 reports a measure of the degree of protectionism, the effective tariff rate (in percent), that indicates a systematic reduction in protectionism over the past three decades.

Non-tariff barriers have also been an important element in the liberalization trends observed.[5] Systematic and comparable data are available since 2009 and reported in Figure 3.5. The three European nations display similar patterns, with a high number of liberalizing interventions up to 2014 and a decline thereafter, and a small and stable number of anti-trade policies. The US experience is slightly different. The data indicate an increase in liberalizing interventions and a reduction in harmful ones in the United States in the period following the Great Recession, with a dramatic switch in both after 2019.

Much of the debate in the European Union – and also in the United States – has focused on the role of imports, which are often seen as destroying domestic jobs largely due to a lack of competitiveness of domestic firms. While the previous chapter showed the rapid growth in overall trade, Figure 3.6 depicts the time series for imports of goods and services as a share of GDP. Since different countries have different degrees of openness (e.g., Sweden is much more open than the United States), the time series have been normalized to the 1970 share. The six countries depicted show a sharp increase in imports which has coincided with increased unemployment and stagnant wages for certain types of workers, notably for blue-collar males. It is easy to associate the two trends, seeing imports as the culprit for such income losses and protectionism as the suitable cure.

Note, however, that while Germany exhibited the highest growth in imports and the United Kingdom the lowest, the perception of the negative consequences of trade is much stronger in the latter than in the former. There are two possible reasons for the differential impact. On the one hand, the geographical concentration of certain industries has implied that the resulting income shocks have affected entire communities, adding to low incomes wealth losses as the price of housing fell and, in some cases, a reduction in the provision of public services in the worst-hit locations. On the other hand, the observed income losses are not a direct failure of trade policy, but rather a failure of social policies, as the winners have not always compensated the losers, a textbook requirement for openness to result in Pareto gains. Of course, the failure to provide adequate social insurance and hence prevent exces-

[5] Non-tariff barriers refer to the wide range of policy interventions other than border tariffs, affecting the trade of goods, services, and factors of production. See, for example, Looi Kee et al. (2009) on the importance of non-tariff barriers. The authors show that non-tariff barriers play a more important role in low-income than in high-income economies.

sive income losses can itself be an indirect effect of openness. In more open economies the tax base is more elastic, making it more difficult to implement the necessary redistribution and implying that increased openness can have an effect on the capacity to maintain the social contract; see EEAG (2020).

3.1.6 Policy Conflicts across Countries

One of the main consequences of the European Debt Crisis has been to highlight the difficulties of having a monetary union that does not share a common fiscal policy. Although the Crisis crystallized this tension, diverging views in policy choices were apparent beforehand. Increasing trade openness generates distributional tensions across countries as both country size and initial comparative advantage matter for the allocation of production and employment within a trading area. Within the European Union, initial differences have led countries to pursue different growth strategies that have affected resilience. Notably, as manufacturing production was reallocated from one economy to another, a number of small countries have relied on low corporate taxation to attract businesses, thus increasing employment and tax revenue. This has led to an increasingly critical debate about tax avoidance by multinational companies and the perception that some EU member states seem to benefit from offering companies opportunities to avoid taxes in other member states.

Differences in the countries' approaches to taxation have also affected the recent agreement at the G7 on a global corporate tax. The effective minimum tax rate proposed of 15 percent has been criticized as too low by some of the high tax countries in Europe and as too high by countries with lower taxes. The fiscal burdens brought about by both the Great Recession and the Covid-19 recovery plan have also increased the potential for tensions between European countries, notably between large and small nations as well as net contributors and net recipients, raising the question of whether such tensions will prevent the implementation of policies that have a broad global perspective. At the same time, the mere fact that agreements have been reached both on the minimum corporate tax and NGEU demonstrates that policy coordination at the European and international level is possible.

Other sources of conflict have also become apparent over the past decade. Migration within the European Union has been a key element in several countries' political debate, as the arrival of citizens from other member states has been perceived as having large distributional and fiscal implications. When migrants obtain jobs, they are argued to cause unemployment for national workers or push down wages; when they remain jobless, they are accused of being a burden on the welfare state and hence on public finances. Heterogeneity across countries in the size of the financial sector has also implied diverging views not only on the taxation of this sector but also on the type and extent of regulation. Such conflict has become particularly strong in the post-Brexit era in which several nations are hoping to become a major financial center in Europe now that London is outside the trade block. Lastly, attitudes towards environmental policies and a carbon tax differ. Large countries are also large emitters while small countries benefit from emission cuts by their neighbors, thus making the latter more inclined and the former more reluctant to implement such policies at the EU level.

These differences in the policies that the various member states put forward have not only generated debates across countries on how to conduct economic policy, but also created a perception of lack of policy direction in the Union. This perception combined with the distributional tensions that have appeared within countries shape political views in the member states.

3.2 DISTRIBUTIONAL TENSIONS WITHIN COUNTRIES

The dynamics of government expenditure, changes in labor and product market regulation, and increased openness have created major distributional tensions within countries. Two aspects have been key: the dynamics of the profit share and the evolution of income inequality.

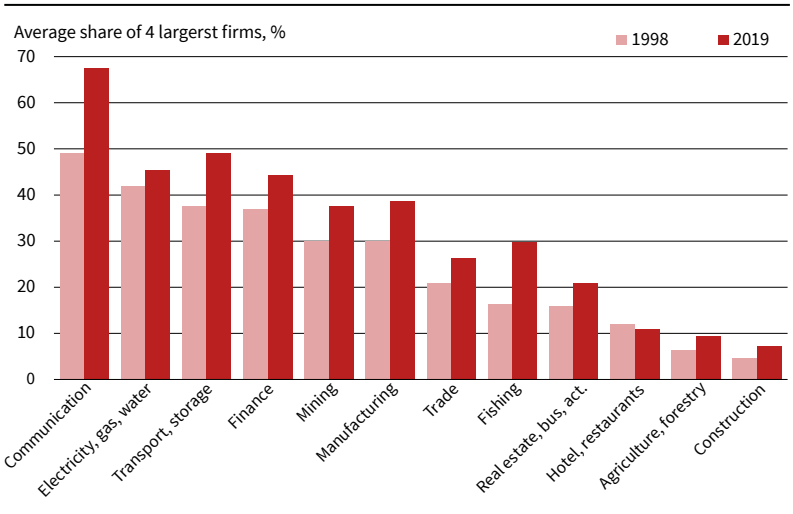
3.2.1 Concentration and the Profit Share

The reduction in PMR described above contrasts with observed market concentration. While deregulation was supposed to enhance competition and reduce market power, a number of authors have identified increases in market concentration over the past few decades, both in the United States and in Europe; see Autor et al. (2017). Figure 3.7 depicts an index of

Figure 3.7

Average Industry Concentration by Industry Groups

1998 vs. 2019



Source: Koltay and Lorincz (2021).

© CESifo

industry concentration in five EU countries in 1998 and 2017. Concentration is measured by C4 (i.e., the market share of the largest four firms in the industry, in percent) and the countries are France, Germany, Italy, Spain, and the United Kingdom. Despite the reduction in PMR that was supposed to reduce barriers and increase competition, only one sector displays a reduction in concentration and all others experienced an increase. The increase is particularly large in trade and in communication, where the market share of the top firms rose from just under 50 percent to almost 70 percent. This implies considerably greater concentration than in the utilities industry, generally seen as a sector with natural monopoly.

The OECD's index measures "the degree to which policies promote or inhibit competition in areas of the product market where competition is viable." Yet technological change has generated scale and network economies that make it less viable in some sectors. Also, privatization does not always foster competition. In the late 16th century Queen Elizabeth I granted a private monopoly on playing cards to her courtier Edward Darcy, which was soon declared illegal by the courts. More recently, indebted governments sold more or less natural monopolies to crafty businessmen. In the 1920s, many countries granted Swedish match monopolies to Ivar Kreuger, who engaged in financial shenanigans before bankruptcy and suicide. Italy and France sold toll highways in the 1990s to private owners who reduced costs (and their workers' income and sometimes the safety of their customers) but need not reduce prices (regulators are often missinformed and subject to capture), so reaped large profits.

The increase in concentration has had several effects. First, it has been accompanied by a rising profit share and a declining labor share. The fall of labor's share in GDP in a number of high-income countries is well documented (see Figure 3.8 as well as Karabarbounis and Neiman 2014, and Valletti 2017) but its causes remain uncertain. While the weakening of labor market institutions and international trade have been argued to have played a role in causing this trend (Krugman 2008), recent work has pointed out the importance of market structure, notably the presence of dominant "superstar firms" which have high mark-ups and a low labor share. Using US data, Autor et al. (2020) have found, first, that the fall in the labor share has been largely due to a reallocation of labor across firms in the same industry, and second, that industries where concentration has risen the most have witnessed the largest declines in the labor share. The increased market power of dominant firms has hence been argued to be a major force in reducing wages or preventing their growth and thus in shaping distributional outcomes.

An additional effect can appear in sectors where the increase in concentration has been associated with a rising market share of large multinational firms, which are more likely than domestic firms to engage in tax optimization, thus reducing fiscal revenues at home. As a result, greater concentration may have decreased the share of income going to workers, both directly because of higher profit shares and indirectly through reduced effective tax rates.[6] Lastly, in some sectors – notably emerging tech sectors – the lack of regulation has allowed the appearance of firms of formidable size, which are perceived as a risk to future competition, innovation, and, in some sectors, also to individual privacy.

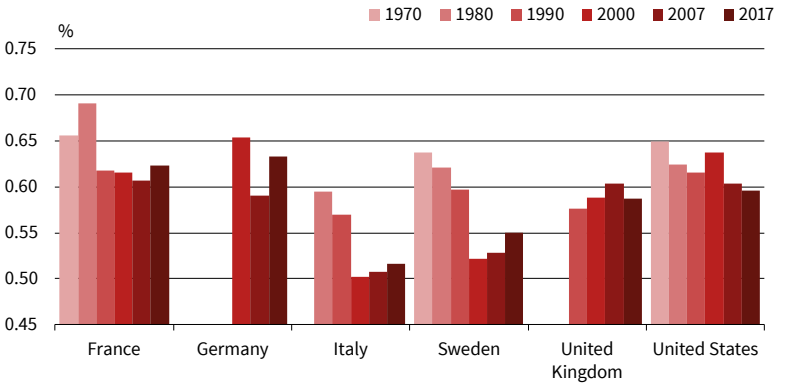
3.2.2 Inequality and the Feeling of Being Left Behind, Vulnerable, and Ignored

The fact that economically vulnerable groups, which depend more on public sector support and the welfare state than other groups, were affected by fiscal consolidation policies, attracted attention to an issue which existed even before the crisis: the general trend towards more income inequality and the perception that changes in the economic environment like globalization and technical change had created significant groups of losers.

In many industrialized countries, income inequality started increasing in the 1980s or the 1990s, so that at the time of the Financial Crisis inequality was significantly higher than two decades before. As seen in Figure 3.9, which depicts the Gini coefficient of disposable income, this was true for the United States, but also for several European countries, including the United Kingdom and Sweden.[7] Other European countries exhibit a variety of experiences. For example, in Italy very high levels of income inequality persisted, while in Germany the Gini coefficient started rising significantly in the 2000s. Interestingly, the Global Financial Crisis resulted in

Figure 3.8

Share of Labor in National Income



Source: Penn World Table.

© CESifo

[6] Note that total tax receipts may have risen even if the share paid in taxes fell because greater profitability implies a larger tax base.

[7] We start by focusing on household disposable income and will consider market incomes below. Disposable incomes consist of earnings, self-employment income, and capital income and public cash transfers; income taxes and social security contributions paid by households are deducted. Hence, it combines a measure of how markets distribute incomes and the extent to which policy corrects resulting inequalities. Income is adjusted for household size.

a reduction in inequality in a number of countries. In the United Kingdom, after almost three decades of rising inequality, the trend was reversed during the Great Recession, while the United States also exhibits a reduction in the Gini coefficient, although to a much smaller extent.

The Gini coefficient, depicted in Figure 3.9, captures a broad measure of inequality largely focused on the differences around the middle of the income distribution. Figure 3.10 presents an alternative measure of inequality, the ratio of the disposable income of those in the top 10 percent of the distribution (p90) to those in the bottom 10 percent (p10). Hence, this ratio measures the gap between those with very high and those with very low incomes. Even if the overall trends are similar to those in the previous figure, important differences appear. The United States has a high Gini coefficient, but those for the United Kingdom and Italy are of similar magnitude. In contrast, when we consider the p90/p10 ratio, the United States is well above the other countries in our sample. The dynamics also vary. Sweden experienced a sharp increase in both the Gini coefficient and the p90/p10 ratio, but for Germany the latter increased much less than the former, indicating that the rise in inequality was not driven by the dynamics of those at the extremes of the distribution. In fact, the reasons for the observed increases in the dispersion of disposable income vary considerably across countries. In some countries, such as the United States, it has been largely due to a greater dispersion of labor earnings (see Figure 3.10). In others, notably in Sweden, wage dispersion remained stable and the worsening of the distribution of income was driven by a greater dispersion of capital incomes – in turn related to real estate price increases and more lenient taxation.[8]

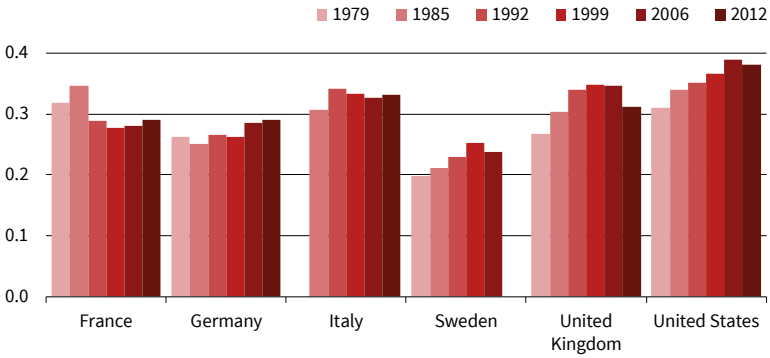
When we focus on the deeper causes of patterns in income inequality, a variety of factors have been argued to play a role. Social policy expenditures decreased after EMU to an extent that can fully explain the increase of inequality in certain member countries. Another important driver of inequality are labor market reforms, while the roles of import penetration and technological change are much debated. What is crucial is that the Global Financial Crisis, the Eurozone Debt Crisis and the ensuing Great Recession, constituted a major shock that questioned the economic dogmas that had been put forward since the late 1970s. The distribution of market incomes came under scrutiny, and an awareness of the role of socio-political relations in shaping inequality has emerged that refutes the idea that we live in a meritocratic society and that markets deliver to all individuals their worth.[9]

[8] See Roine and Waldenström (2012) and García-Peñalosa and Orgiazzi (2013).

[9] For example, Piketty (2020) presents a historical perspective of inequality dynamics, where distributional outcomes are not a deterministic outcome, but rather result from the combination between fundamentals (preferences and technology) and ideological factors.

Figure 3.9

Gini Coefficient, Disposable Income



Note: The Gini index ranges from 0–1, where 0 means perfect equality and 1 (or 100%) means maximal inequality.
Source: Luxembourg Income Study. © CESifo

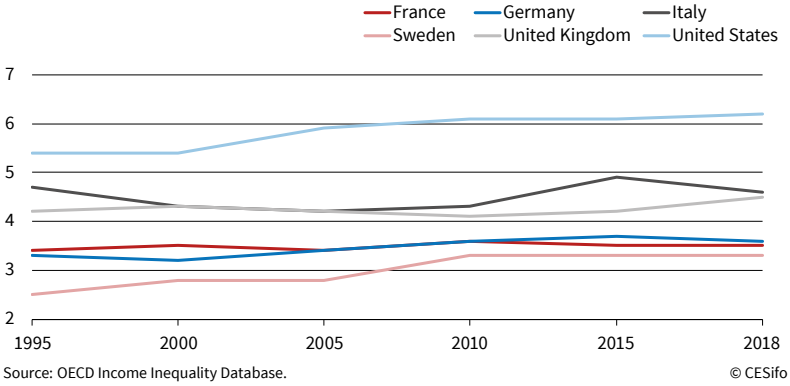
In this context, perceptions can be more important than objective facts. Spruyt et al. (2016) argue that (p. 345) "it is not actual vulnerability per se that matters (i.e., material wealth, educational attainment, cultural capital, and internal political efficacy) but subjectively experienced vulnerability (i.e., relative deprivation, anomie, perceived lack of political efficacy)." Moreover, aggregate measures of inequality in economic outcomes may fail to capture dimensions of inequality which drive populism. One issue is inequality of opportunity. If part of the population has the impression that it has no opportunities to acquire education skills and improvements in their wellbeing, they may turn to populist leaders.

