

Macroeconomic policies and OECD policy advice during the COVID-19 pandemic

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No. 1857

OECD Economics Department Working Papers

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This version replaces the document originally published on 18 February 2026, as the disclaimer for Israel has been added on page 2.

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ABSTRACT/RÉSUMÉ

Macroeconomic policies and OECD policy advice during the COVID-19 pandemic

The global health crisis triggered by the COVID-19 pandemic was met with unprecedented policy responses by governments, including massive fiscal and monetary policy stimulus. This paper documents and reviews the OECD's macroeconomic assessment and policy advice contained in its economic flagship publication, the Economic Outlook. The three main findings are: First, the recovery was swifter and inflation was stronger and more persistent than anticipated. Second, OECD policy advice evolved from maintaining a very accommodative stance throughout 2020 to reducing fiscal support and adopting a more restrictive monetary policy in late 2021. Third, the policy advice was significantly influenced by real-time uncertainty about the evolution of the pandemic and the strength of the recovery due to subsequent upward data revisions.

Keywords: Economic Policy, Monetary Policy, Fiscal Policy, COVID-19 pandemic.

JEL codes: E52, E61, E62, E63, E65, F42

Les politiques macroéconomiques et les conseils dans la matière de l'OCDE pendant la pandémie de COVID-19

La crise sanitaire mondiale déclenchée par la pandémie de COVID-19 a suscité des réponses politiques sans précédent de la part des gouvernements, notamment des mesures de relance budgétaire et monétaire massives. Ce document analyse l'évaluation macroéconomique et les recommandations de l'OCDE présentées dans sa publication économique phare, les Perspectives économiques. Les trois principaux constats sont les suivants : premièrement, la reprise a été plus rapide et l'inflation plus forte et plus persistante que prévu ; deuxièmement, les recommandations de l'OCDE ont évolué d'une position très accommodante tout au long de 2020 à la réduction du soutien budgétaire et à l'adoption d'une politique monétaire plus restrictive fin 2021 ; troisièmement, ces recommandations ont été fortement influencés par l'incertitude en temps réel quant à l'évolution de la pandémie et la force de la reprise, en raisons des révisions à la hausse ultérieures des données.

Mots-clés : Politique économique, Politique monétaire, Politique budgétaire, pandémie de COVID-19.

Codes JEL: E52, E61, E62, E63, E65, F42

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Macroeconomic policies and OECD policy advice during the COVID-19 pandemic

A retrospective assessment

Michael Koelle, Kyongjun Kwak and Jakob Brunnengräber¹

Introduction

The COVID-19 pandemic triggered a once-in-century global health crisis, with millions of lives lost. Governments took unprecedented measures to contain the spread of the virus. Large shares of the population in OECD countries were under lockdown by April 2020, resulting in large drops in economic activity (OECD, 2020^[1]). Prolonged lockdowns in advanced economies were sustained by significant support to households and firms and other monetary and financial measures (OECD, 2021^[2]). These support measures, together with the mass adoption of teleworking (Adrian et al., 2024^[3]), enabled many workers to stay home and help contain the spread of the virus, especially before effective medical interventions to protect people from the virus, in particular vaccines, became available.

Helped by fiscal support and accommodative macroeconomic policies, the rebound from the pandemic was faster than expected as economies reopened, although there was significant uncertainty about the effectiveness of vaccines and the robustness of the removal of mobility restrictions (OECD, 2021^[2]). The recovery was accompanied by a strong rise in inflation, which proved sharper and more prolonged than initially anticipated. At first, disruptions in container shipping times and costs and a global microchip shortage pointed to temporary supply constraints as the driver of price pressures, which optimal monetary policy would look through (Beaudry, Carter and Lahiri, 2023^[4]). However, the acceleration of inflation in 2022 following Russia's invasion of Ukraine led to a sharp tightening of monetary policy, following decades of price stability and low interest rates in the major economies (Reis, 2022^[5]). Substantial fiscal stimulus increased public debt in many countries, at a time when higher interest rates also pushed up borrowing costs. These developments have raised questions about the appropriateness of the extent and duration of macroeconomic policy support during the COVID-19 pandemic.

