INTERNATIONAL PAPERS IN POLITICAL ECONOMY

Prospects and Policies for Global Sustainable Recovery

Promoting Environmental and Economic Sustainability

Edited by

PHILIP ARESTIS
MALCOLM SAWYER

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International Papers in Political Economy

This series consists of an annual volume with a single theme. The objective of the IPPE is the publication of papers dealing with important topics within the broad framework of Political Economy.

The original series of *International Papers in Political Economy* started in 1993, until the new series began in 2005, and was published in the form of three issues a year with each issue containing a single extensive paper. Information on the old series and back copies can be obtained from the editors: Philip Arestis (pa267@cam.ac.uk) and Malcolm Sawyer (e-mail: mcs@lubs.leeds.ac.uk).

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Editors

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Preface

This is the nineteenth volume of the series of *International Papers in Political Economy* (*IPPE*). This series consists of an annual volume with relevant papers on a single theme. The objective of the *IPPE* is the publication of papers dealing with important topics within the broad framework of political economy. The original series of *International Papers in Political Economy* started in 1993 until the new series began in 2005 and was published in the form of three issues a year with each issue containing a single extensive paper. Information on the old series and back copies can be obtained from the editors: Philip Arestis and Malcolm Sawyer.

The theme of this nineteenth volume is 'Prospects and Policies for Global Sustainable Recovery'. The two global crises of the past 15 years (global financial crises 2007/2009 and COVID-19 pandemic 2020/2022) not only have had severe economic and social impacts but have brought to the fore major questions on the role of markets, of the State and of social cohesion. The climate emergency confronts us all with increasing intensity and the need for urgent and effective actions. Societies are scarred by high levels of inequality. The purpose of this volume is to overview the prospects for a sustainable future, and the policies, which would be supportive of environmental sustainability. The policy perspectives covered include the funding and financing of investment to confront the climate emergency; enhancing productivity and technical innovation to aid sustainability; the significance of the commons in the context of the state, the corporation, labour markets, and finance; lessons from feminist economics for a socially sustainable recovery; and macroeconomic policies to underpin sustainability.

Cambridge, UK — Philip Arestis
Leeds, UK — Malcolm Sawyer

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Notes on Contributors

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Unnada Chewpreecha is the principal economic modeller at Cambridge Econometrics, UK. She has over 16 years of experience in the development and application of the E3ME model, a large-scale global energy-environment-economy (E3) model, as well as custom-made country-specific E3 models for Thailand, India, Brazil, Kosovo and the USA. Her expertise is in the application and development of E3ME and other E3 models to provide macroeconomic analysis of the climate, energy and resource efficiency policies. Topics that she covers range from carbon pricing, Nationally Determined Contribution (NDC) and Long Term Strategies (LTS) targets, 1.5 °C target, green recovery, energy efficiency, circular economy, green technologies, green jobs, climate risks, environmental tax reform, just transition, climate finance, border tax adjustment and many more. She recently provided modelling inputs for the European Commission's official impact assessments 'Stepping Up Europe's 2030 Climate Ambition'. In 2022, she joined the G20 Climate Sustainability Working Group to provide modelling inputs on the study 'Stocktaking of Economic, Social, and Environmental Impacts of Sustainable Recovery, Including Impacts on NDC Implementation'. Unnada regularly runs E3ME and macroeconomic modelling training courses for audiences around the world. Her written contributions range from policy briefs, book chapters, technical reports and academic papers.

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Bernadette Louise Halili is a PhD student in Economic Integration at the University of the Basque Country (UPV/EHU), Bilbao, Spain. Her research interests are interdisciplinary in nature and span the areas of political economy, comparative capitalism, institutions and applied macroeconometrics. Her doctoral thesis takes an actor-centred and non-Western-centric approach to comparative political economy (CPE) through the role of country-level institutions in influencing macroeconomic outcomes such as national income, international finance and macroeconomic policy in emerging markets. She is interested in considering the roles of the society, the market and the state as economic actors using theoretical and empirical methods in comparative institutional analysis that conceptualise and operationalise macro-level institutional settings in a novel way. The geographic scope of her research focuses on emerging markets, particularly on member states of the Association of Southeast Asian Nations (ASEAN). Her recent work on health determinants of academic performance across Filipino schoolchildren and on institutional determinants of levels of outward Chinese foreign direct investment across Asian economies has been published in journals such as *European Journal of Sustainable Development* and *Eurasian Geography and Economics*.