The Global Financial Crisis has raised awareness of the distributional changes of the past few decades and brought considerable attention to the evolution of top incomes, such as the share of aggregate income that is received by those in the top 1 percent of the income distribution. Although the Gini coefficient better reflects what is happening in the center of the distribution and focusing on disposable income is a more suitable way to measure household welfare, pre-tax top income shares have captured the popular

Figure 3.10

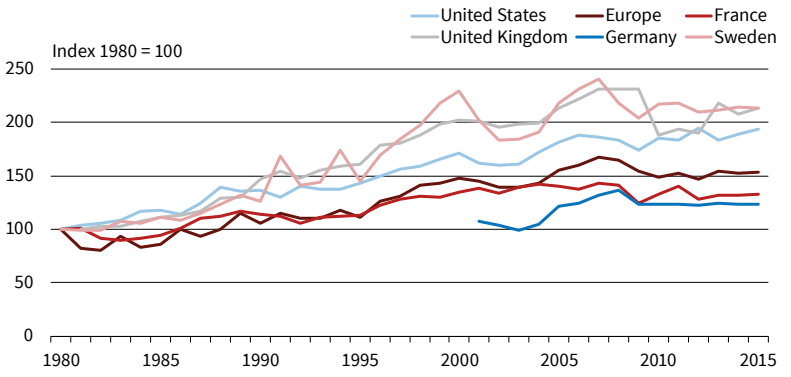
P90/P10 Ratio of Disposable Income

Top 10 percent of distribution / bottom 10 percent of distribution



Source: OECD Income Inequality Database. © CESifo

Figure 3.11
Pre-tax Income Share of the Top 1 Percent

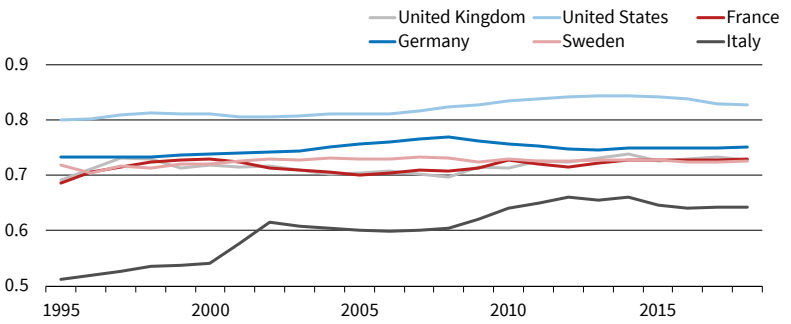


Source: Piketty 2020, Figure 10.3. © CESifo

imagination as a measure of distributional woes. Figure 3.11 depicts the evolution, relative to its level in 1980, of the income share of the top 1 percent. There has been a generalized upwards trend in this share, with the exception of Germany in the 1990s, and the magnitude of the increase has been large, with the United States, the United Kingdom, and Sweden experiencing at least a twofold increase between 1980 and 2015. Even a country like France, where the Gini coefficient of disposable income and the p90/p10 ratio have remained stable, witnessed an increase in the top 1 percent share. If perceptions are important, this increase may be of greater social significance than the evolution of measures such as the Gini coefficient of disposable income.

Wealth inequality has also acquired increasing importance in the public debate. The dynamics of wealth inequality, displayed in Figure 3.12 for selected countries, are less striking than those for income, yet important patterns appear. First, the Gini coefficients are much larger than for income inequality, lying between 50 and 85 percent (while those for income are in the 20–40 percent range). Discussions of the distribution of wealth have hence highlighted how much more unequally assets are shared as compared to wages or income. Second, certain countries that display low Gini coefficients for income have highly unequal wealth distributions, as is the case for Sweden. This has raised questions about whether the gap between the two can result in difficulties in maintaining equality of opportunity and hence lead to future increases in income inequality.

Figure 3.12
Gini Coefficient, Net Wealth



Note: Wealth is measured as total household assets minus debts and split equally amongst all adults in the household. The Gini index ranges from 0–1, whereas 0 means perfect equality and 1 (or 100%) means maximal inequality.
Source: World Inequality Database. © CESifo

Recently, a debate has emerged concerning the potential effect of quantitative easing on wealth inequality, and two mechanisms have been pointed out as being potentially important: the impact of inflation on real debt and the effect of low interest rates on asset prices. These effects are likely to be highly dependent on the way a country's financial sector is structured and the types of savings that households hold. Figure 3.12 indicates that in the immediate aftermath of the Great Recession, countries had different experiences. Between 2007 and 2013, wealth inequality fell slightly in Germany (by 2 percentage points), remained stable in France and Sweden, and increased in the other three economies by 3 percentage points in the United Kingdom and the United States and by 5 percentage points in Italy. The potential effects of monetary policy are also dependent on the extent to which policy results in higher prices and are hence likely to be different in the response to Covid-19 than they were during the Great Recession. Yet, a common perception arising from these debates is that not only is wealth highly unequally distributed, but also that quantitative easing has tended to enhance such inequality, providing yet another example of a policy that benefits those at the top of the distribution.

A last important aspect is that a feeling of being left behind may emerge in particular regions of a country, typically in those with poor economic development where people have the impression that the places where they live have been forgotten by the policymakers: by the early 2000s the European promise was already showing signs that income convergence was not as strong as many had predicted. Although the evidence is mixed, there seems to have been a sharp contrast between convergence in certain aspects, such as labor productivity, and divergence in others, notably employment rates across regions of member states (see, for example, Martin 2001). The differences have been exacerbated by the Great Recession. The global shock had the strongest impact on the peripheral regions of the Union, which were both those with a sovereign debt problem and with the lowest productivity (see Fingleton et al. 2015). At the same time, the past five decades have witnessed a notable increase in urbanization,[10] which has made certain groups of the population feel that policy decisions have aimed at benefiting workers in

[10] Urbanization rates vary considerably within the European Union, but all countries have experienced large increases since the 1970s, and in some cases much of the increase occurred over the past two decades. For example, in France urbanization rose by 5 percentage points in the three decades preceding 2000 and by another 5 percentage points between 2000 and 20020. Own calculations from https://www.un.org/en/development/desa/population/theme/urbanization/index.asp.

densely-populated metropolises at the expense of those living in small towns and rural communities.

These tensions have created dissatisfaction with incumbent policymakers that have led voters to consider other options.

3.3 THE NEW POPULISM

3.3.1 What is Populism?

Populism can be defined as "an ideology which pits a virtuous and homogeneous people against a set of elites and dangerous 'others' who are together depicted as depriving (or attempting to deprive) the sovereign people of their rights, values, prosperity, identity and voice." (Albertazzi and McDonnell 2008, p. 3). This report is primarily interested in the economic implications of populism.[11] EEAG (2017) defines populist economic policy as follows:

"Populist economic policy claims to design policies for people who fear to lose status in society and who have been abandoned by the political establishment. The populist economic agenda is characterised by short termism, the denial of intertemporal budget constraints, the failure to evaluate the pros and cons of different policy options as well as trade-offs between them. It often focuses on single and salient political issues, overemphasises negative aspects of international economic exchange and immigration, and blames foreigners or international institutions for economic difficulties. The populist economic agenda rejects compromise as well as checks and balances and favours simplistic solutions."

Populist governments usually run high budget deficits, they reject immigration and international trade, and they tend to dislike checks and balances as well as supra- and international institutions which constrain national sovereignty. Populism occurs in variants often referred to as right- and left-wing populism. While left-wing populists often focus on redistribution and deficit spending, right-wing populist typically emphasize issues related to immigration and identity. Both types of populism tend to favor protectionism in international trade.

3.3.2 What are the Causes of the Growing Support for Populist Politicians?

The rise of populism is a complex and multi-faceted development. The view is widespread that it is related to both economic, non-economic, and cultural factors. The relative importance of these factors is disputed, however.

[11] See Kyle and Gultchin (2018) on the extent of populism. It identifies populist leaders or political parties that have held executive office across 33 countries between 1990 and 2018, and shows that over that period the number of populists in power around the world has increased fivefold (from four to 20) and that this now includes countries not only in Latin America and in Eastern and Central Europe – where populism has traditionally been most prevalent – but also in Asia and in Western Europe.

3.3.2.1 Cultural and Political Values versus Economic Factors

The extent to which economic issues are important in explaining the rise of populists is disputed. Inglehart and Norris (2016) examined to what extent populist support is correlated with economic and cultural variables. They found that cultural and political values play a key role. Support for populism is strengthened by anti-immigrant attitudes, mistrust of global and national governance, support for authoritarian values, and left-right ideological self-placement. Economic indicators, in contrast, are seen as less relevant. They write (p. 4):

"Looking more directly at evidence for the economic insecurity thesis, the results of the empirical analysis are mixed and inconsistent. Thus, populist parties did receive significantly greater support among the less well-off (reporting difficulties in making ends meet) and among those with experience of unemployment, supporting the economic insecurity interpretation. But other measures do not consistently confirm the claim that populist support is due to resentment of economic inequality and social deprivation; for example, in terms of occupational class, populist voting was strongest among the petty bourgeoisie, not unskilled manual workers. Populists also received significantly less support (not more) among sectors dependent on social welfare benefits as their main source of household income and among those living in urban areas."

Support for populists may also be related to more fundamental views and values like a low tolerance level of foreigners or different cultures and religions. It may also reflect a low level of education. For instance, Kriesi (1999) used Eurobarometer survey data to show that people with lower educational attainment – including farmers, artisans and low-skilled workers – are disproportionately represented among supporters of populist movements.

Disentangling cultural, political, and economic factors driving populism is often difficult because they interact, and there is considerable overlap. International migration, which is a focus of populist policies, is a good example. Populists use the concerns of natives that they compete with immigrants for jobs and support by the welfare state. But they also exploit fears that immigration may undermine values and traditions of the native population, as well as undercutting domestic labor market standards.

There are various economic developments which could have favored the rise of populism. A first aspect is economic crisis and the hardship that ensues, which suggest the "elites" have failed. Inequality and redistribution could have been key aspects, although they are viewed in different ways by different groups. Those whose relative incomes have fallen the most have the feeling of being left behind, vulnerable, and ignored, while in some countries, notably those with

large welfare states, those in the middle of the distribution perceive themselves as bearing an excessive burden in financing redistribution. Similarly, social dynamics are interpreted in a variety of ways – generating frustration of being unsuccessful in a meritocratic and competitive society, or anger about being unsuccessful in a society which is not meritocratic and competitive. Globalization can create a rejection of the ensuing economic change, in particular with respect to immigration and structural change triggered by trade (the "China shock").

Guriev (2018) reviewed the (limited and recent) literature on which economic factors enhance support for populist parties. The evidence he discusses indicates, first, that the increase in unemployment that took place in Europe during the Great Recession had a causal impact on the rise of populism.

Second, inequality matters in various forms. Spruyt et al. (2016) used Belgian survey data and found that subjective vulnerability matters more than actual vulnerability, and concluded that one of the key lessons is that parties and politicians who aim to reduce the demand for populism need to counter the widespread feeling that they are unresponsive to the concerns and grievances of voters. Guriev (2017) highlights the importance of inequality of opportunity for how much individuals "support" markets.

The empirical evidence on the response to the feeling of being left behind is mixed, however, and depends on the setting. Brexit is a widely studied case of populist policy influence. Becker et al. (2017) argue that it is not inequality or poverty as such which explains voting behavior, but rather the interaction between pressure related to fiscal cuts or migration and socio-economic fundamentals like education. Dorn et al. (2020) used German regional income data and investigated to what extent there is a causal impact of a region falling behind in terms of incomes relative to the national average and vote shares of radical right- and left-wing political parties. The results suggest that economic deprivation does have a significant positive impact on political support in particular for the right-wing populist party AfD.

Lastly, trade plays an important role. This is captured not only by the different responses to globalization of skilled and unskilled workers, but also by the fact that these responses vary with the skill-composition of exports and imports. Moreover, Rodrik (2018) argues that the type of populism that emerges depends on how globalization is perceived. When immigration and refugees are the most salient aspects of globalization, as is the case in much of Western Europe, populism tends to focus on identity and cultural cleavages. When the main change is trade openness resulting in import competition and the loss of low-skilled employment, as in Southern Europe and Latin America, populists focus on income and education differences and the self-interest of the elite. Interestingly, in the United States both aspects seem to have been present.

What is certain is that despite a diversity of national experiences, both in the most salient economic trigger and the resulting form of populism, crises, inequality, and openness have been important factors in changing political outcomes over the past decade.

3.4 A PERCEPTION OF POLICY FAILURE

Deep economic crises are often followed by political polarization and the rise of populism. This applies in particular to financial crises. For instance, Funke et al. (2016) analyzed the aftermath of financial crises over the past 140 years and found that these crises have often been followed by rise of extreme right-wing parties. The Global Financial Crisis, which broke out in 2008, had a profound impact on the perception of economic policies and public debates, leading to a fundamental critique of the financial sector above all but also to some extent the capitalist system as a whole.

3.4.1 Those Left Behind versus the "Elites" in the Aftermath of the Great Recession

Regulation and policy did play some role in sowing the seeds of the Financial Crisis, for example in the United States where subprime borrowers were explicitly targeted and to some extent subsidized by the Federal government. But the crisis was primarily perceived as a result of deregulation and greed in financial markets and banks. Banks had made extremely high profits for many years, which were distributed in particular to bank managers in the form of extremely high salaries and bonuses. The crisis revealed that these profits were only possible because banks had taken high risks. Now, as things went wrong, banks were on the brink of bankruptcy. In a capitalist system owners and creditors of these banks would normally bear the cost of the bankruptcy. However, the trouble was that regulators had not required banks to hold enough loss-absorbing capital. Given this, a collapse of a large bank would endanger other banks and might even trigger a run on the financial system. The bankruptcy of the bank Lehman Brothers demonstrated this. It sent shockwaves through the global financial system, led to a sudden stop in lending among banks, and would have caused other financial institutions to collapse. Since a collapse of the financial system would have led to a much deeper recession, saving the banks was necessary. But the fact that taxpayer money was used to rescue the banks justifiably led to public outrage.

It is interesting to note that the behavior of the banks reflected not so much a classical market failure but rather, a case of regulatory failure implied by the "too big to fail-problem." In a market economy, risk taking by banks would not be a problem, and there

would be no incentives to take excessive risks if banks had enough capital – either equity or "bail-inable" debt. But that was not the case. Banks could operate with very little equity and large amounts of short-term debt, often debt held by other banks, so that bail-ins would be a threat to financial stability. Given this, many investors had the expectation that banks would be bailed out by governments in the case of financial distress, and they gave credit without thinking much about the risk. Without the implicit government bail-out guarantee many banks would have been unable to operate with the low levels of equity observed before the Financial Crisis.

In Europe, the Financial Crisis was followed by the Eurozone Debt Crisis. The crisis began with the revelation that public debt statistics had been forged in Greece. Investor confidence in the ability of the Greek government to meet its financial obligations collapsed. In some countries, notably Spain and Ireland, real estate bubbles led to banking crises and more bank bailouts, which eventually became so costly for the governments that they led to situations where the sustainability of public debt seemed questionable. In Italy, chronically low economic growth and high levels of public debt also undermined investor confidence. A similar situation emerged in Portugal. The reaction to these developments was a combination of support, partly through government bond purchases by the ECB and partly through conditional loans provided by the newly created Eurozone rescue facilities, in particular the European Financial Stability Facility (EFSF) and later the European Stability Mechanism (ESM).

The Eurozone Debt Crisis forced many European countries to cut back public spending to stabilize their public finances. Opponents of these measures argued that "austerity" policies were counterproductive and would only lead to a deeper recession and eventually a disintegration of the Eurozone. This did not happen, but the striking injustice of spending billions in tax money on saving imprudent banks, combined with the painful experience of fiscal austerity led to a wave of criticism, and not just of the financial sector and regulatory failure.

For populist parties, the crisis was an opportunity to attack a ruling "elite" for failing to regulate the financial sector properly and for managing the crisis in a way where vulnerable groups in society, in particular the young and the poor, were not protected. Policy decisions were thus perceived to punish the people but not the elite, which had been at the source of the crisis both as policymakers and actors in the financial sector.

The crisis also attracted attention to problems and challenges in areas beyond the financial sector. A contrast was drawn with the fact that over the previous decade calls for protecting manufacturing sectors facing job-losses because of global competition had remained unheard, implying that interventions to prevent blue-collar job losses were not enacted while those to save white-collar employment were. On the left of the political spectrum, much of the focus was on the gap between inaction about environmental issues and climate change and the will to engage in international coordination to save the banks.

3.4.2 Freedom, Meritocracy, and Populism

In the debate about inequality, the extent to which inequality can or cannot be justified plays an important role. One justification for inequality in outcomes is that incentives are necessary to motivate individuals to be productive. From that perspective, income differences simply reflect what people contribute through their work, their entrepreneurial skills, or the willingness to save, invest, and take risks. This view portrays inequality as a desirable feature of a meritocratic society.

There are basically two objections to this view, which are probably both relevant for understanding how populism is related to inequality. The first objection is that the distribution of income is not entirely or not even primarily related to the contributions to society of those who earn the income. The second questions the view that a meritocratic society is desirable.

There are various reasons to question the view that the existing distribution of income is meritocratic.[12] For instance, if people inherit large amounts of wealth, their incomes may be related to the merits of their parents or grandparents but not to their own contribution. In addition, market incomes are always a result of a mixture of effort and luck. If technological change favors certain groups and destroys the jobs of others, it is difficult to argue that this is a result of individual merit. Many markets are characterized by frictions, monopolies and cartels, or regulations which distort outcomes. The financial sector boom which preceded the Global Financial Crisis provided huge incomes and profits to people who, as became clear later, did more harm than good to society. For all of these reasons, the distribution of income emerging in the market does not necessarily reflect the fair value of the contributions individual members of society have made. A populist rejection of the political and economic system and the elites dominating it may be a result of anger about the fact that Western societies are not meritocratic, an anger that is accentuated by the claim that it is so.[13]

However, populism may also be a reaction to the fact that societies are, at least to a certain extent, meritocratic. The term "meritocracy" goes back to the satirical novel *The Rise of the Meritocracy 1970–2033* by Michael Young, published in 1958. The novel describes a society which establishes radically meritocratic structures. The key problem of this society

[12] See, for example, Piketty (2020) and Sandel (2020).
[13] Sandel (2020) argues that the defence of meritocracy is largely a way for elites to justify the intergenerational transmission of privilege; see also Markovits (2019).

is that those who are not successful have no excuse and nobody defends their interests because by definition they deserve to be where they are. In this society an opposition movement emerges which is called "The Populists." From this perspective populism is a movement driven by the anger of those who live in a society which offers many opportunities but fail to seize them. Populism reflects the frustration of those who are unsuccessful and know it is their own fault.

Examples of rising support for populism where this frustration may play a role can be found in the formerly communist societies of Central and Eastern Europe. It is a striking feature of the growing success of populist parties in Germany that this support is much stronger in the formerly communist East Germany than in the West. One explanation is that part of the population in Eastern Germany is frustrated about the fact that the end of communism has opened up a world of new possibilities and liberties to them but that they have not been able to use the new possibilities fruitfully while others have.

3.5 HOW DID POPULIST POLICIES PERFORM?

Populist economic policy is likely to have high economic costs and has led to bad economic outcomes in the past. This is particularly visible in the case of populism observed in Latin American countries. Leading industrialized countries like the United States or the United Kingdom are much more robust, so that negative effects of populist economic policy decisions will be less clearly visible, but they nevertheless are likely to exist.