¹ The authors are economists in the OECD Economics Department. Corresponding author: Michael.koelle@oecd.org. Our thanks to Tim Bulman for providing inputs on the COVID-19 Policy Response, Tomás Opazo Valenzuela for outstanding research assistance, Rosario Hernando Cruz for editorial assistance, Manuel Bélin for his help in extracting historical vintages from Economic Outlook databases, as well as Luiz de Mello, Isabell Koske, Nigel Pain, David Turner, Filippo Cavassini, Manuel Bélin (all ECO) and Wessel Vermeulen (CFE) for helpful comments.

Against this background, this paper retrospectively looks at the OECD macroeconomic assessment and policy advice during the COVID-19 pandemic, focussing on four editions of the bi-annual OECD Economic Outlook (EO) covering the period from June 2020 to December 2021. It assesses the macroeconomic context, the economic projections and policy advice contained in the Economic Outlook, and the factors shaping this advice. The main findings are:

- The recovery from the COVID-19 pandemic was swifter and inflation was stronger and more persistent than anticipated on the basis of a comparison of successive EO vintages. A main factor was the strong underestimation of GDP levels during 2020 and 2021 in early releases of national accounts data. The rise of inflation that took place in 2021 was consequently underestimated by the OECD, but also by other major forecasters. A large degree of estimated slack in the economy and the assumed absence of further supply shocks were given as the main rationale for this assessment.
- OECD policy advice evolved during the pandemic from advocating for a very accommodative stance throughout 2020, when the focus was on helping economies facing a deep and sudden downturn, towards recommending a tighter fiscal stance and less accommodative monetary policy in the second half of 2021. This was accompanied by a change in the assessment underlying the policy advice, moving from considerations about preserving room for factor reallocation in 2020 to concerns about fiscal sustainability and price stability in 2021.
- Four contextual factors shaping the OECD policy advice around this turning point in mid-2021 stand out:
 1. Massive national vaccination campaigns were just taking off, promising an end to pandemic restrictions, but under significant uncertainty about their timing, effectiveness, availability, and usage in different countries.
 2. In the period leading up to the pandemic, inflation expectations had been well-anchored for a long time in many OECD economies, and inflation had been undershooting its target, causing policy concerns about inflation being “too low”, which created a certain tolerance for a temporary overshooting of inflation, including in some monetary policy frameworks.
 3. Supply bottlenecks that appeared during the economic reactivation of 2021, such as in shipping and semiconductor supply chains, were judged to be of temporary nature.
 4. The strength of the pandemic recovery was missed by indicators available at the time. Mismeasurement of GDP translated into an overestimation of the size of the (negative) output gap. Another standard indicator of economic slack, the unemployment rate, ceased to be informative during the pandemic because it lost its predictive power of the output gap, even if the latter were correctly measured.
- The position in the macroeconomic cycle – which subsequently turned out to be misapprehended – was repeatedly cited in the May 2021 Economic Outlook as a major factor in the judgement call to continue advocating for accommodative macroeconomic policies. Due to data indicating ample economic slack, the ongoing observed rise in inflation was understood as a transitory phenomenon, driven by temporary supply restrictions and transient factors in specific sectors, rather than a harbinger of underlying broad price pressures.
- Retrospectively, the formulation of policy advice might be improved with stronger incorporation of explicit conditioning assumptions and risk management criteria, the consideration of alternative indicators relevant for the nature of the shock, a retrospective assessment of the informativeness of such indicators during the COVID-19 pandemic, and a better appreciation of the globally synchronised nature of the economic shock and rapid recovery of economies, which might have resulted in more accurate forecasts.

This paper is organised into three substantive sections, each corresponding to one set of analysis and findings. The first section examines the recovery and rise in inflation as understood in economic projections, real-time data, and ex-post data revisions. It also documents the macroeconomic support policies OECD countries undertook at the time. The second section classifies and describes the macroeconomic policy advice given to individual countries in the OECD Economic Outlook. The third section discusses contextual determinants of macroeconomic policy advice referenced in the relevant editions of the Economic Outlook. A final section provides a brief assessment and concludes.