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Jonathan Michie has since 2008 been Professor of Innovation and Knowledge Exchange, and President of Kellogg College, at the University of Oxford, UK. Before returning to Oxford, he was director of the Business School at the University of Birmingham, and before that, he held the Sainsbury Chair of Management at Birkbeck College, University of London, where he was Head of the School of Management and Organisational Psychology. Previously, he was at the Judge Business School, Cambridge, where he was also a fellow and director of Studies in Economics at Robinson College, and a research associate of the ESRC Centre for Business Research. He moved to academia from Brussels, where he was an expert to the European Commission. Michie became Chair of the UK's Universities Association for Lifelong Learning (UALL) in May 2020. He is the Managing Editor of the *International Review of Applied Economics*, was joint secretary of the 2019 Centenary Commission on Adult Education and was an 'interdisciplinary' panel member for Management and Business in the UK's Research Excellence Framework (REF) 2021 exercise. Michie is a fellow of the Academy of Social Sciences, on whose Council he served for six years, and was awarded an OBE for services to Education.

Hector Pollitt is a senior economist at the World Bank, focusing on climate change. He is also a research fellow at the Centre for Environment, Energy and Natural Resource Governance at the University of Cambridge, UK. Prior to joining the World Bank, he was the chief economist at Cambridge Econometrics, where he worked on and developed the E3ME macro-econometric model, one of the world's most advanced macroeconomic models. Over a period of nearly two decades working at Cambridge Econometrics, he produced numerous model-based analyses of climate and energy policy that fed into European Commission official policy assessments. He has also worked with several international organisations to explore policy options to promote sustainable development and regularly review other modelling exercises for policymakers. Hector's research work focuses on the intersection between post-Keynesian and complexity economics. He has particular interest in the dynamics of economic growth and development, with a focus on innovation and transformational change, all within the system boundaries set by the natural world. Working with his regular co-authors, he has written research articles in several top-tier climate change journals, including on post-COVID-19 economic recovery. He has co-edited two books that explore policies to promote sustainable development in East Asia.

Carlos Rodriguez Gonzalez is Professor of Applied Economics in the Department of Public Policies and Economic History at the University of the Basque Country, Spain. He teaches economic policy at the undergraduate level and international economics at the master's level in the Faculty of Economics and Business. He has been teaching also as an invited professor for several years at the University of Lyon III (Institut d'Administration des Entreprises), France. He has taken part in many research projects. He is a member of a research group on 'Institutions, Regulation and Economic Policy'. In the past, he was also a member of the European Union project 'Financialisation, Economy, Society and Sustainable Development'. His main research topics belong to international economics (international trade and the multinational enterprise), economic policy (monetary policy) and political economy (growth models and comparative political economy). He has written extensively in ranked journals such as *International Business Studies*, *Open Economies*, the *Journal of Transnational Corporations*, *International Finance*, the *Journal of Post Keynesian Economics* and more recently *Eurasian Geography and Economics*. He has also written several chapters in different books and co-edited two books for Palgrave Macmillan.

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Helen Traill is Lecturer in Political Economy and Sustainability at the Adam Smith Business School, the University of Glasgow, UK, where she has worked since 2019. Helen Traill's current work spans sustainability transitions across food and energy, with a concern for everyday lived realities of sustainable life. This includes work on the EU Horizon 2020 funded MPOWER project on municipal action for energy transitions, and a recent Scottish Government- and EU-Social Innovation Fund project on the ethics of sustainability in areas of urban deprivation, which won a Scottish Knowledge Exchange Award in 2020. Helen Traill holds a PhD in Sociology from the London School of Economics and Political Science, which explored community growing projects and their relation to urban land politics and practices of communality. This ethnographic work underpins a forthcoming book with Bristol University Press on *The Practice of Urban Escape: Politics, Justice and Community in Urban Growing Projects*. Helen Traill is an ECR committee member of the Royal Geographical Society's Food Geographies Working Group and attends meetings of the Glasgow Food Policy Partnership. Her research interests span community and belonging, the politics of land ownership and the social life of sustainability.