Most work on the economic consequences of populism has been narrative. For example, based on the experience of Latin American countries in the second half of the 20th century, Dornbush and Edwards (1991) describe a "populist cycle" doomed to self-destruct. Populist leaders tend to engage in redistribution and expansionary fiscal policy that initially create a demand-driven economic expansion. As inflation rises and the accumulation of debt becomes unsustainable, an economic crisis ensues, which in turn makes the populist leaders lose power. This view highlights what Dornbusch and Edwards (1991) consider the key characteristic of populist policies – an emphasis on the potential of policy (notably in terms of growth and income redistribution) and a disregard for its risks – inflation and deficit finance, external constraints, and the behavioral responses to regulation and non-market policies. That is, policy is characterized by short-termism and the negation of the medium-term consequences of fiscal expansion.

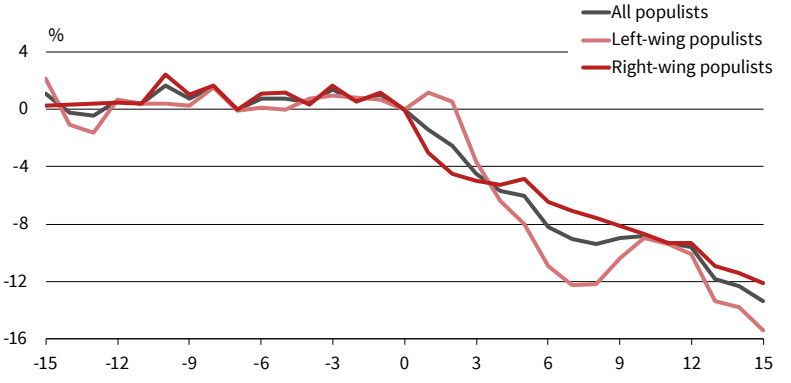
Recent work has started to examine in a more systematic way the economic consequences of populism. In particular, Funke et al. (2020) constructed a large database for the period 1900–2018 to examine how economies perform under populist presidents or prime ministers. Their analysis suggests that although not all populist leaders "self-destruct," there are long-lasting economic losses relative to comparable non-populist regimes. Two core economic outcomes are examined: GDP, which is found to fall both in the short- and in the medium-term, and consumption, which (for certain regimes) increases in the short-run before declining below its pre-populist regime level. The magnitude of these effects is large, with GDP per capita being more than 10 percent lower as compared to a non-populist counterfactual, as can be seen in Figure 3.13. The figure depicts the gap observed when comparing the estimated paths of real GDP per capita for countries with populist regimes and those without.

The losses are associated with a variety of intermediate mechanisms. Some of them follow closely the discourse of populist electoral candidates; notably, protectionism is reflected by an increase in tariff rates and reduction of various measures of globalization. The consequences of macroeconomic policy are apparent in an increase in the debt-to-GDP ratio (of 10 percentage points after 15 years) and, in the case of left-wing populists, in higher and more volatile inflation rates (there is no effect on inflation for right-wing regimes). Lastly, both types of populist regimes display a considerable erosion of democratic institutions, with diminished judicial constraints on the executive, a decline in the extent to which elections are free and fair, and a reduction in freedom of the press.

Funke et al. (2020) also examined distributional outcomes, an important aspect given the emphasis that populists make on pursuing the interest of "the people" against members of the elite. Two measures of inequality are used, the Gini coefficient for disposable income and the labor share. On average there is no significant change in inequality, but the results depend on the type of government. When right-wing populists are in power, inequality rises slightly as captured by a higher Gini coefficient (depicted in Figure 3.14) and a lower labor share. Under left-wing populist governments, the labor share initially increases but declines again after 10 years, while the Gini coefficient falls for the 15 years following the regime

Figure 3.13

Differences in Real GDP (Average Gap, in %) after Populists Take Over (+/–15 Years)



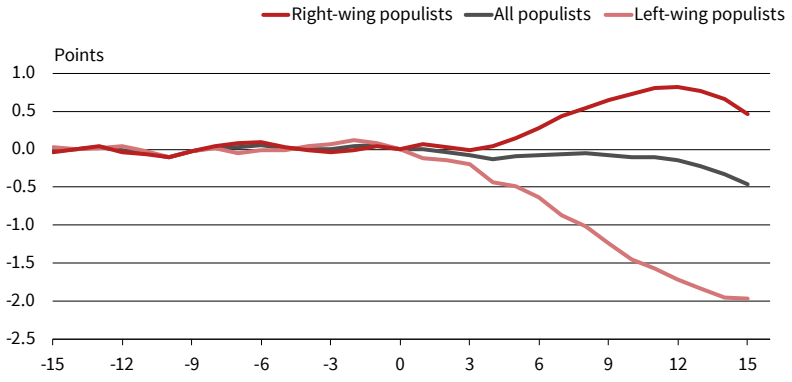
Source: Funke et al. (2020). © CESifo

change (by 2 Gini points). The difference between the two distributional measures probably reflects the fact that reshaping the factor distribution of income has limits, and hence after an initial increase in wages the regime can only keep inequality falling through increased transfers.

Although the recent populist movements propose policies broadly in line with those just described, there are two important differences. The recent populism no longer focuses on traditional redistribution simply based on income and wealth, but instead has a "nativist" component that confronts "the people" both against migrants and against the cosmopolitan elite. The perception is that instead of the workers of the world uniting, it is the elites of the world that have done so, and that access to this self-serving elite occurs largely through elite higher education, the access to which is highly dependent on family background. At the same time, the extreme right and the extreme left now join forces against policies that defend markets and globalization, with the former arguing that globalization results in too much welfare support, the latter claiming that those policies do not restrain markets enough (De Vries 2017).

Figure 3.14

Differences in the Gini Index (Average Gap, in %) after Populists Take-Over (+/–15 Years)



Source: Funke et al. (2020). © CESifo

3.6 NEW CRISES, NEW POLICIES

The climate of mistrust in elites and policymakers that developed in the wake of the Global Financial Crisis has developed into a challenge to economic policy that has been accentuated by the Covid-19 health crisis. Citizens in EU countries seem to share a widespread perception of government failures, and what makes these perceptions unique is that they are shared across the political spectrum even if the reasons for the mistrust differ. The slow start of the vaccination campaign in the European Union generated a perception of inefficiency due to excessive bureaucracy, and although the success of campaigns in most member countries has moderated the criticism, dissatisfaction prevails. Similarly, governments have been criticized for confining too late or confining too much, while economic policy during the crises has been blamed by the left for fostering inequality and by the right for exacerbating public debt. Exceptional circumstances have required exceptional decisions, yet the latter have been widely perceived as lacking.

The dissatisfaction with policy has also stemmed from the looming environmental crisis. Both markets and policies are perceived as having failed the general population, and tensions have emerged along a variety of dimensions. Younger generations feel their parents and grandparents are responsible for a crisis whose costs only the younger generations will need to bear; poorer countries blame richer nations; and within countries the income divide has also become a divide between those who generate high emissions and those who do not. Moreover, the increase in public debt that occurred during the Great Recession has been accentuated by the Covid-19 crisis, leaving governments in a tight spot. In this context, a complete rejection of the liberal paradigm of the past few decades is being advocated by many. Yet the very special economic climate over the past two years has created unusual circumstances and novel challenges, which the next chapter discusses, outlining possible desirable and undesirable features of economic policy over the next decade.

REFERENCES

Albertazzi, D. and D. McDonnell (2008), "Introduction: The Sceptre and the Spectre", in D. Albertazzi and D. McDonnell, eds., *Twenty-First Century Populism,* Palgrave MacMillan, Basingstoke, 1–11.

Atkinson, A. B. (2007), "Measuring Top Incomes: Methodological Issues", in A. Atkinson and T. Piketty, eds., *Top Incomes over the Twentieth Century: A Contrast Between Continental European and English-Speaking Countries*, Oxford University Press, Oxford.

Autor, D., D. Dorn, L.F. Katz, C. Patterson and J. Van Reenen (2017), "Concentrating on the Fall of the Labor Share", *American Economic Review,* 107(5), 180–185.

Autor, D., D. Dorn, L. F. Katz, C. Patterson, and J. van Reenen (2020), "The Fall of the Labor Share and the Rise of Superstar Firms", *The Quarterly Journal of Economics* 135(2), 645–709.

Becker, S. O., T. Fetzer, and D. Novy (2017), "Who Voted for Brexit? A Comprehensive District-Level Analysis", *Economic Policy,* 32(92), 601–650.

Bertola, G. (2016), "Labor Policies and Capital Mobility in Theory and in EMU", *European Economic Review* 87, 62–77.

Bertola, G. (2017), "EMU and Labor Market Policy: Tensions and Solutions", *European Economy Discussion Paper* 054, European Commission DG Economic and Financial Affairs.

Chu, C. and Y. T. Wang (2021), "Gini Coefficient versus Top Income Shares–Pattern Change Differences", *Economics Letters* 201, 109769.

De Vries, C. E. (2017), "The Cosmopolitan-Parochial Divide: Changing Patterns of Party and Electoral Competition in the Netherlands and Beyond", *Journal of European Public Policy* 25(11), 1541.

Dorn, F., C. Fuest, L. Immel, and F. Neumeier (2020), "Economic Deprivation and Radical Voting: Evidence from Germany", *ifo Working Paper* 336.

EEAG (2017), "The EEAG Report on the European Economy – Economics of Populism", CESifo, Munich.

EEAG (2020), "The EEAG Report on the European Economy – Fair Taxation in a Mobile World", CESifo, Munich.

European Bank for Reconstruction and Development (EBRD) (2013), *EBRD Transition Report 2013: Stuck in Transition?*, European Bank for Reconstruction and Development, London.

European Bank for Reconstruction and Development (EBRD) (2016), *Transition Report 2016–17: Transition for All: Equal Opportunities in an Unequal World,* European Bank for Reconstruction and Development, London.

Fingleton, B., H. Garretsen, and R. Martin (2015), "Shocking Aspects of Monetary Union: The Vulnerability of Regions in Euroland", *Journal of Economic Geography* 15.5, 907–934.

Funke, M., M. Schularick, and C. Trebesch (2016), "Going to Extremes: Politics after Financial Crises, 1870-2014", *European Economic Review* 88, 227–260.

Funke, M., M. Schularick, and C. Trebesch (2020), "Populist Leaders and the Economy", *ECONtribute Discussion Paper* 036.

García-Peñalosa, C. and E. Orgiazzi (2013), "Factor Components of Inequality: A Cross-Country Study", *Review of Income and Wealth* 59(4), 689–727.

Guriev, S. (2018), "Economic Drivers of Populism", in: *AEA Papers and Proceedings* 108, 200–203.

Guriev, S. (2017), "Impact of Cycle on Growth: Human Capital, Political Economy, and Non-performing Loans", in: *Investment and Growth in Advanced Economies*, European Central Bank.

Harvey, D. (2007), "A Brief History of Neoliberalism", *Oxford University Press*.

Inglehart, R. F. and P. Norris (2016), "Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash," *Harvard Kennedy School Faculty Research Working Paper* 16-026.

Karabarbounis, L. and B. Neiman (2014), "The Global Decline of the Labor Share", *The Quarterly Journal of Economics* 129(1), 61–103.

Koske, I., I. Wanner, R. Bitetti, and O. Barbiero (2015), "The 2013 Update of the OECD's Database on Product Market Deregulation – Policy Insights for OECD and Non-OECD Countries", OECD Economics Department Working Papers 1200.

Kriesi, H. (1999), "Movements of the Left, Movements of the Right: Putting the Mobilization of the Two Types of Social Movements into Context," in H. Kitschelt, P. Lange, G. Marks, and J. Stephens, eds., *Continuity and Change in Contemporary Capitalism,* Cambridge University Press, New York, NY, 398–426.

Krugman, P. (2008), "Trade and Wages, Reconsidered", *Brookings Papers on Economic Activity*, Economic Studies Program, The Brookings Institution, 39, 1, 103–154.

Kyle, J. and L. Gultchin (2018), *Populists in Power around the World,* Tony Blair Institute for Global Change, https://institute.global/policy/populists-power-around-world

Looi Kee, H., A. Nicita, and M. Olarreaga (2009), "Estimating Trade Restrictiveness Indices", *The Economic Journal* 119.534, 172–199.

Markovits, D. (2019), *The Meritocracy Trap,* Penguin, UK.

Martin, R. (2001), "EMU versus the Regions? Regional Convergence and Divergence in Euroland", *Journal of Economic Geography* 1.1, 51–80.

Napoletano, M., and J.-L. Gaffard (2009), "Country Size, Appropriate Policy, and Economic Performance: Some Evidence from OECD Countries", Documents de Travail de l'OFCE 2009-08, Observatoire Francais des Conjonctures Economiques (OFCE).

OECD (2016), OECD Factbook 2015-2016: Economic, Environmental and Social Statistics, OECD Paris.

OECD (2021a), Revenue Statistics 2021- Ireland. https://www.oecd.org/tax/revenue-statistics-ireland.pdf.

OECD (2021b). Revenue Statistics 2021- Spain. https://www.oecd.org/tax/revenue-statistics-spain.pdf.

Rodrik, D. (2018), "Populism and the Economics of Globalization", *Journal of International Business Policy,* 1(1), 12–33.

Roine, J. and D. Waldenström (2012), "On the Role of Capital Gains in the Swedish Income Inequality", *Review of Income and Wealth* 58(3), 569–587.

Spruyt, B., G. Keppens, and F. Van Droogenbroeck (2016), "Who Supports Populism and What Attracts People to It?", *Political Research Quarterly* 69, 335–46.

Young, M. (1958), *The Rise of the Meritocracy 1870–2033,* Penguin Books.

Will the Role of Governments in the Economy Change after the Crisis?

Will the role of governments in the economy change after the Covid-19 crisis, and if so how? During the crisis, governments did much to protect the economy, supporting households, job matches, and firms. This was accompanied by soaring budget deficits and extremely expansionary monetary policy. Governments also restricted individual freedoms in an unprecedented way. Overall, government intervention increased massively during the pandemic. Some people argue that governments should also take a more active role after the pandemic, at least for a longer phase during the economic recovery.[1]

For instance, in his book on politics after the pandemic, Gerbaudo (2021, p. 250) claims that "the public has increased its acceptance of the need for greater government interventionism beyond what was already considered necessary in light of the upcoming climate emergency." Others object that weaknesses and deficiencies of government responses to the pandemic reflect limited effectiveness of the public sector in general, suggesting that devoting more resources to it may be counterproductive. At least, governments would need to change before they can be trusted to play a more important role in the economy. Of course, one could also argue that the situation is so special and different that it does not have any implications for the future of government.

How did governments perform during the crisis? This question is not easy to answer because there is no obvious benchmark. Still, performance can be compared across countries, and outcomes can be compared to what citizens expected. From a political economy perspective, the perception of citizens of whether governments performed well is likely to be an important factor affecting the role of government after the crisis.

Next to the performance of governments during the pandemic, the future role of governments will also depend on other consequences of and lessons drawn from the crisis. First, public debt has increased considerably, limiting the financial resources available to governments in the future. Second, the disruption of international trade and supply chains and the lack of critical medical supplies like masks and ventilators in certain countries in the early phase of the pandemic is sometimes presented as a reason to foster autarky and roll back globalization and international trade. From this perspective, governments are expected to take measures to secure the availability of critical medical supplies in future health crises. Given that we do not know the type of crisis we will face in the future, achieving this is not easy. In addition, the view is widespread that governments should take action to foster the resilience of supply chains more generally. Of course, this raises the question of why companies should not be trusted to do what is necessary in this field.

Third, the idea that many companies and even entire sectors need support to restart their activity has given rise to the idea of "building back better," suggesting public support for the recovery should steer the economy towards more sustainability, in particular decarbonization. The European Green Deal reflects this view. But it is also a concern that exaggerated views on what governments can accomplish can lead to inefficient policies and stifle adjustment and growth.

At the same time, economic challenges which existed before the crisis have not gone away. Demographic change and the aging of the population reduce the potential for future economic growth and put severe pressure in particular on the European welfare states. The digital transformation of the economy implies deep structural change. The Covid-19 crisis has underscored the importance of digitization as a factor not just for productivity but also resilience. In key areas of the digital economy, especially in consumer platforms, but also in areas like public sector digitization and data sharing, Europe is lagging behind. Improving in this key area will be a high priority on the post-crisis policy agenda.

In the global economy, the rise of China and other emerging economies implies that the relative weight of the EU will decline. Increasing geopolitical conflicts between the USA and China raise the question of how Europe can protect its interests and whether it will have to choose one of the two sides, implying a collapse of cooperation with the other.

What does this imply for the future course of economic policy and the economic role of governments in Europe? These are very broad questions, and providing a comprehensive answer would be beyond the scope of this report. Instead, the contribution of this chapter is to analyze a number of issues which are important for this debate. In the next section we briefly discuss how previous crises affected the political landscape and the role of government. We also compare the Covid-19 crisis to the financial crisis and the Eurozone debt crisis. In Section 3 we take a closer look at the performance of

[1] Stiglitz (2021) puts this as follows, mostly with a view to the role of government in the US: "Beyond the public health aspects of recovery, there are multiple roles the government can fill, especially when it comes to fixing problems that the market cannot resolve on its own." , ibid, p.5.

governments during the Covid-19 crisis in different policy areas and the implications for their future role. In the subsequent sections we turn to two key economic policy areas and how the crisis may affect the way in which they will be addressed: public finances and labor market policy.

4.1 HOW DID PREVIOUS CRISES AFFECT POLICY-MAKING AND THE ROLE OF GOVERNMENTS?

In a discussion about how the Covid-19 crisis will affect the role of governments in the economy, it is natural to consider the experience with previous crises. In the past, deep economic crises have often had a profound impact on the economy as well as on the political climate. Fortunately, pandemics are relatively rare events. Jorda et al. (2020) have analyzed the economic consequences of pandemics. Most of the pandemics they considered happened centuries ago. Pandemics caused by the black death, the plague, or the cholera usually have had a very high death toll, leading to a scarcity of labor after the pandemic. As a result, rates of return to capital and land rents declined while wages increased. Politically, pandemics often led peasants or workers to ask for an extension of their rights.