The recovery was swifter and inflation was more persistent than anticipated

The strength of the recovery from the pandemic was long underestimated

According to the latest data, real GDP in the average OECD country recovered to its pre-pandemic level five quarters after the onset of the pandemic (Figure 1). By the end of 2021, GDP levels had caught up to what was implied by pre-pandemic trends. This rapid and strong recovery almost took a stylised “V-shape”, with the recovery almost as rapid as the fall of economic activity in the first half of 2020.

This rapid and strong recovery was largely unanticipated. Projections foresaw a much longer slump in activity, especially those a few months into the pandemic (the grey lines in Figure 1). At this time, the true extent of the economic impact of lockdowns was not yet known; it turned out to be overestimated by several percentage point for the average economy. Moreover, the General Assessment of the June 2020 OECD Economic Outlook argued

The crisis will cast a long shadow over the world and OECD economies. By 2021, it will have taken real income per capita in the majority of OECD economies back to 2013 levels in the double-hit scenario and to 2016 levels in the single-hit scenario.

(OECD, 2020^[1]), p. 14

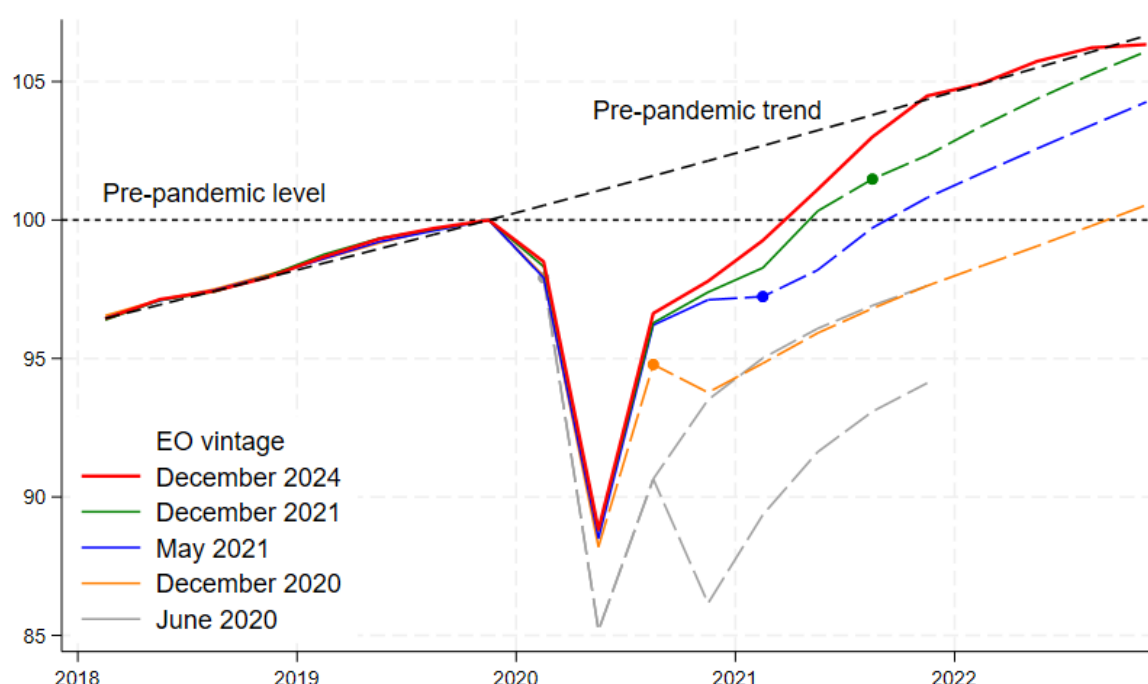
This pessimistic assessment was informed by historic comparison. The health situation was seen as comparable to the Spanish flu pandemic of 1918-19 and ridden with large uncertainty. The economic situation – the fall in GDP, investment, and international trade; as well as the underlying economic mechanisms – was often compared to the 2008/09 global financial crisis and earlier episodes of economic crises, such as the Great Depression, which had caused a large and lasting slump and activity (Pain et al., 2014^[6]; Chen, Mrkaic and Nabar, 2019^[7]):

The global economy is now experiencing the deepest recession since the Great Depression in the 1930s, with GDP declines of more than 20% in many countries during shutdowns and a surge in unemployment.