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The Recent Global Crises and Economic Policies for Future Durable Recovery

Philip Arestis and Nikolaos Karagiannis

1 Introduction

The Covid-19, when the world economies suffered from a GDP contraction, was followed by recovery at the beginning of 2021. The economic outlook, though, remained uncertain due to risks of Covid-19 pandemic, financial uncertainties and the expected gradual removal of monetary accommodation. Recovery policies are urgently needed so that a strong long-term and durable recovery emerges. Fiscal, monetary and financial stability, policies, along with coordination of them, are important.

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Coordinated policies should focus on increasing productivity of the work force, increasing wages without inflation and reducing inequalities.

The rich countries' demand increased due to the easing of Covid-19 lockdowns and expansionary monetary and fiscal policies. Aggregate demand expanded, but supply constrains could not meet demand. Companies were raising wages to attract workers, due to the pandemic-driven labour shortages; temporary expansion of unemployment benefits were introduced. In the USA, in September 2021, workers leaving their jobs for better opportunities elsewhere peaked at 4.4 m according to the Bureau of Labour Statistics. In October 2021, some US businesses were prepared to extend weekly working hours to seven-day week, which helped to enhance supplies (*Financial Times*, 14 October 2021). Supply shortages is a serious problem in the UK; business have faced a slow-down, with labour shortages being the main reason (a million fewer workers than at the beginning of Covid-19). Exports have also been significantly reduced, in view of Brexit and the Covid-19 syndrome. In the European Monetary Union (EMU), business expanded due to no initial labour shortages; the service sector in the EMU expanded the strongest over the last 15 years. More recently, EMU companies have difficulties finding enough workers to meet rising demand, along with shortages of equipment and raw materials. Consequently, EMU companies struggle to keep up with increased demand, thereby prices of goods and services increased. Rising energy prices is another impact on the EMU, and the UK, inflation, in view of shortfalls in gas supplies. Travel restrictions, due to the Covid-19 pandemic, and uncertainty that produces delays in investment projects have not helped supply to meet demand. In view of all these problems in the USA, UK and EMU, upward pressure on inflation emerged.

In the EMU, inflation rose to 5% in December 2021 due to soaring energy prices, restricted supply, high demand and Covid-19. The ECB governing council at its meeting on 09 September 2021 decided to reduce the pace of its €80bn Quantitative Easing (QE) per month at 'a moderately lower pace' and 'step-by-step' reduction, but not pursue tapering, with its interest rate left unchanged. The Fed would start tapering its $120bn-a-month purchase of assets, when meeting its inflation target and the maximum of employment; the Fed's Federal Open Market

Committee (FOMC), at its 22 September 2021 meeting, confirmed it. However, on 04 November 2021, the Fed began its tapering, in view of higher inflation. The frequent statement, the words until now, by the Fed Chair that inflation pose a 'severe threat' to recovery implies that the Fed would increase its interest rate. The Fed Chair, after the 26 January 2022 FOMC meeting, signalled that in March 2022 the federal funds rate will be raised, shrink its bond buying to fight inflation and cool the fast-growing US economy.

The US consumer price index (CPI) increased annually to 7.9% in February 2022, from 7.5% in January 2022, the fastest increase since 1982, due to supply constraints, labour shortages and strong spending. The Bank of England's (BoE's) Monetary Policy Committee (MPC), at its 22 September 2021 meeting, decided on no change of its monetary policies, being in a 'wait and see' inflation-mode. Inflation in the UK was 5.4% in December 2021, with wage rate at 3.8%, according to the Office of National Statistics (ONS; reported on 18 January 2022), due to rising food prices and energy costs.

US, UK and EMU Central Bankers warned that supply shortages would last longer than expected (*Financial Times*, 30 September 2021). Policies are required, but not suppressing demand, which would be counterproductive; enhancing supply is what is needed. Supply disruptions produce slow recoveries, and these are the main drivers of the emerging inflation. Higher interest rates would not reduce inflation, since central banks are ill-equipped to influence supply. Business investment is appropriate, but it does not respond to low interest rates when expectations do not help. Fiscal policy, through capital spending, lower VAT on energy and taxing the profits of energy providers (Befinger, 2022), is a way forward, along with monetary policy coordination.