In more recent decades, economic crises often took the form of financial crises. There is a growing literature on the political consequences of financial crises.[2] The years after financial crises are often characterized by high policy uncertainty, political fractionalization, and polarization. In many cases this goes along with growing political support for right-wing populist parties. A possible explanation is related to the slow pace of the economic recovery. It is plausible that policy uncertainty delays the economic recovery. At the same time, the causality may run both ways – if economic hardship persists, it is likely that trust in the ability of governments to overcome the crisis erodes and political polarization and support for populists intensifies. This is related to the more general issue of government performance. If citizens have the impression that the established political actors manage the crisis badly, they may turn to parties who challenge the political mainstream.

The global financial crisis of 2008, which was followed by the Eurozone debt crisis, confirms this pattern. As mentioned in Chapter 3 of this report, there was a strong increase in support for populist political parties after the financial crisis. Although the Covid-19 crisis differs from the financial crisis and the Eurozone crisis in many respects, it is interesting to compare the two with respect to their likely political consequences in Europe.

In the financial crisis, the prevailing perception was that greed, fraudulent behavior of financial elites, and a lack of appropriate regulation of banks and financial markets triggered the crisis. A large part of the financial help provided by governments went to banks, who had caused the crisis in the first place. This was seen as unjust. Unsurprisingly, this led to a backlash against a type of capitalism where banks and financial products seem more important than the rest of the economy.

The Covid-19 crisis is a natural disaster. It is not perceived as the result of flawed institutions or greed. The debate about the causes of the pandemic does include theories about the possibility that the virus was released by accident or on purpose from a laboratory, but the credibility of these theories is limited. There is also a debate about overpopulation and the destruction of wildlife habitat as potentially causing growing risks of pandemics. But overall, the Covid-19 crisis is primarily perceived as a natural disaster which happened without anyone being directly "responsible" for it.

Another difference is that, in the Covid-19 crisis, government support went primarily to small businesses, freelancers, and employees, not to banks. In Europe, many employees benefited from furlough schemes, rather than losing their jobs. Government support therefore enjoys broad political support. Maintaining it while the crisis lasts is hardly called into question. There are demands that the financial burden of this support should be borne by well-off taxpayers or by those who benefited from the crisis.[3] There is also critique that some of the support goes to companies or individuals who are wealthy enough to survive without support. But this debate is not nearly as critical as the debate in the financial crisis about billions of taxpayer money going to those who were perceived as being responsible for the crisis – the banks and their creditors and owners.

Moreover, the Covid-19 crisis affected the daily lives of virtually the entire population. Everybody had to reduce social contacts and travel, wear masks, and follow stay-at-home orders. The public health crisis underlines the importance of the common good for the wellbeing of each individual citizen. At the same time, it shows that all citizens bear responsibility for the common good.

The financial crisis, in contrast, left the impression that the economic problems can be solved with money, and the debate is primarily about who pays the bill – inevitably a zero-sum game. Since collapsing banks and their managers could not be forced to foot the bill, the crisis left behind a general feeling of injustice and fraudulent behavior by the financial elites.

These differences suggest that resentment against elites and anti-capitalist backlash, which played an important role after the financial crisis, are less likely after the Covid-19 crisis. This is despite the fact that, economically, the Covid-19 crisis also affects people very differently.

[2] See Funke et al. (2021) and the literature cited there.

[3] See the discussion in Ayaz et al. (2021).

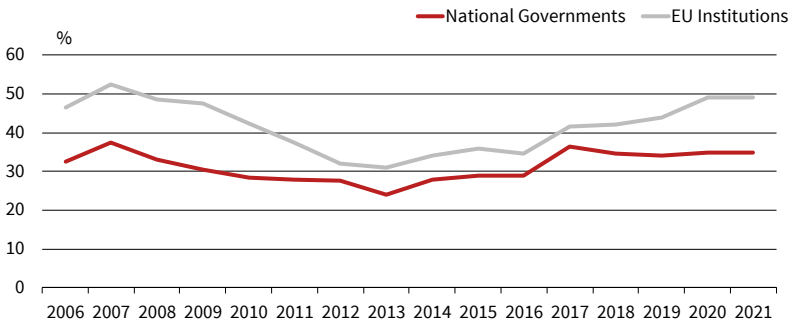
As far as Europe is concerned, it is interesting to compare the Covid-19 crisis to the Eurozone debt crisis. The Covid-19 crisis was seen as a shock coming entirely from the outside. It was not perceived as a crisis caused by policy errors or "bad behavior" of individual countries or governments. This was an important factor explaining that the European countries showed some solidarity in financial terms and agreed to create the recovery fund Next Generation EU, which provides financial support to the economically weaker EU member states. This was based on a narrative about solidarity in times of need and a common interest in avoiding a deeper economic crisis in the poorer or more highly indebted countries.

The Eurozone debt crisis, in contrast, was deeply divisive. It pitched the highly indebted "periphery" countries against the less indebted "Northern" countries, in particular Germany. What made things worse in terms of generating a divisive narrative was the fact that the crisis started with the revelation that Greek public debt statistics were incorrect. From the beginning, the perception prevailing in the Northern countries was that the mostly Southern European periphery countries had caused the crisis by violating fiscal rules by overborrowing in the private as well as the public sector and by neglecting structural reforms to boost productivity. The periphery countries, in turn, saw themselves confronted with a crisis of confidence, much of which was triggered by the financial crisis that had its origins in the US. They suddenly saw themselves confronted with a situation where they risked losing their political independence to the Troika, just because they needed liquidity support or, such as in the case of Greece, at least some debt relief.

Trust reflects institutional performance, but it is also important for effective governance. Evidence on the financial crisis shows that the decline in trust in general was temporary (Eurofond 2018). Figure 4.1 illustrates that the financial crisis and the Eurozone debt crisis affected trust of EU citizens in national governments as well as EU institutions. The data shows that it took a long time before trust recovered. This is no surprise, given the divisive nature of the crisis and the widespread perception that those who caused the crisis received more help than ordinary citizens affected by the fallout. There is a strong social gradient in the development of trust, and people in low-status positions experience large declines in trust in national institutions, which can cause polarization (Eurofond 2018). The dynamics of trust may thus contain both a virtuous and vicious cycle, where strong (weak) trust is supportive (impairing) of reforms and changes which in turn improves (deteriorates) performance and thus strengthens (weakens) trust.

As in the financial crisis, but now with governments rather than banks in the focus, dealing with

Figure 4.1
Trust in National and EU Institutions



Note: The table shows the average of the trust values for each year. Survey question: For each of the following institutions: Do you tend to trust it or tend not to trust it?
Source: European Commission (2021), Standard Eurobarometer 95-Spring 2021, Public Opinion in the European Union, First Results Report; author's calculations.

© CESifo

the situation was again seen mostly as a zero-sum game. The recovery took a long time. Lack of mutual trust between countries and their governments and diverging views about how the crisis can be overcome, combined with populist approaches to economic policy, almost led to Greece being excluded from the Eurozone in 2015. Currently, assessments of the reasons for the debt crisis and the appropriate remedies still differ across countries. But in the Covid-19 crisis, the EU member states did agree to put aside their differences about economic and fiscal policy, a common fund was created to respond to the crisis, and the net contributors were not happy but agreed. The view prevailed that there was a common interest in preventing a return of the Eurozone debt crisis or worse.

Although the Covid-19 crisis is far from over, it is remarkable that the economic recovery so far has been much quicker than the recovery after the Eurozone debt crisis (see Chapter 1 of this report). There is currently no sign that the Covid-19 crisis will boost populist political forces in the same way as the financial crisis. But before drawing conclusions, it is necessary to take a closer look at the performance of governments and the perception of this performance in the last two years.

4.2 A DIFFERENT ROLE FOR GOVERNMENTS IN THE ECONOMY AFTER THE COVID-19 CRISIS?

In a public health crisis like the Covid-19 pandemic, governments play an even more important role than in other types of crises. The health system becomes the center of attention. Most health systems are heavily regulated or run by the government, and they often depend on funding which comes from the public social security system or simply tax money. At the same time, the government is expected to provide help for closed businesses and employees whose jobs are temporarily suspended or even lost. In addition, governments need to act to stop the spread of the disease. Some of the measures taken to reign in infections, like closures of shops, restau-

rants, and schools, have drastic implications for the economy but also for well-being and basic individual freedoms. Individual citizens feel the impact of government action or the consequences of its absence much more than in normal times. Of course, without these policy interventions, well-being and individual freedoms would also be affected.

However, the extended role of governments *during* the Covid-19 pandemic does not directly imply that more government activity is also needed *after* the crisis. It is plausible that exceptional circumstances like those of a pandemic require exceptional policies, but once the crisis is over these exceptional policies are no longer needed. One might even argue that there should be less government simply because debt accumulated during the crisis needs to be serviced so that less tax money is available for other public sector activities. Another argument for smaller government could also be that citizens are fed up with restrictions of their freedoms and want less regulation and less government intervention.

In fact, the implications of the Covid-19 crisis for the future role of governments are more complex than this. One important factor is how the crisis affects trust in the ability of governments to operate effectively. Here, the performance of the public sector during the crisis plays an important role. Moreover, the policy agenda after the crisis may not be the same as before, and that may also have implications for the role of governments. We discuss both issues in the next sections.

4.2.1 The Performance of the Public Sector During the Crisis

How did governments perform during the Covid-19 crisis? The answer clearly differs across policy areas, countries, and time. Since the Covid-19 crisis is not over yet, it may also be too early for conclusions. Nevertheless, some patterns can be identified, and some data is available about outcomes as well as perceptions of government performance in the crisis.

4.2.1.1 Management of the Health Crisis

The public health crisis caused by the Coronavirus was a stress test for the ability of governments to react fast and appropriately. In the early phase of the pandemic, some countries reacted quickly while others reacted too slowly, so that measures to limit the spread of the disease came late. Some countries failed more than others. In the United Kingdom, the government first played down the dangers and rejected lockdown measures until infections and, a little later, hospitalizations surged. It then made a U-turn, but it was already too late: the death toll as well as the economic downturn in the United Kingdom in 2020 were much worse than in most other European countries.

To what extent late reactions to the initial outbreaks reflect a lack of effectiveness of government action is debatable because decision-makers faced a high degree of uncertainty regarding many aspects of the pandemic. In addition, countries were affected very differently. For instance, in Italy and Spain the virus had already spread before Europe became fully aware of the danger it represented.

At the same time, it should be noted that the risk of a global pandemic was not unknown to governments. Many experts had repeatedly argued that countries should do more to prepare for this type of crisis. In Germany, for instance, a detailed scenario for a pandemic was produced in 2012 and presented to the Federal Parliament.[4] It had no significant impact. The fact that past pandemic warnings like the SARS turned out not to affect OECD countries also contributed to the downplay of such risks.

During the Covid-19 pandemic, a key challenge for governments was to strike an appropriate balance between measures to reign in infections on the one hand and, on the other, avoiding excessive or ineffective limitations of economic activity and individual freedoms through lockdowns and other measures to fight the pandemic. An intensively debated issue was whether damage to the economy could be reduced by avoiding lockdown measures. Some countries, in particular the United Kingdom, Switzerland, and Sweden as well as a number of US states initially followed a strategy of avoiding lockdowns. Experience also showed that voluntary precautionary behavioral responses played an important role. However, this came at the cost of higher infection rates and a growing number of deaths related to Covid-19.

Figure 4.2 relates the Covid-19 death toll to the loss of GDP in a number of countries. There is a positive correlation between the size of the GDP loss and the death toll. Moreover, there are three clusters of countries. The first includes Germany, the Scandinavian countries, with the exception of Sweden, and Australia as well as New Zealand. These countries took relatively early measures including rather harsh lockdowns. The number of Covid-19 deaths was relatively small. The second cluster includes Sweden, the United States, and Switzerland. These countries first avoided lockdown measures, hoping, among other things, that this would limit the economic damage caused by the pandemic. Figure 4.2 suggests that this did not work. The economic downturn was comparable to that which occurred in the first group of countries, but the number of Covid-19 deaths was much higher. Then there is a third group of countries, which includes France, Spain, Italy, and the United Kingdom. In these countries both the loss in GDP and the death toll were very high.

[4] Bundesregierung (2013), Bericht zur Risikoanalyse im Bevölkerungsschutz 2012, Deutscher Bundestag, Drucksache 17/12051, 3.1.2013.

It is tempting to conclude that the governments of the first group of countries managed the crisis better than those of the second group and much better than those of the third group. But things may not be so simple. First, the pandemic affected countries very differently depending on health strategy, economic structures, and economic policies. In Europe, the virus first arrived in Italy and Spain–these countries had no time to prepare. When it became clear that the virus had reached Europe, it had already spread widely in Italy and Spain. At the same time, the health systems of these countries had limited capacities and were affected by shortages of ventilators and other types of medical equipment. As a result, massive lockdown measures had to be taken, and economic activity declined, not just because of the lockdowns but as a result of the pandemic itself.

The other European countries were warned and had the opportunity to take measures before the virus could spread. Some of these countries nevertheless decided to avoid lockdown measures, at least until they saw that this strategy could not be sustained.

Second, economic and health data for 2020 are incomplete as indicators of how countries are affected by the pandemic. For instance, some countries limited the spread of the virus by closing schools early while other countries avoided school closures as long as they could, as documented further below. The latter has certainly increased the spread of the virus and the death toll while doing little to prevent a decline in GDP. However, the smaller educational loss may have a positive impact on human capital, which will only be felt in the medium and long term.

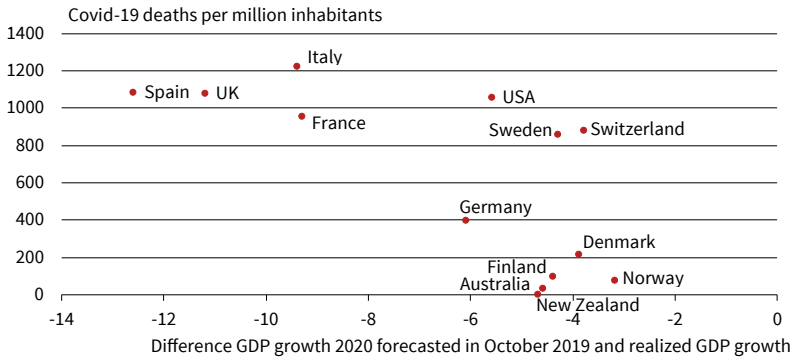
Third, the impact of the pandemic in 2020 across countries may be very different from the impact in 2021. In 2021, the situation changed because vaccines became available; also learning and adaptability implied that economic activity was affected less despite the same containment measures being deployed. One key indicator of government effectiveness is the distribution of the vaccines. Here, the United Kingdom and the United States were more successful than the EU countries.

Moreover, already in the autumn of 2020, when the second wave of the pandemic came, some governments which had reacted swiftly to the first wave were too passive, despite stark warnings coming from experts. Measures to stop the spread of the disease were delayed, probably because many politicians were more afraid of being blamed for overreacting than for reacting too late. This was also when it became clear that too little had been done to improve the infrastructure for testing, tracking, and isolating infections.

French President Emmanuel Macron compared the fight against the pandemic to a warlike situation, and many other politicians agreed. However, the effort did not always match the rhetoric. In Germany,

Figure 4.2

GDP Loss and Covid-19 Death Toll



Source: IMF World Economic Forum; Our World in Data. ©CESifo

for instance, testing and tracking was strongly restricted over the weekends because the public health authorities were partly closed. The German economist Moritz Schularick commented as follows: Imagine in 1940, facing the threat of a German invasion, Winston Churchill had said: "… we will continue to fight, except on the weekends!"[5] However, other countries did expand the capacity of the health system, including testing and tracking abilities, and fared better in the second wave. Differences in the degree of digitalization play a large role for the economic effects of the pandemic across countries.

In the autumn of 2021, another wave of infections hit in particular Austria, Germany, and the Netherlands, where vaccination rates are lower than in other parts of Europe. Again, measures to reign in the infections were taken late, and neither schools nor public health services seemed much better prepared than a year ago. Therefore, some governments which seemed to perform better in the early phase of the pandemic were much less effective in later phases, and vice versa.

Trust in institutions has played a large role during the Covid-19 crisis for compliance with recommendations and willingness to vaccinate against Covid-19. Trust is also important for the ability to undertake and implement structural reforms. Both health and economic development influence the trust in government, and declining trust in government tends to be associated with declining trust in democracy, see Becher et al. (2021). Importantly, declining trust in democracy is not synonymous with support for non-democratic regimes but can also fuel political engagement.

4.2.1.2 Border Closures and Trade Disruptions

When governments reacted to the crisis after the initial outbreak, the reactions were not always appropriate, and they were not coordinated. Many countries reacted by closing their national borders, as was also

[5] Schularick (2021), p. 28.

done within the EU. Borders were closed not only for people but also for the transport of goods. The latter contributed little to stop the spread of the virus, but the economic impact was significant. The disruption of border-crossing supply chains led to a collapse of industrial production and intensified the economic downturn. This is an area where policymakers did learn from the early phase of the crisis. During the second wave of infections in the autumn of 2020, travel restrictions returned but they were more differentiated, and the transport of goods was mostly exempted. As a result, industrial production in Europe and worldwide recovered.

4.2.1.3 School Closures

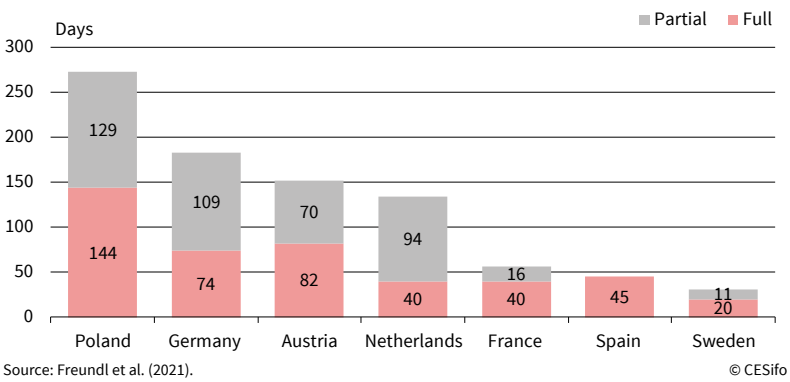
From an economic perspective, the impact of the pandemic on schools is particularly severe. School closures have a significant long-term impact on human capital and later lifetime earnings of the affected children. The school closures affect children asymmetrically, with larger losses of education for children of parents with lower education and incomes, so that future inequality is exacerbated.