(OECD, 2020^[1]), p. 10

Figure 1. Real-time data and projections systematically and persistently underestimated GDP

Real GDP, 2019Q4 = 100, average OECD country



Note: The chart shows the evolution of real quarterly GDP in the average OECD country across different vintages of the OECD Economic Outlook databases. Solid line segments indicate observed data associated to each EO vintage (which may have been revised in a later vintage), dashed line segments indicate OECD projections, and dots indicate the quarter when the corresponding EO was published. The June 2020 projections foresaw two scenarios, with a single and multiple pandemic waves, respectively.

Source: OECD Economic Outlook, vol. 107-115; and OECD calculations.

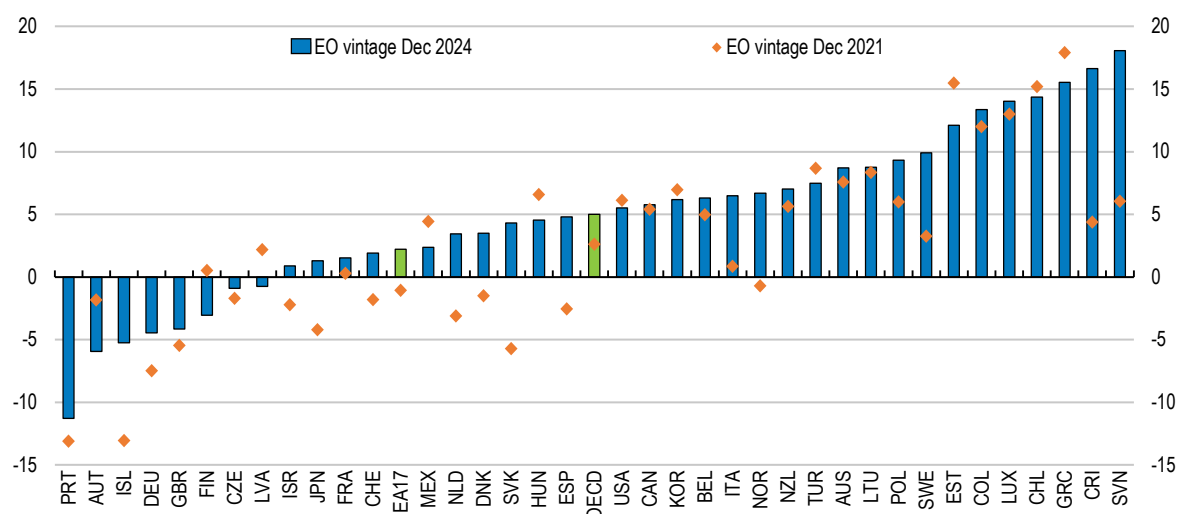
A similar underestimation of the economic recovery characterised all the EO editions in the analysis period (Figure 1). For example, by December 2020, the degree of the downturn in the second quarter of 2020 was well known. Yet the EO projected for the average country that the level of GDP in end-2020 would still be more than 5% below pre-pandemic levels (the orange dashed line segment in Figure 1). Moreover, a return to pre-pandemic levels was not projected until late 2022, almost 3 years after the onset of the pandemic. This echoes the path of GDP in the average OECD country during the global financial crisis, when GDP took more than 3 years to recover to its pre-crisis level (Annex Figure A.1.).

A compounding issue was that not only projections but also the real-time data, underestimated the degree of the recovery that had already taken place. For example, the available data in December 2020 (the orange solid line segment in Figure 1) indicated that output in the third quarter had recovered to 94.8% of pre-pandemic levels, while the most recent data (the red line) indicate a recovery to 96.2%, or 1.4% percentage points more. The underestimation of activity in first GDP releases became even more significant in May 2021, when national account releases for 2021Q1 that were available at the time (the blue solid line segments) indicated that GDP was 3% below pre-pandemic levels whereas, according to the latest data revisions, the gap was less than 1%.