The OECD's forecast of world economic growth by the end of 2022 of 4.4% would bring GDP in most countries back to pre-pandemic levels. The OECD (*Financial Times*, 02 December 2021) increased its inflation forecasts for the G20 countries because of the Omicron coronavirus variant, from 3.9% to 4.4% in 2022. The OECD advised governments to stimulus packages of investment. At the beginning of the Covid-19 pandemic, Central Banks around the world decided to keep low interest rates, which had been lowered during the Global Financial Crisis (GFC) and continued with Covid-19. However, with the economies rebuilding, after lifting pandemic restrictions, inflation emerged, along with a debate as to whether to end the QE, the relevant precursor of higher interest rates. Initially, the ECB was reluctant to introduce the QE scheme, unlike the BoE and the Fed. In fact, the ECB introduced its QE in 2015, while the other two Central Banks had already undertaken their QE schemes. The ECB reduced its interest rate after the collapse of the Lehman Brothers (September 2008), but increased it in 2011; started reducing it at the end of 2011 to 0% in March 2016, and introduced negative deposit rate in June 2014. The BoE and the Fed reduced their interest rates at the beginning of the GFC and continued so subsequently. Such monetary policies easing should increase the demand for loans, but if economies suffer from poor expectations of economic activity, demand is lacking. Proper coordination of monetary with fiscal policies is necessary.

This contribution focuses on recent economic developments in the USA, the UK and the EMU. Economic policies pursued in these countries over the GFC and Covid-19 are discussed. This would propose that coordination of relevant policies is the best way for future durable economic recovery. After this introduction, we discuss recent and current economic developments and economic policies, followed by our proposal of proper coordination of policies. Finally, we summarise and conclude.

2 Economic Developments and Economic Policies

Recent Developments

Economic policies stimulated the economies over the Covid-19 pandemic to a greater extent than over the GFC. The GFC emerged due to the financial sector's speculative activities. The Covid-19 was a natural disaster. Monetary policy was helpful, and fiscal policy, introduced only late in the GFC, helped to prevent the emerged recession from a depression. However, fiscal austerity, introduced in 2010, did not help. Fiscal policy helped the relevant economies at the outset of the Covid-19 pandemic. Monetary policies also helped the financial systems. The role of Central Banks as 'lenders of last resort' helped the GFC; the Central Banks' intervention restored the financial sectors from the problems that had emerged and caused the GFC. Over the Covid-19, lose monetary policies helped the financial markets to provide liquidity to the private sector. Fiscal policies helped greatly the recoveries. Financial stability policies, changes of banks' reserve requirements, for example, helped.

The US President's March-2021 proposal for $1.9tn stimulus package and $1.2tn infrastructure plan helped economic activity. On 11 August 2021, the Senate voted the $1.2tn infrastructure plan, including fixing roads, rail networks, improve broadband provisions, support climate-change schemes, investment in education and housing. The House of Representatives approved the $1.9tn on 24 August 2021. The House considered the $1.2tn infrastructure bill at the end of September 2021 and passed it on 05 November 2021. The President signed the bipartisan infrastructure bill into law, and he also proposed a new social spending bill for $1.75tn, $555bn of it was for clean-energy investments. Much of the rest was on childcare, health care for the poor and the elderly. The House of Representatives passed this bill on 17 November 2021, but the Senate has not yet.

The IMF (2021a) expects global GDP to be 4.4% for 2022, in relation to 5.9% in 2021; and 3.8% in 2023. The IMF's managing director, Gopinath (2021), confirms that "We estimate the pandemic has reduced per capita incomes in advanced economies by 2.8 percent a year, relative to pre-pandemic trends" (p. 2). In a speech (24 April 2022), she warned that global forecasts for 2022 and 2023 are downgraded in view of the Covid-19 and the Ukraine war.[1]

Economic recovery emerged due to governments' expansionary fiscal policies, and accommodative monetary policies, after abandoning the 2010 austerity. Inflationary pressures emerged in 2021, due to economies returning to business after the Covid-19 relaxation of relevant restrictions. Central Bankers of the USA, UK and EMU argued that the