It is striking that the European countries pursued very different strategies regarding school closures. Figure 4.3 shows that the duration of school closures differed greatly. In Poland, Germany, Austria, and the Netherlands, schools were fully or partially closed for more than 100 days, in some case much more. In Sweden, schools were closed just for 31 days, in Spain and France school closures lasted for less than 60 days. In some countries, in particular in Sweden, keeping the schools open was part of a general policy which tried to avoid lockdowns but ultimately came at the price of a very high number of infections and Covid deaths. In other countries like France and Spain, schools were given priority over other areas of public life.

4.2.1.4 The Vaccines

One of the positive surprises in the pandemic is that it was possible to produce a vaccine relatively quickly.

Figure 4.3
School Closures
January 2020–May 2021



Source: Freundl et al. (2021). © CESifo

This was also a European success. The first highly effective mRNA-based vaccine was developed by the German biotech company BioNTech. The work of BioNTech was partly supported by public subsidies for research and development, but the key factor in this success was the entrepreneurial decision by BioNTech to give up its main activity, which was to produce a cancer treatment, and shift its resources fully to the development of a vaccine based on the innovative mRNA technology. Shortly afterwards more vaccines produced by companies in the UK and the US became available. This is clearly a success of both science and research and private entrepreneurship combined with the resources of large pharmaceutical companies like Pfizer, which cooperated with BioNTech in making the vaccine available and getting it through the regulatory processes.

Unfortunately, Europe was less successful in organizing the mass production and delivery of the new vaccines. Originally, the EU member states had decided to organize the purchases and the distribution of the vaccines individually or in spontaneously formed groups. But then the decision was made to involve the EU, although health policy is a responsibility of the member states. There are good reasons for EU-wide coordination in this area, but finally the process was slowed down. Despite the urgency, the European Union was significantly slower than the United States and the United Kingdom in making the vaccines available to the population. This had a high cost in terms of lives lost and economic damage, which could have been avoided. While the reason for the delays has never been fully revealed, the impression remains that the decision-making process, which required coordination between national governments and EU-level institutions, was too slow and inefficient.

4.2.1.5 Macroeconomic Crisis Management

As far as the economy is concerned, the key role of governments in crises is to stabilize the macroeconomic situation and provide assistance to firms or private households strongly affected by the crisis. In most European countries, support to individuals is supplied through "automatic stabilizers" in the form of social safety nets, in particular unemployment insurance systems and short-time work schemes. In financial markets, large economic shocks like the Covid-19 crisis can easily give rise to a collapse of confidence, which leads to a liquidity crisis and a self-enforcing downward spiral of insolvencies and fire sales. Governments and central banks can prevent this by providing liquidity to banks and companies and by acting as a lender of last resort.

In the Covid-19 crisis, macroeconomic stabilization required measures which differ from those necessary in other crises in so far as stabilizing aggregate demand was not the main concern. The main concern

was that parts of the economy, mostly activities where people come together, could not operate. As a result, demand was redirected towards other sectors. Demand for durable consumption goods, for instance, increased during the pandemic, as did online purchases and food sales of supermarkets since restaurants were closed except for take-out.

In this asymmetric situation, rather than stabilizing aggregate demand, more targeted measures were needed, which helped employees and firms in the strongly affected sectors and preserved job-matches and production capacity, making a swifter recovery of economic activity possible alongside reopenings. At the same time, a concern was and continues to be that the measures used to support job-matches and firms have a status quo bias and risk interfering with the reallocation of human and real capital which accompanies "normal" structural change.

Overall, in the area of macroeconomic policy, most governments reacted appropriately to the crisis. This is also true for the European Union. In Europe, the economically weaker member states of the Eurozone are particularly vulnerable to economic shocks. Since Eurozone countries do not have national central banks with full control over a national currency, they lack a traditional lender of last resort. To some extent the ECB has taken over this role through the (controversial but effective) OMT program and by extending government bond purchases.

But in this crisis the EU member states did not just wait for the ECB to act, they decided to support the poorer and more highly indebted member countries by introducing a recovery fund financed through common debt. This took pressure off the ECB and changed expectations of investors in financial markets as well as those of consumers and companies and helped to maintain confidence in the ability of the Eurozone member states to service their debt and stabilize their economies after the crisis. Of course, the fundamental problem of very high levels of public debt in some member countries has not been solved through these measures. Addressing these issues has only been postponed.

The macroeconomic policy response is certainly a rather successful part of government reactions to the Covid-19 crisis. Nevertheless, the crisis leaves governments in a situation with high levels of debt and deficits as well as highly expansionary monetary policy. At some point this fiscal and monetary support for the economy will need to be scaled back. In particular, fiscal policy will need to stabilize and eventually reduce debt ratios because the next crisis will come, and when it comes fiscal space will be needed again to respond.

Scaling back crisis support is also important because there needs to be a balance between helping companies and their employees in unusual crisis situations and letting structural change take place, even though structural change implies that some jobs get lost or some firms shrink or may even go bankrupt. However, new companies and jobs will emerge and this is essential for productivity growth. In many countries there is now a tendency to call for government support whenever there are signs of declining activity, even if there is no direct link to the special situation of the pandemic. There is a risk that, as a result of the crisis, the political economy will shift in such a way that governments are expected to protect established economic activity against all pressures for change. It is paramount that the special, crisis-related support measures are phased out after the crisis since they will otherwise constrain adjustments and reallocations of resources in the form of both human and physical capital which are necessary for structural change and economic progress.

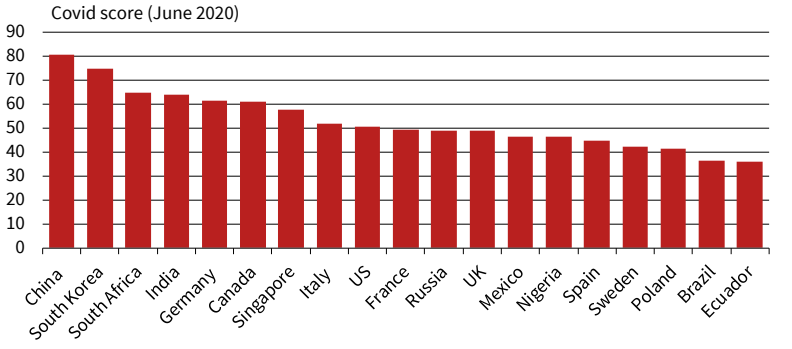
4.2.2. Implications for the Future Role of Governments in the Economy

4.2.2.1 What does Performance During the Crisis Imply for the Future Role of Governments?

Which conclusions can be drawn from the performance of governments during the crisis? The answer to this question is far from easy. One reason is that there may be disagreement about how governments performed during the crisis and about what can reasonably be expected from them. Some decisions taken during the pandemic were misguided or came too late, but what is the benchmark?

While measuring the effectiveness of government crisis management is certainly difficult, it is possible to measure the perception of citizens about the effectiveness of their governments. Figure 4.4 summarizes the results of a survey study conducted by Lazarus et al. (2020), which covers various dimensions of government crisis management. For instance, respondents were asked whether they think their government made sure accurate information about the pandemic was provided, whether they received medical, financial and other help when they needed it, whether

Figure 4.4
Satisfaction of Citizens with Covid-19 Crisis Management of Their National Governments



Source: Lazarus et al. (2020). © CESifo

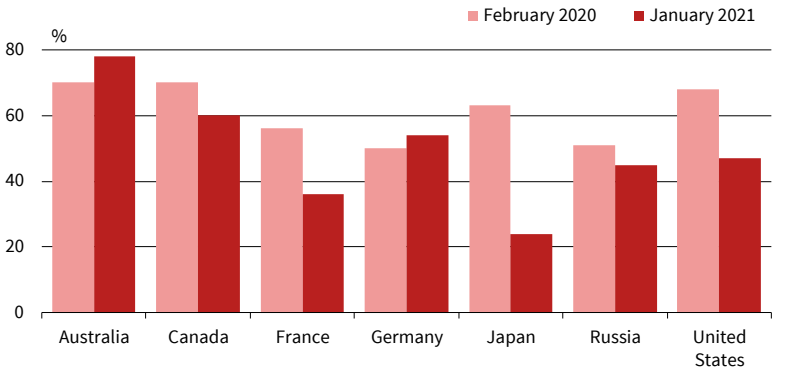
they think the government took the right measures and protected vulnerable households and so on. The answers to these questions were aggregated into an overall "Covid-19 score," which could take values between 0 and 100, where 100 was the highest possible satisfaction.

It is important to note that the survey was conducted in June 2020, after the first infection wave and before further waves as well as the vaccination campaigns followed. As Lazarus et al. (2020) show, the results are closely correlated with the number of Covid-19 deaths as well as with the general level of trust in government.

The scores reported in Figure 4.4 do not reveal much about whether citizens got from their government what they expected, or whether they are disappointed and how this affects their views about the government. However, there are survey studies which try to identify the particular impact of the Covid-19 crisis on political views by tracking government approval over time and through survey experiments.

Figure 4.5

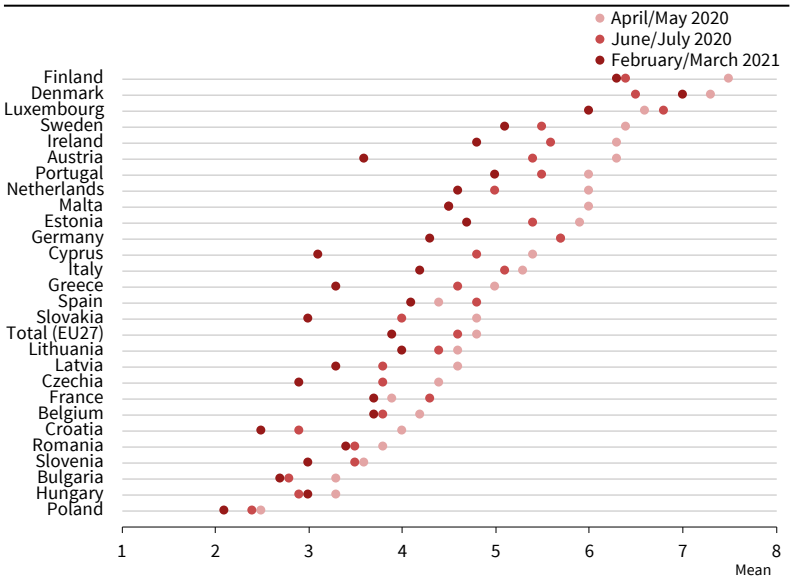
Changing Confidence in Government Crisis Management



Source: Ipsos (2021). © CESifo

Figure 4.6

Trust in National Governments



Source: Eurofound. © CESifo

Herrera et al. (2020) used high frequency polling data about government approval. The dataset covers the time span between January and July 2020. The data confirms that there was a "rally-around-the-flag" effect in the early phase of the pandemic which boosted support for incumbent government, but that support disappeared quickly in countries where governments failed to reign in the pandemic and infection numbers were high.

Gianmarco et al. (2020a) report results from a survey carried out in June 2020 to measure the impact of the crisis on socio-political attitudes in Italy, Spain, Germany, and the Netherlands. The results show that both interpersonal trust as well as trust in institutions, support for the European Union, and for a tax-financed welfare state all declined as a result of the crisis. But the authors also identify a "rally-around-the flag" effect around incumbent governments and growing trust in scientific expertise. At the same time, populist positions are losing ground. This might hint at a growing demand for competence in political leadership. In Gianmarco et al. (2020b) the authors conclude:

"In this sense, a new fault line in the political arena may be opening up, confronting the increased demand for simple policy solutions of the past two decades with the complex, nuanced, and competent approaches demanded by the future."[6]

It should be taken into account, however, that this survey is from June 2020, a rather early phase of the pandemic. The authors also acknowledge that whether the demand for competence effect they detect persists will depend very much on how governments and other actors including scientists are perceived to perform in the course of the entire crisis.

In the meantime, more evidence exists, including surveys, which track trust in government over longer time spans. Figure 4.5 shows results from Ipsos (2021). These results are from two surveys. The first was conducted in February 2020, when the pandemic was only beginning to be felt in Europe. The second is from January 2021, a time when the respondents had already experienced how their governments managed the first and much of the second wave of the pandemic. The results are quite striking. Australia is the only country where the share of respondents who are confident that their government manages the crisis effectively increased significantly. In Germany the increase is small, implying at least that confidence has not declined, but in all other countries confidence did decline, in some cases dramatically.

Another survey which allows tracking the development of trust in national governments as well as EU institutions over time is offered by Eurofund (Figure 4.6–4.9). The results are similar. Since April 2020,

[6] Gianmarco et al. (2020b).

trust in national governments has declined in almost all countries under consideration.

An interesting question is whether the decline in trust differs across age groups. The older population was most exposed to the health risks caused by the pandemic, and this group arguably benefited most from measures to stop the spread of the virus. The younger population in turn was more affected by the economic fallout as well as closures of schools and universities, and parents with schoolchildren also had to bear a heavy burden, including working from home and looking after the children and their schooling. Figure 4.7 shows that the decline in trust was similar across age groups.

The picture is different when it comes to trust in the European Union, as Figure 4.8 shows. Here differences across countries are striking. While trust in the European Union declined sharply in Germany, Austria, Finland, and France, it increased significantly in Portugal, Italy, and Spain.

One possible explanation for declining trust is the delayed supply of vaccines, where the EU played an important role. However, this does not explain the increase in trust in some countries. Here the transfers provided by the fund Next Generation EU may play a role. Italy, Spain, and Portugal are all net beneficiaries in this program. Again, the change in trust across age groups is similar (Figure 4.9).

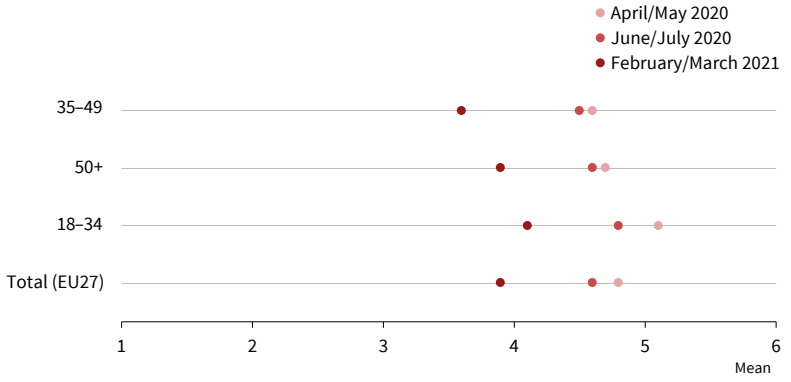
What is the link between trust in government and the role of government in the economy? Empirically, there is a positive but small correlation between indicators of trust and the size of government, as Figure 4.10 shows.

It is, of course, far from clear whether there is a causal link running from trust to the size of government. There may be no causal relationship between these two variables at all. For instance, it may be that countries with stronger democratic institutions and rule of law are countries where both trust and public sector size are larger. However, it is certainly even less likely that causality runs from public sector size to trust than vice versa.

One should also bear in mind that a decline in trust as documented in the surveys cited above does not necessarily reflect a decline trust in the public sector as such. It may also reflect that citizens no longer trust the incumbent government and want a change.

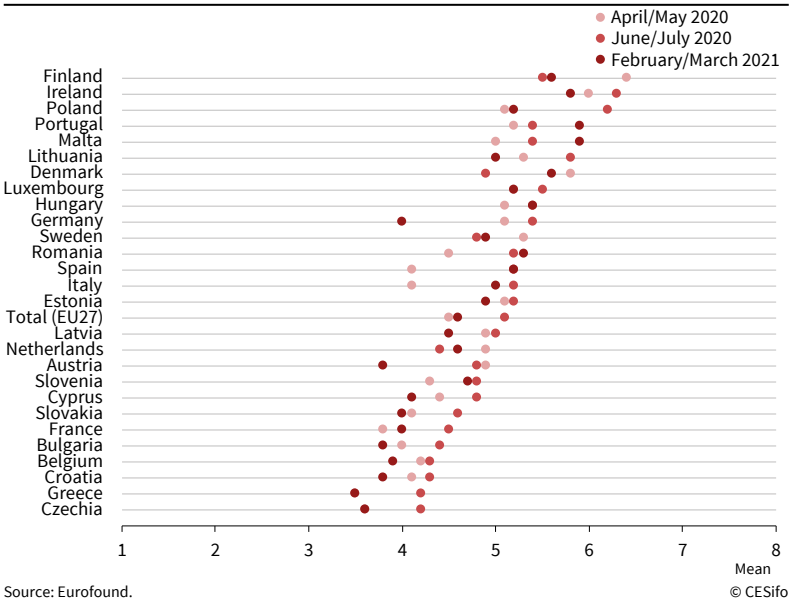
If it is true that on average governments are not perceived to have performed very well during the crisis, what does this imply for their future role? One possible conclusion is that governments should get fewer resources because they cannot be trusted to use them wisely. Another possible conclusion would be the exact opposite. Maybe governments failed because they did not have the necessary resources?[7] In this case, the answer would be to give them more resources to increase government spending on hospitals, public health authorities, or schools. Of course, government failures may also be a consequence of lacking institutional capacity to act appropriately.