Translated into annualised growth rates, these differences imply that in the first quarter of 2021, growth in the average country was almost twice as high (5%) than what was suggested by the releases of official GDP figures available at the time (Figure 2). Differences were even more striking for some individual countries. For example, Slovenia was thought to grow at 6% when it really grew at 18.1%, Costa Rica was thought to grow at 4.4% but grew at 16.6%.

Figure 2. GDP was subject to significant revisions during the recovery from the pandemic

Real GDP growth, quarter-on-quarter, annualised, %, 2021 Q1



Note: OECD excludes Ireland due to the significant influence of multinational firms on Irish GDP in 2021. EO110 dates from December 2021, and EO116 from December 2024.

Source: OECD Economic Outlook, vol. 110 and 116; and OECD calculations

The rise of inflation was underestimated

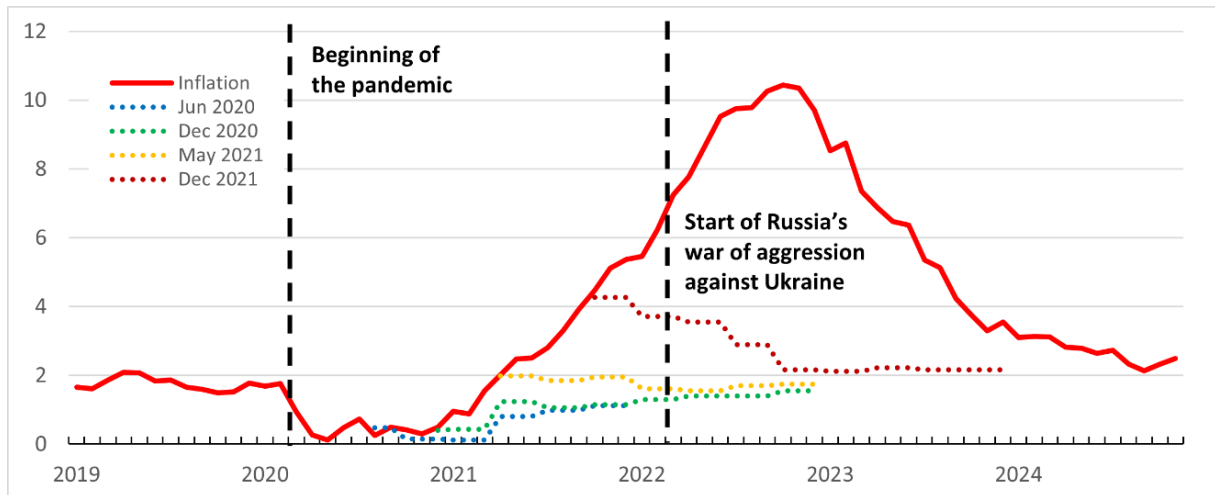
Inflation projections repeatedly underestimated actual inflation (Figure 3). Even before Russia's war of aggression against Ukraine, annual inflation in the median OECD country reached 5.4% in December 2021. Projections at this time judged inflation to have reached its peak – at the level of the last known inflation datapoint from October, which was around 4.5% percent for the median country – and to return to 2% within a year, a level of inflation which constitutes the inflation target or midpoint of the target range for many countries. Earlier EO vintages similarly saw 2% as the terminal point of inflation.

While OECD projections evolved across vintages of the EO, they underestimated the rise of inflation. For the one inflation datapoint projected throughout all four EO vintages, average annual inflation for 2021, only the latest EO in December 2021 – when most monthly datapoints were already known – had a projection close to the actual, just below 3% (Figure 4). Even in June 2021 inflation was projected to fall below 2%. Projections made early on during the pandemic in 2020 were even lower, around 1%, possibly reflecting the overestimation of the initial GDP shock as well as the very low inflation observed in 2020, which was expected to linger.

The errors in aggregated Consensus Forecasts were similar to those in OECD projections (Figure 4). An exception is the early pandemic period, where uncertainty was enormous, and OECD projections overestimated the fall in GDP (see above) to a larger degree than Consensus projections. The picture from Figure 4, which is for the median country and where therefore forecast errors for individual countries are averaged out, is confirmed by a country-by-country analysis of standard forecast performance metrics such as the standard deviation and RMSE of forecast errors (Annex Table A.1). Similarly, the 2021 surge in inflation was not anticipated by other forecasters including the IMF and major central banks (IMF, 2023^[8]; Chahad et al., 2022^[9]).