[1] The OECD's forecasts for the UK's economic growth (08 June 2022, reported in the *Financial Times*, 09 June 2022) are worst amongst the G20 countries, except Russia's, and highest inflation amongst the G7 countries, until 2024, due to high inflation, energy inflation, rising interest rates, increasing taxes, low investment and productivity.

inflationary pressures would be temporary. The BoE Governor (Bailey, 2021) suggested the recovery should not be risked by premature tightening of monetary policy. However, at the G30 meeting of Central Bankers (17 October 2021), the Governor suggested that the BoE would have to act to curb inflation (*Financial Times*, 18 October 2021). The BoE would probably raise its interest rates before it finishes its QE programme, and faster than the ECB and the Fed, due to the Covid-19 pandemic and Brexit. Coordination of economic policies is vital under such circumstances. The BoE's MPC, at its meetings on 4 November 2021, decided to leave its interest rate and QE unchanged. The Governor of the BoE suggested that the evolution of the labour market would be 'crucial' to the interest rate increase. The reason the BoE was not prepared to raise interest rates was due to the expectation that GDP would weaken in early 2022.

In the US, UK and EMU, due to fast rising energy prices and supply constraints, high inflation would persist. Reducing demand, for example, by increasing interest rates and enlarging supply through fiscal action can tackle inflation.[2] Central Bankers voiced inflation fears, with inflation lasting longer than expected; they would proceed with tightening policies. The ECB's approach to rising inflation, though, is in contrast to the Fed's and BoE's, which have signalled tightening their policies. The UK annual CPI rose to 5.5% (January 2022), driven by household energy bills. This put pressure on the BoE to examine the extent to which tightening of its monetary policy is appropriate (reported by the ONS, 17 November 2021). The BoE Chief Economist, Huw Pill, in his speech at the Confederation of British Industry on 26 November 2021, suggested that if the labour market continued to be strong, interest rates would have to increase and inflation would decrease. However, he suggested that in view of the economic uncertainty, the BoE could not decide on whether and when interest rates increase. This depends on how the economy performs, thereby a step-by-step cautious approach to policy is required.

[2] Central Banks cannot control supply-side inflation. If Central Banks ignore it, problems arise. The ECB raised its rates in 2008 and 2011, in view of supply-side factors, which worsened the Great Recession. Increase in interest rates would not prevent inflation increasing, since energy shocks increase. Higher interest rates destabilise the economy.

The labour-market shortages in the UK, USA and EMU imply unit labour costs rising, especially so in the USA (reported in the *Financial Times*, 02 February 2022). In the UK, labour shortages are due to Brexit, with foreign workers leaving the country, and the tough immigration rules, which left companies short of workers; some companies are short of 20% of staff. Job vacancies in the UK increased in the three months to July 2021, as the labour market rebounded from the Covid-19 pandemic; unemployment fell to 4.7% (the ONS, 17 August 2021), which supported wage increases. In August 2021, unemployment in the UK fell to 4.6% (the ONS, 14 September 2021). However, there was then lack of workers, implying that there are not enough workers, rather than not enough jobs.

The Governor of the BoE repeatedly reported that the members of the MPC were careful of the outlook of inflation, and if signs of persistent inflation emerged, the Bank was prepared to employ relevant monetary policies. Broadbent (2021), the Deputy Governor of the BoE, in a speech (22 July 2021), suggested that in view of emerging wage growth policy-makers should pay close attention. However, "in the past, the UK labour market has often proved sufficiently flexible to absorb shocks, and reallocate resources—for example after the GFC—without a significant and lasting effect on the NAIRU, or on wage growth" (Broadbent, 2021, p. 20). Still, Broadbent (op. cit., p. 21) suggested that the MPC should be looking at the demand and pay close attention to the labour market. The Governor of the BoE (Bailey, 2021), suggested, "During the Covid crisis, we have seen a simultaneous and substantial fall in both demand and supply. But, all the indications are that for both demand and supply the decline will be temporary" (p. 1). This is so, since Covid-19 does not destroy long-run economic capacity; and where the recovery in demand exceeds supply, it is possible that this difference is temporary. However, the Governor suggested both the UK demand and supply will continue to recover.