Figure 4.7
Trust in National Government Across Time and Age Groups



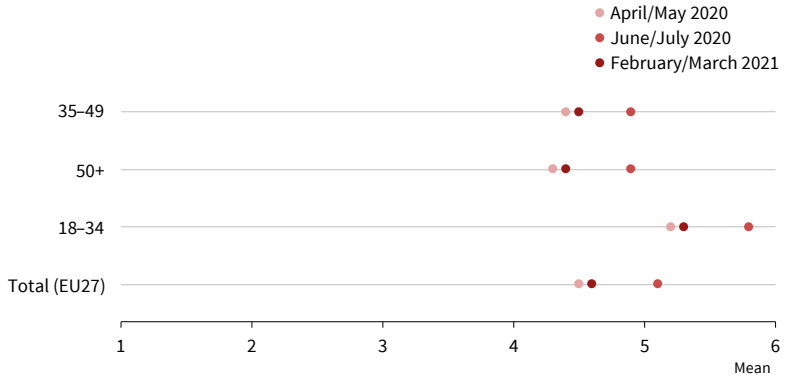
Source: Eurofound. © CESifo

Figure 4.8
Trust in EU Institutions



Source: Eurofound. © CESifo

Figure 4.9
Trust in EU Institutions Across Age Groups and Time

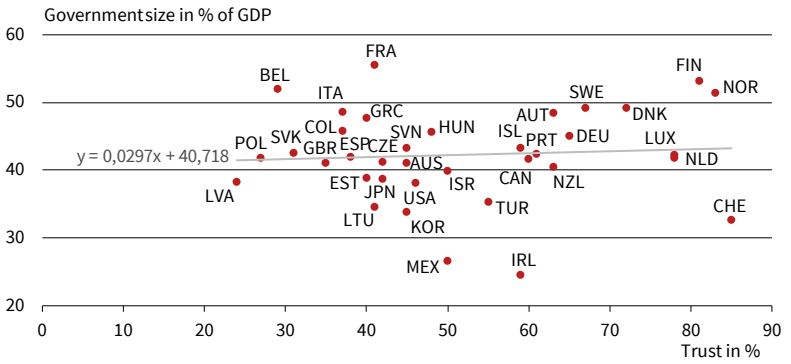


Source: Eurofound. © CESifo

[7] One example for this view is Stiglitz (2021), who argues that "Decades of weak government intervention have left the health and economic systems of the United States fragile in the face of a prolonged pandemic.", ibid, p. 4.

Figure 4.10

Trust in Governments and Public Sector Size



Source: OECD. © CESifo

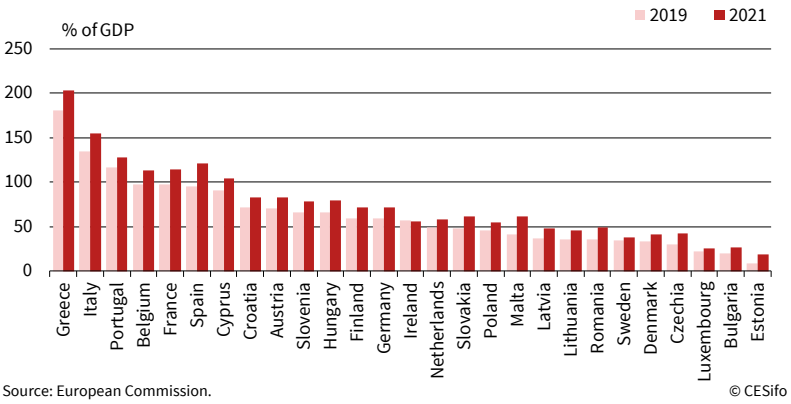
In this case institutional reform would be required. Clearly, the differences in satisfaction with government performance across countries suggest that lessons to be drawn for the future role of governments and for necessary reforms are very country-specific.

Nevertheless, a number of tentative conclusions can be drawn from the insights presented in this section. First, compared to the financial crisis, a similar backlash against capitalism and financial globalization is unlikely. Second, the importance of science, expertise, and competent leadership which is able to address complex challenges like those posed by the pandemic suggests that demand for competent governments which draw on expertise and scientific advice may increase. The fact that at least some leaders with populist leanings like Donald Trump did not appear to act very competently in the Covid-19 crisis suggests that political support for populists will not be boosted by this crisis. If the economic recovery continues and turns out to be faster than the recovery after the financial crisis and the Covid-19 crisis, this will further reduce the likelihood of growing political support for populism.

At the European level, the fact that the economically more vulnerable countries received support and were able to stabilize their economies in this crisis better than in the Eurozone debt crisis implies that resentment against European institutions and among member states is much less likely, even taking into account the fact that the EU countries member states were rather slow in providing medical help to the countries strongly affected in the early phase of the pandemic. The experience of a certain amount of solidarity among the EU member states may boost trust in EU institutions and open opportunities for more cooperation at the European level. However, the asymmetric development of trust in the EU in different countries suggests that universal support for more EU policies, let alone redistribution, should not be taken for granted.

Figure 4.11

Public Debt



Source: European Commission. © CESifo

4.2.2.2 A Shift in What People Expect from Governments? "Getting Back to Normal" versus "Building Back Better"

Decisions about the future role of governments will not only depend on perceived performance during the Covid-19 crisis. Another relevant factor for the future role of governments is that the crisis may change what people expect from the government and its policies after the crisis. As mentioned above, it will also depend on what governments can do, given that their finances have deteriorated.

Governments support the economic recovery with a lot of money. It has been argued that, given the huge efforts required to mobilize these resources, it would not be enough to use them just to get back to normal, that is restore the economy as it was before the crisis. We should rebuild back better. The view is widespread that more emphasis should be placed on sustainability, inclusion, and resilience. This is why the European Union has geared its 750 billion recovery fund NGEU towards spending on decarbonization and the digitization of the economy. If the policy agenda changes after the crisis, this is likely to have consequences for the role of the public sector in the economy.

In the following, we discuss the perspectives for the role of governments against the backdrop of the Covid-19 crisis in two key policy areas: public finances and labor market policies.

4.3 FISCAL POLICY: DOES THE PUBLIC DEBT LEGACY OF THE CRISIS DIMINISH THE ACTIVE ECONOMIC ROLE GOVERNMENTS CAN PLAY?

The increased level of debt has direct implications for the future role of the public sector. On average, across EU countries public debt increased by roughly 15 percentage points of GDP between 2019 and 2021 due to public sector deficits and declining GDP (Figure 4.11). If more resources are needed to service the debt, fewer resources are available to provide public goods and services. In this area the public sector will either need to shrink, taxes will need to rise, or reforms will be needed which increase economic

growth and tax revenues so that the additional debt can be serviced without reducing spending on public services or raising taxes. If more revenue needs to be collected, this may come at the price of a less redistributive tax system, because raising revenue and redistribution are competing objectives (Ayaz et al. 2021). Most likely, the burden of public debt incurred as a result of the crisis will increase the overall tax burden, but it will also tend to reduce the active economic role of the public sector, that is its role in public goods provision and income redistribution.

It has been argued that public debt is less of a problem today compared to previous decades since the growth corrected rates of returns for governments (the r-g debate) are low or even in some cases negative (Blanchard 2019). It is true that there has been a long-term trend towards lower interest rates in particular on relatively secure assets as government bonds. However, the Eurozone debt crisis demonstrated that doubts about access to liquidity and debt sustainability may trigger spikes in risk premia, even in an environment with generally low and declining interest rates. Currently, interest rates on government debt are particularly low because of the asset purchase programs of central banks. But these programs will have to be phased out at some point. Moreover, high debt levels place countries in a very vulnerable position if and when returns normalize. In addition, interest rates on government bonds tend to rise if debt levels rise. This implies that a rising debt level may increasingly undermine the ability of governments to successfully achieve fiscal consolidation. Importantly, the debate often overlooks that a low growth corrected rate of returns does not preclude an increasing debt level if the primary balance is in systematic deficits.[8] In the absence of reforms this is the situation for most European countries.

The challenges arising from aging have been known and discussed for some time, also the consequences for fiscal sustainability. With unchanged policies, systematic budget deficits arise and debt ratios increase further due to a shrinking work force and increasing expenditures on pensions and health, see OECD (2021) and European Commission (2021). Figure 4.12 reports a recent assessment of fiscal sustainability for EU countries. The specific assumptions underlying the analysis can obviously be discussed, and these projections may also differ from country-specific projections, but the message is quite clear; a number of countries face substantial challenges to ensure fiscal sustainability.[9] About 2/3 of all EU countries have a sustainability problem requiring a permanent improvement of the primary budget balance exceeding 1 percent of GDP, and in about 1/3 of the countries the needed improvement exceeds 3 percent of GDP. These numbers do not include any fiscal implications from the Covid-19 crisis. Note that these requirements are only to make existing policies sustainable.

In this situation it is striking that many policymakers, rather than calling for more fiscal prudence, denounce what they call fiscal austerity and ask for more room for deficit financing of public spending. One example is the debate about the reform of fiscal rules in Europe. The European Stability and Growth Pact requires countries, among other things, to keep their debt-to-GDP levels below 60 percent. In most EU countries, debt levels are much higher than that. Many policymakers as well as advisers and technocrats are now calling for an increase in the debt limit. For instance, the European Fiscal Board has proposed to replace the general debt rule by a more realistic approach, which would set country specific targets for fiscal consolidation.[10]

It is true that the fiscal rules enshrined in the Stability and Growth Pact were made at a time when interest rates were much higher and lower public debt limits were needed to limit the cost of servicing the debt. But it should not be forgotten that economic growth rates were also higher, and stability risks are not only related to interest costs but also to the fragility of investor confidence in economic crises, especially when it comes to highly indebted countries which are members of currency unions or whose monetary policy is restricted by fixed exchange rates.

A reform of fiscal rules in the EU should take into account that the 60 percent limit for the public debt-to-GDP ratio is so far below the existing debt levels for many countries that its relevance is called into question. But reforms should not just increase room for debt: reforms should also create better incentives to improve the solidity of public finances, in particular in the medium term. This requires a balance between,

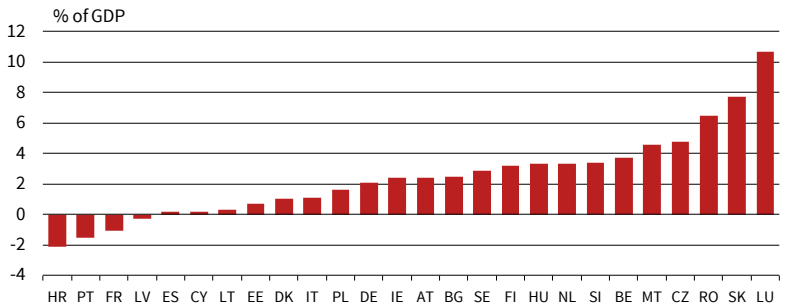
[8] See Fuest and Gros (2019).

[9] In a bit less than half of the Member States the sustainability gap is due to both an unfavorable initial fiscal position and the cost of aging.

[10] https://www.euractiv.com/section/economy-jobs/news/eu-fiscal-watchdog-wants-to-scrap-60-debt-limit/.

Figure 4.12

Fiscal Sustainability Indicator



Note: The fiscal sustainability indicator is the permanent change in the primary budget balance in % of GDP needed to ensure that the present value of revenue equals the present value of expenditures plus initial net debt. The computation is based on population forecasts and maintaining unchanged policies.
Source: European Commission (2021). © CESifo

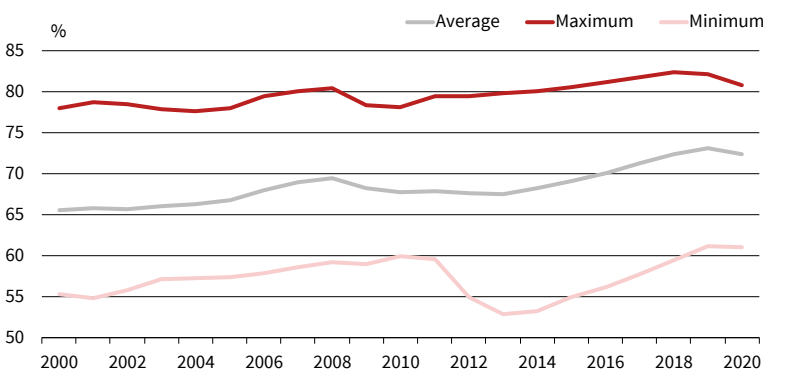
on the one hand, changes for more flexibility and solidarity, and on the other hand, reforms which prevent soft budget constraints and imprudent fiscal policies. For instance, a reform of fiscal governance should include a more realistic approach to debt levels, but it should also introduce new capital requirements which require banks to underpin highly concentrated portfolios of national public debt with equity.

The debate about the reform of fiscal rules reminds us that they were introduced in the first place primarily to prevent a fiscal dominance of monetary policy. In the current economic and political environment, this issue is particularly important because, after a long period of very low inflation rates, monetary policy now faces a scenario of rising inflation. The pandemic has led central banks to engage in unprecedented monetary expansion. At the same time, supply constraints due to trade disruptions and worker shortages as well as rising energy prices give rise to stagflation fears. This raises the possibility that we may face a scenario similar to the 1970s and early 1980s, when the world was hit by the stagflationary oil shock, and policymakers were surprised that expansionary fiscal and monetary policy only made things worse (see Chapter 2). This time, conflicts may arise between the need to reign in inflation and the fear that contractionary monetary policy measures may raise interest costs of highly indebted governments. In the Eurozone, there is the additional risk that, as a response to tighter monetary policy, risk premia on government bonds of highly indebted Eurozone member states may rise drastically, leading to a scenario similar to the Eurozone debt crisis.

Anticipating such a scenario, the ECB announced on December 16, 2021 that it may deviate from the capital key when rolling over its government bond portfolios and buy a large share of Greek government bonds.[11] This points to the fact that the ECB may face a conflict between limiting inflation and limiting interest rate spreads in the Eurozone. Its mandate clearly requires it to prioritize fighting inflation, but whether that will be politically feasible is an open question. To avoid such a scenario, it is important that the Eurozone develops its institutions and policies so that i) the sustainability of public debt is protected and ii) cases where public debt is excessive can be resolved without relying on the central bank monetizing the debt. The introduction of the NGEU fund was an important step in this direction as it redistributes the burden of newly incurred debt from highly indebted and less prosperous member states to the others. But the magnitude of NGEU is not large enough to solve the sustainability issues of the most highly indebted member states, and mutualizing the debt has its limits, not least because it creates adverse incentives for future fiscal policy.

[11] "PEPP reinvestments can be adjusted flexibly across time, asset classes and jurisdictions at any time. This could include purchasing bonds issued by the Hellenic Republic over and above rollovers of redemptions in order to avoid an interruption of purchases in that jurisdiction …", ECB statement on monetary policy decisions, December 16, 2021, https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.mp211216~1b6d3a1fd8.en.html

Figure 4.13
Employment Rate



Source: Eurostat. © CESifo

4.4 THE LABOR MARKET – THE FUTURE OF WORK

Future economic developments crucially depend on the labor market. Employment (job-type, work conditions, wages, etc.) is crucial for the individual but also for society, affecting both the level and distribution of incomes and public finances/social cohesion. The key to solving many economic problems is labor market reforms.

The debate on labor market developments since the Industrial Revolution has been dominated by job pessimism and a concern whether there would be enough jobs. This job pessimism also enters contemporary discussions, although historical developments have consistently refuted this concern and there is no indication that it is going to be a problem within any reasonable forecast horizon. The development in the employment rate in the European Union is shown in Figure 4.13 for a period which includes several crises, intensive globalization, and new technologies, and if anything, there is a slight upward trend in employment rates. In a number of countries – e.g., The Netherlands, Sweden, and Denmark – labor market reforms have played a crucial role in supporting employment growth.

The debate on the future development spans from dystopian views to very optimistic views on the future development of society. The dismal views at the outset take in the fact that productivity growth in recent years has been low in historical comparison,[12] and the risk of secular stagnation due to a shrinking population and workforce due to aging (Summers,2015; Gordon,2014). These developments imply that growth rates and rates of return will be "low for long." The term "shrinkonomics" coined by

[12] There is an issue whether measurement of productivity growth is downward biased, not properly capturing quality and welfare improvements following from ICT, see e.g., Feldsteain (2017).

Hong and Schneider (2020) refers to the troublesome economic development in Japan over the last couple of decades. The Japanese experience may be seen as an early indication to other countries of the consequences of an aging society since the change in the age composition of the population in Japan is a few decades ahead of most other countries. A more optimistic view is associated with the so-called Fourth Industrial Revolution in terms of automation and robots, see e.g., Brynjolfsson and McAfee (2014). But even this is seen as a threat to jobs by many, and how many jobs are at risk due to automation has been the subject of debate, see e.g., Nedelkoska and Quintini (2018) and OECD (2021). While productivity growth is indisputably important for material living conditions, the implications for overall employment are less clear, and it is reminiscent of the job pessimism already associated with the first industrial revolution. Notions like "shortage of jobs" do not make much economic sense in a medium- to long-run perspective. Developments in labor demand and supply ultimately determine wages and employment and eliminate any shortages.

Aggregate numbers like those reported above conceal large structural shifts across sectors and job types. Labor markets are characterized by ongoing in- and outflows from neither across business cycles nor jobs. Labor market developments are not smooth, either across business cycles or structural changes. Along economic development there have been employment crises and persistent unemployment, and particular groups have been affected. This is a result of differences in policies and institutions, etc., but also reflects that structural changes have different effects across groups and countries. Structural changes affect underlying demand and supply conditions, tending to produce winners and losers. In the process some job prospects deteriorate, and others worsens, causing changes both within and between countries.

The Covid-19 pandemic underscores this point in a clear way. To control the pandemic most countries have resorted to lockdowns, travel restrictions, and work-from-home policies. In particular, service, trade, and tourism has been affected (see Chapter 1), and this is different to the Financial Crisis, which affected construction, industry, and manufacturing. Clearly, the scope of work-from-home differs across sectors and job types, but also the level of digitalization is important. Hence, sectors/countries depending on physical contacts or being less digitalized are more adversely affected than other sectors/countries. Hence, while shock and policies are largely the same, the effects are very different across sectors and countries. The experience during the pandemic has so far been that economic activity in many countries has recovered rather swiftly alongside reopenings (see Chapter 1) which suggests a less persistent downturn than during the Financial Crisis. From a labor market perspective, this reduces the risk of a persistent increase in unemployment.