Figure 3. OECD inflation projections repeatedly understated actual inflation

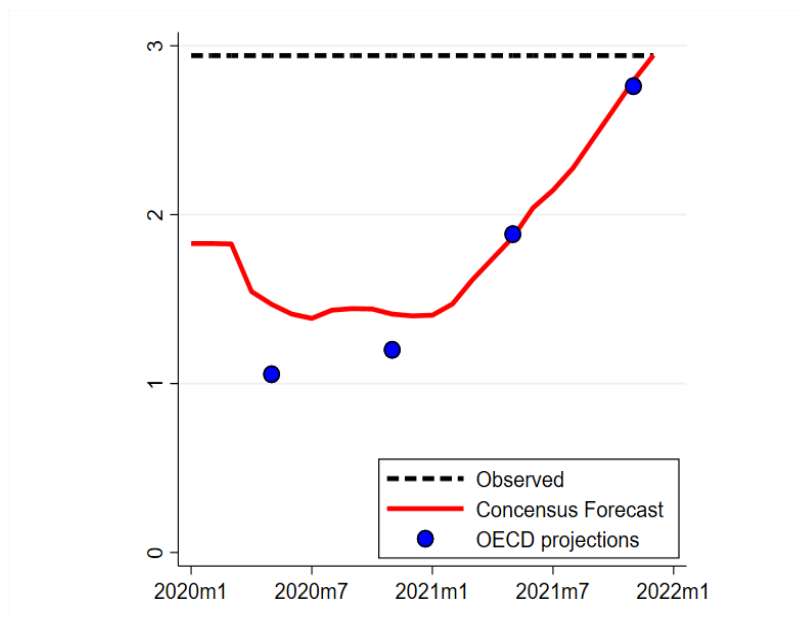
Inflation, OECD, year-on-year percent changes in the consumer price index



Note: OECD median. The dotted lines represent the median of projected inflation of the 36 countries excluding Australia and New Zealand.
Source: OECD, Monthly Economic Indicators database; OECD Economic Outlook 107-110; and OECD calculations.

Figure 4. The rise in inflation was underestimated by all major market observers

Average annual inflation, 2021, average OECD country



Note: Unweighted average of 37 OECD countries excluding Türkiye.
Source: OECD Economic Outlook, vol. 107-110; and Consensus Forecast.

A retrospective analysis in the November 2022 EO found that around half of the rise in inflation during 2020-21 was supply-driven, and the other half demand-driven (OECD, 2022_[10]). The underestimation of the degree of the recovery likely contributed to an under-appreciation of demand pressures. At the same time, by definition, analysts were unable to anticipate the series of supply shocks that would hit the world

economy after the initial shock of the COVID-19 crisis, including the blockage of the Suez Canal in March 2021 and other disruptions to international shipping, as well as shortages of key components in many industrial goods, such as semiconductors. These two factors shaped the projected path of inflation, as the June 2020 Economic Outlook clearly explained:

Inflation is expected to remain low in the absence of protracted supply cuts (including oil), reflecting subdued demand.

(OECD, 2020^[1]), p. 44

A similar argument was repeated a year later in May 2021:

Signs of higher input cost pressures have appeared in recent months, but sizeable spare capacity throughout the world should prevent a significant and sustained pick-up in underlying inflation. The recent upturn in headline inflation rates reflects the recovery of oil and other commodity prices, a surge in shipping costs, the normalisation of prices in hard-hit sectors as restraints are eased, and one-off factors such as tax changes, and should ease in the near term.