Two members of the MPC (Ramsden, 2021; Saunders, 2021) suggested that UK inflation needed to be tackled, and monetary policy should be tightened early due to the rising inflation. This would take three years to produce a balanced demand and supply and inflation to come down to 2% (Saunders, 2021). Haskel (2021) distanced himself from Ramsden (2021) and Saunders (2021) and argued that there was no need to remove the BoE stimulus, despite rising inflation. The response of the Governor of the BoE was that the MPC could sell back government bonds before increasing the Bank's main interest rate. However, in terms of when and how precisely the MPC would act so, its response at the 05 August 2021 meeting was 'some modest tightening' of its monetary policy in view of relevant forecasts that inflation would rise to 4% by the end of 2021, to be transitory. This expected rise of inflation compares to its previous forecast of 3%, as the economy rebounded from the Covid-19 pandemic slowdown (the Committee forecasted inflation to be 3.3% in 2022, 2.3% in 2023 and 1.9% by the middle of 2014). The forecast of 4% inflation was due to supply being behind demand and labour shortages. The Committee put the labour market at the centre of its judgement, was concerned about wage inflation and prepared to monitor closely potential wage pressures. The Committee also indicated that with unemployment having peaked, allowed it to begin discussing raising interest rates gradually, in order to keep inflation at its 2% target. The committee, though, kept its interest rate unchanged and decided to continue with its QE at £150bn until the end of 2021. However, at its meeting on 05 August 2021, the Committee provided guidance of what to undertake when changes were required, and how to unwind the QE plan, namely to pursue QE tightening so that the interest rate reached 0.5% and the BoE would then stop reinvesting bonds that mature. After the rate of interest reached 1.5%, selling of bonds would be undertaken. Clearly, the main policy tool of the BoE remained its interest rate.

The UK inflation experience is similar to that of the USA, where the annual rate of inflation of 5.4% emerged in June 2021, due to the lifting of the Covid-19 pandemic restrictions, causing demand to exceed supply. Inflation would fade as supply reached demand (due to the policies of the President) and workers returned to the labour force, thereby reducing pressures on wages and inflation. Additionally, the US Treasury Secretary suggested that inflation in the USA was transitory (*Financial Times*, 02 November 2021). Inflation in the EMU was more modest than in the UK and the USA. It was in the EMU, in June 2021, 1.9% (higher inflation rates emerged later in 2021, but not as high as in the UK and USA).

This could be due to the EMU being behind the UK and the USA in terms of opening its economy from the Covid-19 pandemic.

These developments put monetary policy-makers into a dilemma. Should they attempt to fight inflation or continue to expect it 'transient'? Either decision has its problems for Central Banks. If they are right about 'transient' inflation, they risk increasing the rate of interest unnecessarily. If inflation became a serious problem and jeopardised recovery, other policies, like fiscal policy, would be necessary. The Central Banks of the UK, the USA and the EMU were firm on 'transient' inflation, but they suggested that if data in the future indicated that policies were needed, monetary policies would be undertaken.

Relevant data (*Financial Times*, 31 July 2021) showed that the lifting of lockdowns in the EMU produced a growth rate of 2% in the three months to June 2021, with unemployment falling to 7.7% from 7.9% in May 2021. Subsequently, business and consumer confidence rebounded strongly, and retail sales reached their pre-Covid-19 levels. Supply constraints pushed CPI inflation to 4.9% in November 2021, up from 1.9% in June 2021, and above the 2% ECB inflation target. The ECB expected inflation to drop back to its target in 2022. However, the EMU was at a critical stage from the point of view of its labour market, because companies lacked 'skilled labour'.