It is a fact that the nature of jobs has changed significantly and will likely continue to do so. This is reflected in both the sectoral distribution of jobs and the educational level of the work force. The broad trend has been first a decline in employment in primary sectors and an increase in manufacturing sector. Recently, the latter has declined and employment in services (private and public) has increased. The educational level has changed dramatically, and the work force is much more educated than in the past. The Covid-19 crisis is also speeding up and creating new source of structural changes including possible changes in, e.g., retail business, travel, and tourism.

Structural changes produce both winners and losers, within and between countries. A key example is so-called skilled bias technological changes producing what Tinbergen (1972) dubbed a "race between education and technology." Skill-bias technological change increases the demand for skilled and reduces the demand for unskilled labor. If the skill-distribution is unchanged, the outcome is an increasing wage gap between skilled and unskilled labor. However, if the skill-distribution can be changed such that it matches the changes in the composition of demand, an increase in wage differences can be avoided. Globalization has increased trade-flows between high- and low-income releasing effects similar to skill-biased technological changes. While there has been a heated controversy on the role of technology and globalization in empirical work[13] it is difficult to separate the two – also because the two are mutually dependent – but this is less important for the overall trend. Empirical analyses show that the educational expansion during the 1960s and 1970s implied that education was ahead of or on par with changes on the demand side. More recently wage inequality has been increasing, and this has been interpreted as technology and globalization winning over education. Goldin and Katz (2009, s. 291) conclude that a "lion's share of rising wage inequality can be traced to an increasing educational wage differential."

An extra dimension has been added to this development, namely, so-called task bias, see, e.g., Acemoglu and Restrepo (2020). Technological developments imply that job-functions which involve routine work can be overtaken by ICT, etc. This effect is not affine to the skill content of the job: some jobs which in the past required skills can now be overtaken by computers. The latest development is automation

[13] Some empirical work OECD (2011, 2017) suggest that technology is less important than globalization, but that policy changes also play a role: deregulation of product market, lower unemployment insurance benefit, and tax reforms have also contributed to widen the wage distribution; see also Jaumotte, Lall og Papagerogiou (2013). For more of a review on how globalization affects labor markets see, e.g., Helpman (2016).

and robots (cobots). What is important here is that relative demand and supply changes. If some skills can be automated, they are less in demand, but then social skills which are less easily automated become scarcer, see, e.g., Deming (2017). The Covid-19 crisis has shown the importance of digitalization and the ability to substitute from physical to virtual activities and contacts, and this will accelerate this development.

The bottom line is that there are ongoing structural changes in the labor market. This has always been the case, and it will continue to be so. Whether structural changes are happening faster than in the past is not clear, but they are moving fast. Structural changes happen for many reasons, and at present the Covid-19 crisis may accelerate some ongoing processes like digitalization. Simple views of the labor market projecting the current situation into the future or detailed attempts to project future labor demand do not have a good track record. Few anticipated in the 1980s the role ICT would have for almost all jobs today. Some broad trends can be predicted, but not the finer allocation across job types. Rather than focusing on predicting the exact structure of demand for labor in the future, it is more important to ensure that there is a qualified labor force capable of adjusting to future demand.

That structural changes create winners and losers and raise the issue on how best to help the losers. In the first place the social safety net provides support to those losing their jobs, but this is only a temporary solution. The social safety net is meant to provide insurance, not permanent support to those affected more long-term by structural changes. Support via the social safety net may also be termed passive in the sense that it aims at repairing on some of the consequences of loss of job, while a more active approach aims at improving the possibilities of finding a new job.

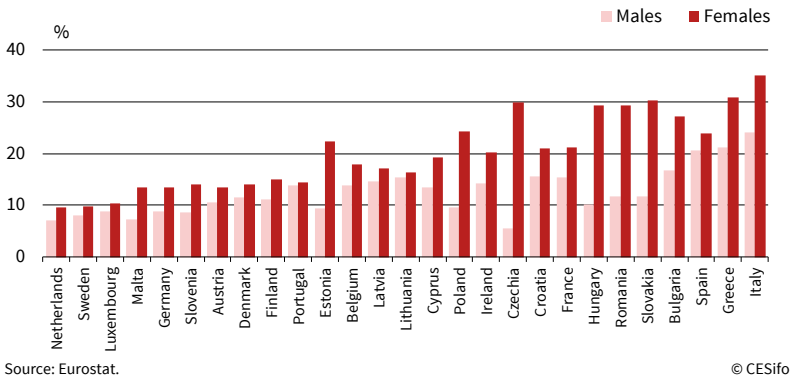
Active labor market policies play an important role here, but it has its limitations. Particular problems arise for those who in a mature age find that their education, qualification, and experience has become obsolete due to structural changes. A risk which may increase when retirement ages are increased to cope with the aging problem, see below. A longer working career has several preconditions. An obvious one is adequacy of qualifications, which in turn has two key elements. Longer working careers increase the return to education, and this gives an argument for more investment in education. But the form of education should also be considered. Evidence on professional training shows that broad-based education rather than more specialized catering to immediate needs in the labor market is associated with later retirement; see Hanushek et al. (2017). This is suggestive that individuals with a broad knowledge base have better scope to adjust to new needs and requirements in the labor market and to update their knowledge, see, e.g., EEAG (2021). Another element is the possibilities for maintaining and developing human capital; life-long learning. The work environment is also important; including multiple job careers to prevent too long tenures in, e.g., physically very demanding jobs.

Equally important is the inflow of new generations. This raises questions on the educational system, in particular that a significant share of each cohort does not obtain a labor market-relevant education. One measure is the share of youth neither in employment nor education or training (NEETS) (Figure 4.14). In EU countries this group constitutes between 10 percent and 30 percent of a cohort and is generally higher for females than males. This is evidence of the absence of equal opportunities, which have implications for inequality and social cohesion. Addressing this problem is one of the most fundamental for policy decision-making today to ensure high employment and low inequality.

Figure 4.14

NEETS – Youth Neither in Employment nor Education, 2020

20–34 year-olds



Source: Eurostat. © CESifo

4.5 CONCLUSIONS AND OUTLOOK

The Covid-19 crisis has prompted a debate not only on how to restart economies after the pandemic but also on the need to rethink economic policies to address policy challenges including the climate, aging, technological developments, inequality, etc. Much of the debate centers on whether more or less government intervention in the economy is needed. Many observers see the Covid-19 crisis as an example of the importance of government intervention, and it is sometimes claimed that governments should also play a larger role after the pandemic. However, since the crisis situation is exceptional, that conclusion may be premature. During the crisis trust in governments has declined, potentially suggesting that demand for larger government is limited. But trust in governments usually declines in times and crisis and recovers later.

For this discussion it is important to note that the Covid-19 crisis is different from any other crisis encountered for about a century. The situation is

different and unusual and the needed policy intervention therefore also unusual. It is not clear why this experience is of much guidance in addressing future policy challenges. It is also worth being reminded of the optimism surrounding the power of fiscal policy (demand management policies) in the 1970s and the rather dismal track record despite substantial policy activism. The brief but important answer is that the policy interventions were not well designed to the problems arising from supply side changes (oil price hikes) and structural problems in the 1980s, see Chapter 2 and 3. This is not saying that fiscal policy is unimportant or not useful, but a reminder that no policy is omnipotent for all kinds of problems. Later developments, and in particular the growth of populism, are also a reminder that it is important to take a broad-based perspective on policymaking, focusing not only on the winners but also how to cope with the losers. A serious policy discussion starts by understanding the problem and why and how policy intervention is needed, and not by defining the solution.

Intergenerational distribution is a common denominator in many contemporary policy themes. The climate and environmental issues have important intergenerational implications. But so has aging and public debt. The agenda of structural reforms to strengthen employment and growth to reduce inequality and improve public budgets and to make pension systems more resilient has not become obsolete as a consequence of the Covid-19 crisis – if anything it has become more urgent. Projection shows that aging is driving up public expenditures, causing financial problems, and it is not obvious that such increases should be passively accepted leading to large government. Increases in retirement ages – motivated by increasing longevity – and strengthening of private savings are part of the solution.

The degrees of freedom in fiscal policy depend critically on debt. The pandemic has taken public debt to record levels. At present, interest rates are low but so are growth rates, and interest rates may change quickly. It is therefore very risky to base policy making on an expectation that the current low costs of servicing public debt are permanent. The present situation strongly depends on central bank intervention, and a normalization of monetary and fiscal policy will change the situation. The current increase in inflation underlines the fact that central bank support for highly indebted governments may end rather sooner than later. Neglecting the debt issue may thus imply some short-term degrees of freedom at the risk of policies being severely constrained by debt problems in the future. Looking back, there are many examples of countries having lost room for maneuver due to high debt levels.

Prudence in fiscal policy and fiscal rules have not become irrelevant as a result of recent developments. Such rules play an important role as guidepost for ensuring fiscal sustainability and thus addressing the problems arising from aging. However, the current debate about fiscal rules is justified in particular because debt ratios have reached levels far beyond the 60 percent limit foreseen by the treaty of Maastricht. While fiscal rules have their limits and enforcement is difficult, they remain important benchmarks in conversations and negotiations about economic policy at the European level. Just making these rules laxer by increasing, e.g., the maximum debt ratio to 90 or 100 percent of GDP, is not solving the problem. There is a need for a better balance between flexibility, incentives, and discipline. One way forward would be to combine higher debt limits with reform requirements like the introduction of equity requirements for banks holding domestic debt portfolios.

Regarding the future role of governments, the consequences of the pandemic are in fact limited. Most importantly, the pandemic is a highly unusual situation, which required unusual policies. The role of government in this crisis offers little guidance regarding its role when the situation is back to normal, as much as a surgeon may play a key role after an accident, but this does not mean the patient needs him permanently. There is rather a significant risk that the exit from the crisis mode, with government support for many individuals and companies, back to a situation where market forces are in play, may come too late. It would be highly problematic if the perceived role of government in the economy changed towards the expectation that government support shields companies and employees from any kind of pressure. The reallocation of human and physical capital which is needed to allow for structural change would be inhibited. This is why it is important that crisis-related support measures are eventually phased out.

A rather straightforward consequence of the pandemic is that it has led to an increase in government debt, which will constrain government action in the future. The higher debt levels also underline the importance of structural and growth enhancing reforms, so that bearing the higher debt burden is easier. If there is a change in what is expected from governments, there may be a shift towards demand for competence. At the same time, populist politicians have not been very successful in this crisis: Whether this will reduce support for populism in the coming years remains to be seen.

REFERENCES

Ayaz, M., L. Fricke, C. Fuest, and D. Sachs (2021), "Who Should Bear the Burden of Covid-19 Related Fiscal Pressure? An Optimal Income Taxation Perspective", *CESifo Working Paper* 358/2021.

Becher, M. et al. (2021), "Covid-19, Government Performance, and Democracy: Survey Experimental Evidence from 12 Countries", *NBER Working Paper* 29514.

Blanchard, O. (2019), "Public Debt and Low Interest Rates", AEA Presidential Lecture, January.

Eurofond (2018), *Societal Change and Trust in Institutions,* Publication Office of the European Union.

Eurofound (2020), *Living, Working and COVID-19 Dataset,* Dublin, http://eurofound.link/covid19data.

Feldstein, M. (2017), "Underestimating the Real Growth of GDP, Personal Income, and Productivity", *Journal of Economic Perspectives,* 31(2), 145–64.

Freundl, V., C. Stiegler, and L. Zierow (2021), "Europas Schulen in der Corona-Pandemie – ein Ländervergleich", *ifo Schnelldienst digital,* November 2021.

Fuest, C. and D. Gros (2019), "Government Debt in Times of Low Interest Rates: The Case of Europe", *EconPol Europe Policy Brief* 15/2019.

Funke, M.l, M. Schularick, and C. Trebesch (2021), "Going to Extremes: Politics after Financial Crises, 1870–2014", *European Economic Review* 88, 227–260.

Gerbaudo, P. (2021), *The Great Recoil: Politics after Populism and Pandemic*, Verso, London.

Gianmarco, D., A. F. M. Martinangeli, F. Passarelli, W. Sas, and L. Windsteiger (2020a), "Wind of Change? Experimental Survey Evidence on the COVID-19 Shock and Socio-Political Attitudes in Europe", *Covid Economics* 44.

Gianmarco, D., A. F. M. Martinangeli, F. Passarelli, W. Sas, and L. Windsteiger (2020b), "Covid-19 and Socio-political Attitudes in Europe: In Competence we Trust", *VoxEU Column*, October 2020.

Herrera, H., M. Konradt, G. Ordoñez, and C. Trebesch (2020), "Corona Politics: The Cost of Mismanaging Pandemics", *Kiel Working Paper*, No. 2165.

Ipsos (2021), One Year with Covid 19: How Institutions Fared, https://www.ipsos.com/en/covid-19-one-year-global-public-loses-confidence-institutions.

Jordà, O., S. R. Singh, and A. M. Taylor (2020), "Long Run Economic Consequences of Pandemics", Working Paper 26934.

Lazarus, J.V., S. Ratzan, A. Palayew, F. C. Billari, A. Binagwaho, S. Kimball, et al. (2020), "COVIDSCORE: A Global Survey to Assess Public Perceptions of Government Responses to COVID-19 (COVID-SCORE-10)", *PLoS ONE* 15(10): e0240011.

OECD (2021), "What Happened to Jobs at High Risk of Automation?", Policy Brief on the Future of Work, Paris.

Schularick, M. (2021), *Der entzauberte Staat: Was Deutschland aus der Pandemie lernen muss,* Beck, München.

Stigliz, J. E. (2021), "The Proper Role of Government in the Market Economy: The Case of the Post-COVID Recovery, *Journal of Government and Economics,* forthcoming.

Lists

LIST OF FIGURES

Figure 1.1 Covid-19 Related Daily Deaths in the World 9
Figure 1.2 GDP, Industrial Production, and International Trade at the World Level 10
Figure 1.3 Global Economic Barometers 11
Figure 1.4 Fuel and Primary Raw Material Prices 11
Figure 1.5 Worldwide Inflation and Oil Price Movements 11
Figure 1.6 Spending Developments 12
Figure 1.7 GDP Developments in Major Countries and Regions 12
Figure 1.8 Unemployment Rates and Labor Force Participation Rates 13
Figure 1.9 Producer Price Inflation 13
Figure 1.10 Sector-Specific Value Added in the Euro Area 13
Figure 1.11 Sector-Specific Employment Developments in the Euro Area 14
Figure 1.12 Unemployment Rates and Participation Rates in Selected Euro Area Countries 14
Figure 1.13 Price Developments in the Euro Area 15
Figure 1.14 Government Budgets in the United States and the Euro Area 15
Figure 1.15 Fiscal Impulses in EU Member Countries 17
Figure 1.16 Central Bank Interest Rates 18
Figure 1.17 Balance Sheet Sizes of Major Central Banks 18
Figure 1.18 Real Effective Exchange Rates around the World 19
Figure 1.19 Exchange Rate of the Euro against the US Dollar and PPP 19
Figure 1.20 10-Year Government Bond Yields 19
Figure 1.21 Interest Rates on Loans in the Euro Area 20
Figure 1.22 Credit Developments in the Euro Area 20
Figure 1.23 Developments in International Stock Markets from a Euro Area Perspective 20
Figure 1.24 Developments of Selected Stock Markets within the Euro Area 21
Figure 1.25 World Economic Growth and the Global Economic Barometers 22
Figure 1.26 Regional Contributions to World GDP Growth 23
Figure 1.27 Economic Growth by Country and Region 23
Figure 1.28 Inflation Rates in Major Countries and Regions 24
Figure 1.29 Confidence Indicators[a] for Different Sectors in the Euro Area 24
Figure 1.30 Economic Growth in EU Member Countries and the United Kingdom 26

Figure 2.1 Consumer Price Inflation 31
Figure 2.2 Unemployment Rate 35
Figure 2.3 Union Density 35
Figure 2.4 Labor Taxation 36
Figure 2.5 Unemployment Insurance Benefits 36
Figure 2.6 Employment Protection 36
Figure 2.7 Wage Inequality (Median to 10% Ratio) 37
Figure 2.8 Government Revenues 39
Figure 2.9 Government Expenditure-to-GDP 39
Figure 2.10 Government Consumption 40
Figure 2.11 Government Debt-to-GDP Ratio 41
Figure 2.12 Exports and Imports as a Proportion of GDP 42
Figure 2.13 Government Expenditure and Exports and Imports from 1990–95 to 2005–09 42

Figure 3.1 Economy-wide Product Market Regulation 46
Figure 3.2 Cross-Country Correlation between Employment Protection and Product Market Regulation 47
Figure 3.3 Regulation: Public Ownership 47
Figure 3.4 Protectionism: Effective Tariff Rate 48
Figure 3.5 Liberalising and Harmful Trade Policy Interventions 48
Figure 3.6 Import of Goods and Services Relative to GDP 48
Figure 3.7 Average Industry Concentration by Industry Groups 49
Figure 3.8 Share of Labor in National Income 50
Figure 3.9 Gini Coefficient, Disposable Income 51
Figure 3.10 P90/P10 Ratio of Disposable Income 51
Figure 3.11 Pre-tax Income Share of the Top 1 Percent 52
Figure 3.12 Gini Coefficient, Net Wealth 52
Figure 3.13 Differences in Real GDP (Average Gap, in %) after Populists Take Over (+/–15 Years) 56
Figure 3.14 Differences in the Gini Index (Average Gap, in %) after Populists Take -Over (+/–15 Years) 57

Figure 4.1 Trust in National and EU Institutions 61
Figure 4.2 GDP Loss and Covid-19 Death Toll 63
Figure 4.3 School Closures 64
Figure 4.4 Satisfaction of Citizens with Covid-19 Crisis Management of Their National 65
Figure 4.5 Changing Confidence in Government Crisis Management 66
Figure 4.6 Trust in National Governments 66
Figure 4.7 Trust in National Government Across Time and Age Groups 67
Figure 4.8 Trust in EU Institutions 67
Figure 4.9 Trust in EU Institutions Across Age Groups and Time 67
Figure 4.10 Trust in Governments and Public Sector Size 68
Figure 4.11 Public Debt 68
Figure 4.12 Fiscal Sustainability Indicator 69
Figure 4.13 Employment Rate 70
Figure 4.14 NEETS – Youth Neither in Employment nor Education, 2020 72

LIST OF TABLES

Table 1.1 Public Finances 16
Table 1.2 Labor Costs[a] 25
Table 1.A.1 GDP Growth, Inflation and Unemployment in Various Regions and Selected Countries 27
Table 1.A.2 GDP Growth, Inflation and Unemployment in the EU Countries 28
Table 1.A.3 Key Forecast Figures for the European Union (EU27) 29
Table 1.A.4 Key Forecast Figures for the Euro Area 29

The Members of the European Economic Advisory Group



Torben M. Andersen

Torben M. Andersen holds a Ph.D. from CORE, Université Catholique, Louvain-la-Neuve, Belgium (1986). He is Professor of Economics at Aarhus University, Denmark and a Fellow of CESifo, Centre for Economic Policy Research and IZA. He has served as department head and member of various university committees. He has had various short-term visiting positions at other universities, served as editor of the *Scandinavian Journal of Economics* (1991–1997), and as member of several editorial boards. He has been extensively involved in policy advice in Denmark and abroad. In Denmark among others as chairman of the Economic Council (1993–1996 and 2001–2003), the Welfare Commission (2003–2006), and the Pension Commission (2014–2015), and corona-advisory expert group, and as member of the Systemic Risk Council (2013-2018). Abroad his advisory activities include the EU Commission, member of the Fiscal Policy Council in Sweden (2007–2011), Economic Policy Council Finland (2014-2019) and Chairman of the Economic Council, Greenland (since 2012), and commission on Migration in Norway (2009–2011). Most of his research has been on macroeconomics, labor economics and the economics of the welfare state. He has published in many scholarly journals, including the *Economic Journal, Journal of Public Economics, Journal of International Economics, Economic Theory,* and *European Economic Review*. He has published several books and edited volumes, most recently *The Danish Pension System – Design, Performance, and Challenges,* edited with Jesper Rangvid and Svend E. Hougaard Jensen, Oxford University Press, to appear.