(OECD, 2021^[2])p. 12

Fiscal and monetary policy remained accommodative until late 2021

The early fiscal response to the crisis was strong across OECD countries. By March 2020, nearly all had announced at least one measure to support firms and households, and a large majority had announced measures to protect jobs. For firms, most countries relied on fiscal transfers and tax instruments, such as deferrals or cuts in taxes and social security contributions. For households and individuals, governments widely used income and in-kind support, mostly channelled through existing schemes such as unemployment insurance with extended eligibility. To protect jobs, nearly all countries used job retention schemes, with three-quarters having pre-existing provisions in place (Bulman and Koirala, 2020^[11]; OECD, 2021^[12]).²

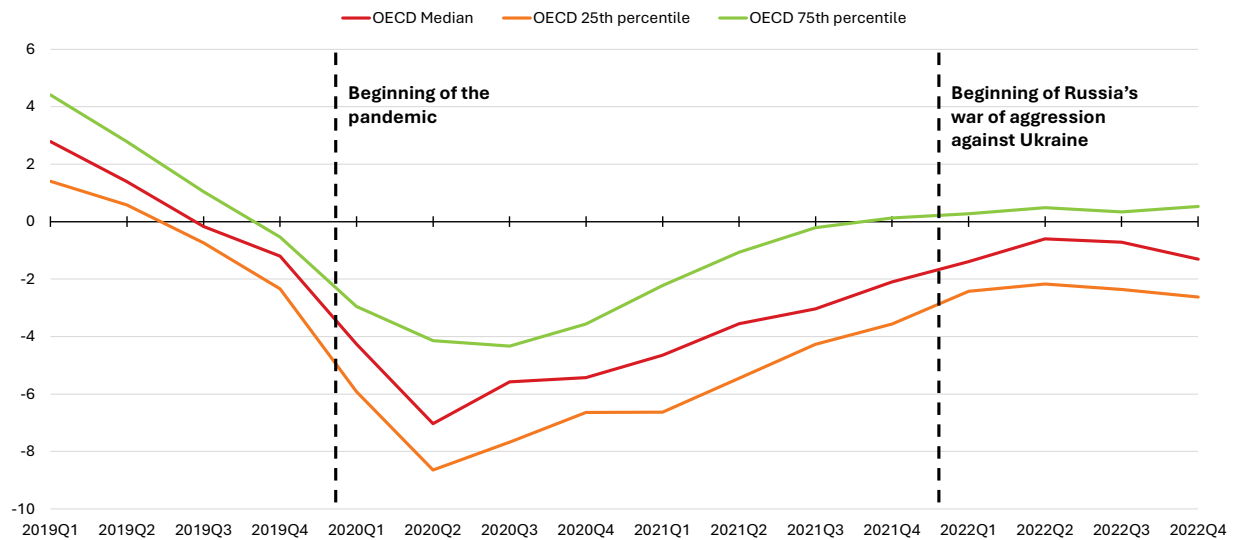
The scale of support programmes, combined with declining economic activity and tax revenues, led to large primary deficits. In Q1 2020, the median primary balance across the OECD stood at -4.3 per cent of GDP and reached a low of -7 per cent in Q2 2020 (Figure 5, Panel A). As the health crisis and sanitary restrictions wore on, many countries targeted policy measures to firms and jobs in the most affected sectors and/or small and medium-sized enterprises. The recovery of economic activity and increased targeting of support led to a gradual improvement in primary balances. Nevertheless, in most countries, deficits remained higher than pre-pandemic levels throughout 2021.

In the early stages of the pandemic, central banks across the OECD played a key role in mitigating the shock, with a rapid easing of monetary policy, which, in many countries, had already been accommodative before the pandemic. The median central bank policy rate across the OECD fell from 1.4% in Q4 2019 to 0.25% in mid-2020 (Figure 5, Panel B). Central banks that had policy rates already near or below zero launched or expanded large-scale quantitative easing programmes and issued strong forward guidance. In many OECD countries, debt moratoria and loan guarantee schemes, often involving coordination among central banks, governments, and the financial sector, helped maintain financial stability by keeping credit flowing and preventing forced deleveraging and bankruptcies among firms whose operations were restricted (OECD, 2020^[13]).