The US Department of Commerce reported that GDP rose 1.6% in the second quarter from the first quarter of 2021, accelerated to 6.9% in the final quarter of 2021 (aided by consumer spending). Strong gains in the second half of the year due to increased demand, which outstripped supply, in view of economic stimulus and poor supply, thereby caused inflation. Similarly, in the UK and EMU, with increased demand there being more modest. House prices in the three countries rose substantially. However, the USA's increase in house prices was not as dangerous as in the pre-GFC that led to the GFC; the US housing lending was not as responsible as in the case of the GFC (mortgage debt is currently around 65% of household income, compared with roughly 100% in 2007 [*Financial Times*, 25 June 2022]). Strong housing demand in view of cheap borrowing, low mortgage rates and limited supply increased house prices to record highs, but that increase was expected to slow by the mid-2022. Also, in the UK, due to high inflation, slowing GDP and rising mortgage rates (*Financial Times*, 19 May 2022). US consumers were facing rising prices, because of their increased spending, due to the fiscal stimulus and employment growth. Household finances were in their best shape for decades; the personal saving rate at 26.9% in March 2021 was reduced to 9.4% by August 2021 (*Financial Times*, 02 August 2021). Low interest rates and QE produced higher prices, especially housing prices, than boosting investment. In the EU, the ECB warned (Financial Stability Review, 25 May 2022) that house prices there were due for correction in view of rising interest rates due to higher inflation.

The US President, on 28 May 2021, proposed $6tr budget proposal—highest federal government spending, in relation to GDP, since World War II. The package included two initiatives, the American Jobs Plan and the American Families Plan. The President's infrastructure part of his proposal was of two parts. One would be devoted to roads, bridges, broadband fibre, ports, airports, water facilities, climate, building rehabilitation, an electric-vehicle charging network and other necessary investments that the private sector was poorly placed and unwilling to make. The other was on child benefits, universal pre-school, paid family leave and subsidies for childcare and community college.

The 'Cornwall Consensus', an advisory memo circulated in view of the G7 meeting on 11–13 June 2021 in Cornwall, UK, should have accounted and taken on board the supply chains in addition to other considerations. Climate groups were also disappointed because of luck of specific plans for climate change. Climate-change plans are a global requirement since climate change is a global thread, which requires national plans for climate changes. Climate plans to reduce the net global carbon emission to zero by 2050, limit global warming to achieve a 1.5 °C limit and climate finance are three aspects of the main issues of the November 2021 Conference of Parties (COP26) meeting in Glasgow, Scotland.[3] At the end of the meeting (13 of November 2021), despite disagreements in terms of how to approach the goal of reducing global warmings to 1.5 °C, countries agreed to keep the limit to 1.5 °C global heating. More progress, however, is necessary in view of the disagreements on cutting

[3] G20 representatives had preliminary talks at a meeting in Rome, before joining another 100 heads of governments on 01 November 2021 in Scotland, for the COP26 climate change talks.

greenhouse gas emissions by 2030, and other disagreements, which will be discussed at the 2022 COP27 meeting in Egypt.

Climate change is likely to influence disproportionately the people at the bottom of inequality. Relevant policies are necessary, and countries should submit fresh and ambitious commitments. The UN's Intergovernmental Panel on Climate Change (IPCC) landmark report (published on 09 August 2021) supports the suggestion for relevant policies. Governments should play a key role in this respect, and countries' collaboration is vital. Developed countries should raise the $100bn a-year commitment to help developing countries to manage climate changes. Governments are actually under pressure to take action on climate plans. Barnett et al. (2021) suggest that in climate economics some authors "have emphasized uncertainty in the climate system's dynamics and how this uncertainty could create fat-tailed distributions of potential damages" (p. 1). Barnett et al. (op. cit.) conclude that these uncertain considerations should be of 'first-order concerns', and not ignored.

Climate change may affect financial stability if banks are exposed to assets whose values are influenced by climate change. When monetary policy is involved with climate change, the independence of Central Banks should be abandoned, and Central bank policies should go beyond inflation targeting. Coordination of monetary and fiscal policies should be "supportive and consistent with government policies on environmentally sustainability and climate change" (Sawyer, 2022, p. 16). Relevant policies should include 'green QE' in terms of asset purchases from companies with appropriate green considerations; also capital requirements on bank lending, based on climate criteria. Central Banks should support governments' relevant policies on climate change (Bartholomew & Diggle, 2021). Central Banks' climate policies are not substitutes of governments' climate policies, but complements. The financial sector should focus on allocating funds to environmentally friendly investments (Fontana & Sawyer, 2014).

The US economy is recovering from the pandemic more quickly than policy-makers expected, and more than in the UK and EMU. The May 2021 US unemployment rate fell to 5.4% from 6.1% in April 2021, implying that the shortage of workers, which contained the US economic recovery, was eased, in response to the President's fiscal stimulus, with