Address:
Torben M. Andersen
Aarhus University
Department of Economics and Business Economics Fuglesangs Allé 4, building 2621, 2
8000 Aarhus C
Denmark
tandersen@econ.au.dk



Giuseppe Bertola

Giuseppe Bertola holds a Ph.D. from the Massachusetts Institute of Technology (1988) and is Professor of Political Economy at the University of Turin (Associato since 1993 and Ordinario since 1996). He was on leave in 2011–15 as Professor of Economics at EDHEC Business School and in 1997–2003 as full-time Professor at the European University Institute. In 1989–93 he was Assistant Professor and Assistant Director of the International Finance Section, Princeton University. He has served as a Managing Editor of *Economic Policy* (2001–2008), Condirettore of *Giornale degli Economisti e Annali di Economia* (1996–2011), and a Program Director of CEPR's Labour Economics programme (2009–2013). He has performed scientific advisory work for the European Commission, the European Central Bank, and other organizations. His research currently focuses on the structural and institutional aspects of labor and financial markets, from an international comparative perspective, particularly as regards their distributional impact and interaction with the European process of economic and monetary unification. He has applied similar methods to exchange rate and money-market policies, interactions between growth and distribution, households' durable consumption and borrowing, and educational systems. He has also published widely in the *Review of Economic Studies*, the *American Economic Review,* the *European Economic Review,* other academic journals and books, also authoring chapters in *Handbook of Labor Economics* and *Handbook of Income Distribution* (North-Holland), co-authoring *Models for Dynamic Macroeconomics* (Oxford University Press) and *Income Distribution in Macroeconomic Models* (Princeton University Press), and co-editing *Welfare and Employment in a United Europe* and *The Economics of Consumer Credit* (MIT Press).

Address:
Giuseppe Bertola
University of Turin
Department of Economics and Statistics
Lungo Dora Siena 100
10153 Turin
Italy
giuseppe.bertola@unito.it



Clemens Fuest

Clemens Fuest holds a Ph.D. from the University of Cologne (1994). He is President of the ifo Institute, Professor of Economics and Public Finance at the Ludwig-Maximilians-University of Munich, Director of the Center for Economic Studies (CES), Executive Director of CESifo GmbH and Speaker of EconPol Europe – the European network for economic and fiscal policy research. Since 2003 Clemens Fuest is a member of the Academic Advisory Board of the German Federal Ministry of Finance (head of the board from 2007 to 2010). He is a member of the European Academy of Sciences and Arts and of the German National Academy of Science and Engineering (acatech). Furthermore, Clemens Fuest is Board Member of the International Institute for Public Finance (IIPF; President – August 2021) and of the German-French Council of Economic Experts. In 2013 he received the Gustav Stolper Prize of the Verein für Socialpolitik (Social Policies Society – VfS), in 2019 the Hanns Martin Schleyer Prize for the year 2018. He was awarded an honorary doctorate of the Karlsruhe Institute of Technology (KIT) in 2017.
His research areas are economic and fiscal policy, taxation, and European integration. Before he was appointed ifo President in April 2016, Clemens Fuest was President of the Centre for European Economic Research (ZEW) in Mannheim and Professor of Economics at the University of Mannheim. From 2008 to 2013 he was Professor of Business Taxation and Research Director of the Centre for Business Taxation at the University of Oxford. He taught as a Visiting Professor at the Bocconi University in Milan in 2004. From 2001 to 2008 he was Professor for Public Economics at the University of Cologne. Clemens Fuest has published widely in German and international academic journals including *American Economic Review, European Economic Review, Journal of Public Economics, Journal of International Economics, National Tax Journal, International Tax and Public Finance* and *International Economic Review.* He has published a number of books and contributes to public debates on economic and fiscal policy through articles in renowned newspapers including *Handelsblatt, Frankfurter Allgemeine Zeitung, Süddeutsche Zeitung, WirtschaftsWoche, Financial Times*, *Wall Street Journal* and *Le Monde*.

Address:
Clemens Fuest
ifo Institute
Poschingerstr. 5, 81679 Munich
Germany
fuest@ifo.de



Cecilia García-Peñalosa

Cecilia García-Peñalosa holds a Ph.D. from Oxford University (1995). She is Professor of Economics at the *Centre National de la Recherche Scientifique* and at the Aix-Marseille School of Economics. Furthermore, since 2017 she has held the chair on Gender, Growth and Development at the École des Hautes Études en Sciences Sociales, and she is a Fellow of CESifo and the Centre for Economic Policy Research. She has held positions at the Autonomous University of Barcelona and the University of Oxford, as well as a council member of the Society for the Study of Economic Inequality. She was associate editor of the *European Economic Review*, and currently is associate editor of the *Journal of Economic Inequality*. Her policy work includes scientific advisory work for the European Commission and the World Bank, among others, and four years as a member of the *Conseil d'Analyse Economique*, an independent advisory group that reports to the French Prime Minister. Her research has focused mainly on long-term growth and income inequality. To what extent is inequality necessary for an economy to grow? Does growth automatically lead to less inequality? Are countries where output is more volatile also more unequal? Her recent work focuses on the factors that determine gender inequality in labor markets. Cecilia García-Peñalosa has published in many scholarly journals, among them the *Journal of Economic Growth*, *Journal of Public Economics*, *Economic Journal,* and the *European Economic Review*, and co-edited the volume Institutions, Development, and Economic Growth, MIT Press CESifo Seminar Series. Her work has been featured in the press, including *The Economist,* and she contributes regularly to public debate in France, through interventions in the radio or newspapers such as *Le Monde.*

Address:
Cecilia García-Peñalosa
Aix-Marseille School of Economics
Aix-Marseille Université
5 Bd Maurice Bourdet
13205 Marseille
France
cecilia.garcia-penalosa@univ-amu.fr



Harold James

Harold James holds a Ph.D. from Cambridge University (1982) and is Claude and Lore Kelly Professor in European Studies and a Professor of History at Princeton University, a Professor of International Affairs at the School of Public and International Affairs, as well as the official historian of the International Monetary Fund. He is Chairman of the Academic Council of The European Association for Banking and Financial History (EABH). Before coming to the United States in 1986, he was a Fellow of Peterhouse for eight years. He was awarded with the Ellen MacArthur Prize for Economic History at the University of Cambridge in 1982, the Helmut Schmidt Prize in Economic History at the German Historical Institute in Washington, D.C. in 2004 and the Ludwig Erhard Prize for writing about economics in 2005. His research focuses on European economic and financial history, and globalization. He has published and co-authored several books analyzing Germany's financial history in the interwar era, the changing character of national identity in Germany and detailed studies about the Deutsche Bank and the Deutsche Bundesbank. His latest book include *The Euro and the Battle of Ideas,* written with Markus Brunnermeier and Jean-Pierre Landau (Princeton University Press 2016); *Making A Modern Central Bank: The Bank of England 1979–2003* (Cambridge University Press 2020); and *The War of Words: A Glossary of Globalization* (Yale University Press 2021).

Address:
Harold James
Princeton University
History Department
129 Dickinson Hall
Princeton, NJ 08544-1017
USA
hjames@princeton.edu



Jan-Egbert Sturm

Jan-Egbert Sturm holds a Ph.D. from University of Groningen (1997). He is Professor of Applied Macroeconomics, Director of the KOF Swiss Economic Institute at the ETH Zurich, President of the Centre for International Research on Economic Tendency Surveys (CIRET), Editor of the European Journal of Political Economy and currently Vice-President of the Swiss Covid-19 Science Taskforce. He was a researcher at the University of Groningen, The Netherlands, until 2001, and taught as Visiting Professor at the School of Business, Bond University, Gold Coast, Australia, in 2000 and 2005. As Head of the Department for Economic Forecasting and Financial Markets at the ifo Institute for Economic Research, he was also Professor of Economics at the University of Munich (LMU) at the Center for Economic Studies (CES), 2001–2003. He held the Chair of Monetary Economics in Open Economies at the University of Konstanz, Germany, which was coupled with the position of Director of the Thurgau Institute of Economics (TWI) in Kreuzlingen, Switzerland, 2003–2005. In his research, Jan-Egbert Sturm relies heavily on empirical methods and statistics, concentrating on monetary economics, macroeconomics as well as political economy. His applied studies have focused on, for example, economic growth and central bank policy. He has published several books, contributed articles to various anthologies and international journals including the *American Economic Review*, the *European Economic Review*, the *Journal of Banking and Finance*, the *Journal of Business & Economic Statistics,* the *Journal of Development Economics*, the *Review of International Organizations*, and the *Scandinavian Journal of Economics*. Since 2001 he has been member of the CESifo Research Network and since 2003 Research Professor at the ifo Institute. In 2006 he was appointed member of the User Advisory Council of the ifo Institute.

Address:
Jan-Egbert Sturm
ETH Zurich
KOF Swiss Economic Institute
LEE G 116
Leonhardstr. 21
8092 Zurich
Switzerland
sturm@kof.ethz.ch

Previous Reports and Policy Briefs

The EEAG Report on the European Economy 2021: Beyond the Coronavirus Crisis: Investing for a Viable Future

Macroeconomic Conditions and Outlook
Distributional Conflicts and Social Capital
Lifecycles and Education: The Coronavirus Crisis Across Generations
Business Investment

The EEAG Policy Brief 2020: Europe's Pandemic Politics

Economic Developments around the World: Corona Crisis Leads to Worst Recession in 90 Years
Fiscal and Monetary Consequences of Covid-19
Risk, Insurance and Solidarity – National and EU Perspectives
Markets, Policies, and Structural Change during and after the Covid Crisis

The EEAG Report on the European Economy 2020: Fair Taxation in a Mobile World

Macroeconomic Conditions and Outlook
Digital and Technological Transformation
Taxing Multinational Companies
Taxing Mobile Jobs and People
Taxing Immobile Factors and Wealth

The EEAG Report on the European Economy 2019: A Fragmenting Europe in a Changing World

Macroeconomic Conditions and Outlook
Coping (or not) with Change
Struggling with Constraints
Looking Outward: Western Disarray, China Rising

The EEAG Report on the European Economy 2018: What Now, With Whom, Where To – The Future of the EU

Macroeconomic Conditions and Outlook
Building Trust between Suspicious Minds
All Together Now: The European Union and the Country Clubs
It's OK to Be Different: Policy Coordination and Economic Convergence

The EEAG Report on the European Economy 2017: Economics of Populism

Macroeconomic Conditions and Outlook
Economic Policy and the Rise of Populism
Britain and the EUexit
Immigration and the Refugee Crisis

The EEAG Report on the European Economy 2016: What next?

Macroeconomic Conditions and Outlook
Intergenerational Fairness
Tuning Secondary Education
Denmark: Too Good to Be True?
Western Balkans: Coming Together

The EEAG Report on the European Economy 2015: Blurring the Borders

Macroeconomic Outlook
The European Energy Conundrum: Power Failure
European Regional Disparity: Borders Strike Back
Migration in the European Union: Too Much of a Good Thing?

The EEAG Report on the European Economy 2014: The Road Towards Cohesion

Macroeconomic Outlook
Switzerland: Relic of the Past, Model for the Future?
Austerity: Hurting but Helping
Banking Union: Who Should Take Charge?

The EEAG Report on the European Economy 2013: Rebalancing Europe

Macroeconomic Outlook
European Imbalances
Labour Market Reforms and Youth Unemployment
US Precedents for Europe

The EEAG Report on the European Economy 2012: The Euro Crisis

Macroeconomic Outlook
The European Balance-of-Payments Problem
Banking Regulation
The Swedish Model
The Hungarian Crisis
Pricing Climate Change

The EEAG Report on the European Economy 2011: Governing Europe

Macroeconomic Outlook
A New Crisis Mechanism for the Euro Area
Greece
Spain
Taxation and Regulation of the Financial Sector

The EEAG Report on the European Economy 2010: Exiting the Crisis

The European Economy: Macroeconomic Outlook and Policy
A Trust-driven Financial Crisis. Implications for the Future of Financial Markets
From Fiscal Rescue to Global Debt
Implications of the Crisis for US Adjustment Needs
The Financial Crisis: Risks and Challenges for the Euro Area

The EEAG Report on the European Economy 2009

The European Economy: Macroeconomic Outlook and Policy
Financial Crisis
Private Equity
Country Chapter: France

The EEAG Report on the European Economy 2008: Europe in a Globalised World

The European Economy: Macroeconomic Outlook and Policy
How Much Real Dollar Depreciation is Needed to Correct Global Imbalances?
The Effect of Globalisation on Western European Jobs: Curse or Blessing?
Industrial Policy
Global Warming: The Neglected Supply Side

The EEAG Report on the European Economy 2007

The European Economy: Macroeconomic Outlook and Policy
Macroeonomic Adjustment in the Euro Area – the Cases of Ireland and Italy
The New EU Members
Scandinavia Today: An Economic Miracle?
Tax Competition
Economic Nationalism

The EEAG Report on the European Economy 2006

The European Economy: Macroeconomic Outlook and Policy
Global Imbalances
Economic Growth in the European Union
Prospects for Education Policy in Europe
Mergers and Competition Policy in Europe

The EEAG Report on the European Economy 2005

The European Economy: Current Situation and Economic Outlook for 2005
Outsourcing
Longer Working Hours – the Beginning of a new Trend?
Pensions and Children
House Prices in Europe

The EEAG Report on the European Economy 2004

The European Economy: Current Situation and Economic Outlook
Labour Market Reform in Europe
Pay-setting Systems in Europe: On-going Development and Possible Reforms
The Economics of Discrimination: Equity, Equality and Diversity in the New European Constitution
The 2004 EU Enlargement: Key Economic Issues
Acceding Countries: The Road to the Euro

The EEAG Report on the European Economy 2003

The European Economy: Current Situation and Economic Outlook
Fiscal Policy and Macroeconomic Stabilisation in the Euro Area: Possible Reforms of the Stability and Growth Pact and National Decision-Making-Processes
Rethinking Subsidiarity in the EU: Economic Principles
Financial Architecture
Should We Worry about the Brain Drain?

The EEAG Report on the European Economy 2002

The European Economy: Current Situation and Economic Outlook
The Weakness of the Euro: Is it Really a Mystery?
Fiscal and Monetary Policy
Prices, Wages and Inflation after the Euro – What Europeans Should or Should not Expect
Growth and Productivity
Welfare to Work
CAP Reform

CESifo Economic Studies



Visit the website to read **free content**, sign-up for electronic alerting services, recommend to your library and submit your work.

cesifo.oxfordjournals.org

Publishing provocative, high-quality, accessible articles in economics, with a particular focus on policy issues

— **SPEED:** Quick online submission, speedy review time, advance access publication

— **VALUE:** Free editor's choice articles thoughout the year, free sample issue, numerous special issues

— **IMPACT:** Over 2,500 institutional subscribers worldwide, over 5,000 full-text downloads per month

CESifo

OXFORD UNIVERSITY PRESS

THE MEMBERS OF THE EUROPEAN ECONOMIC ADVISORY GROUP



Torben M. Andersen
Aarhus University
EEAG Chairman

Professor of Economics at the Department of Economics and Business Economics, Aarhus University. Former chairman of the Danish Economic Council



Giuseppe Bertola
Università di Torino

Professor of Political Economy



Clemens Fuest
ifo Institute and LMU Munich

Professor of Economics and Public Finance at LMU Munich, President of the ifo Institute, Director of the Center for Economic Studies, Executive Director of CESifo GmbH and Speaker of EconPol Europe – the European network for economic and fiscal policy research



Cecilia García-Peñalosa
Centre National de la Recherche Scientifique and Aix-Marseille School of Economics
EEAG Vice-Chairwoman

Professor of Economics at the Aix-Marseille School of Economics, Research Director at the Centre National de la Recherche Scientifique (CNRS) and a member of the Ecole des Hautes Etudes en Sciences Sociales (EHESS)



Harold James
Princeton University

Professor of History and International Affairs, Claude and Lore Kelly Professor of European Studies, and Director of the Program in Contemporary European Studies at Princeton University



Jan-Egbert Sturm
KOF, ETH Zurich

Professor of Applied Macroeconomics and Director of the KOF Swiss Economic Institute, ETH Zurich. President of the Centre for International Research on Economic Tendency Surveys (CIRET) and Editor of the European Journal of Political Economy