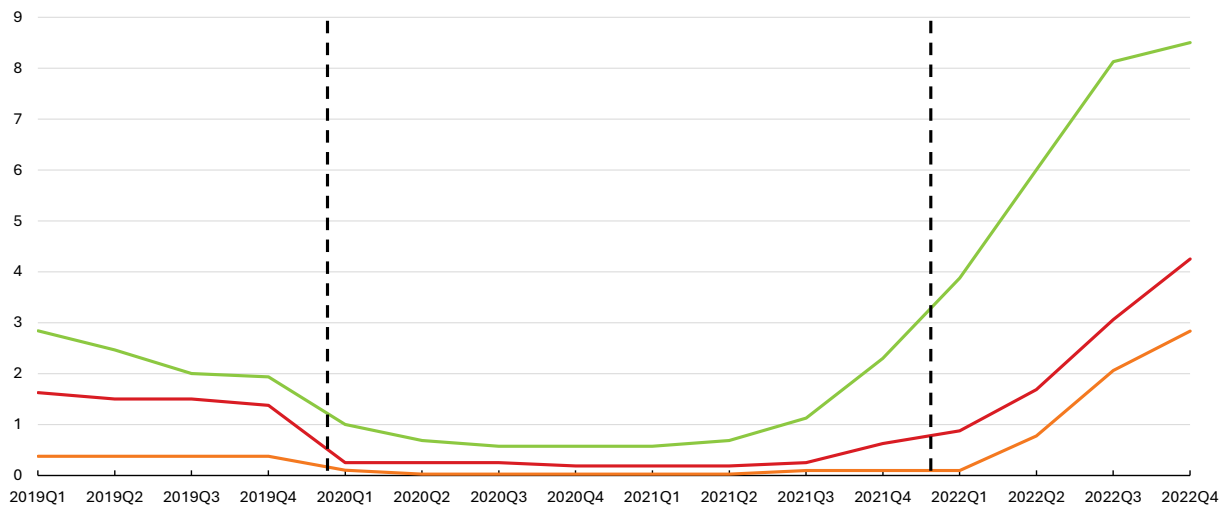
² The OECD Economics Department recorded countries' key policy announcements responding to the COVID-19 crisis in the OECD COVID-19 Policy Response Tracker from January 2020 to mid-2021. The tracker covered the 38 OECD member and 10 non-member countries.

Figure 5. Strong deficit spending and very low interest rates remained in place until late 2021

Panel A: General government primary balance, % of GDP



Panel B: Central bank policy rate, %



Note: A. Excludes Chile, Colombia, Costa Rica, Mexico, and Türkiye due to missing time series on primary government spending. B. Includes the 17 OECD euro area countries as one jurisdiction.

Source: OECD Economic Outlook 116, OECD calculations.

In the second half of 2020 and throughout 2021, central banks generally maintained broadly accommodative policies. In major OECD economies, asset purchase programmes continued, although some central banks reduced the pace of net asset purchases, which some observers interpreted as a tightening of non-conventional monetary policy instruments (OECD, 2021^[14]). However, interest rates remained highly accommodative in most countries, even as fiscal policy gradually consolidated in 2021. In Q4 2021, with inflation already above targets in many OECD countries and rising at different speeds, policy interest rates began to diverge. In the 25th percentile of OECD countries, rates remained near zero, while those in the 75th percentile increased sharply from 1.1% in Q3 to 2.3% in Q4. In the euro area, where the European Central Bank (ECB) sets monetary policy for 17 OECD countries, policy interest rates remained unchanged throughout 2021. However, heterogeneous inflation across member countries posed unique challenges for monetary and fiscal policy coordination in the euro area (Box 1).

Box 1. Policy coordination became increasingly challenging for the euro area in 2021

In response to the COVID-19 crisis, the ECB pursued a highly accommodative monetary policy. Between 2020 and 2022, it maintained the very low interest rates that had been in place since 2019, keeping the deposit facility rate at -0.5 per cent, and the interest rates for refinancing operations and the marginal lending facility at 0 per cent and 0.25 per cent, respectively (ECB, 2025^[15]). Through quantitative easing, it provided EUR 1 850 billion of additional liquidity under the temporary Pandemic Emergency Purchase Programme (ECB, 2025^[16]).

On the fiscal side, the European Commission and Council activated the general escape clause of the European fiscal rules (the Stability and Growth Pact) in March 2020 to increase the budgetary flexibility of member countries for their emergency responses. The EU also supported member states through different emergency instruments. The most important fiscal support on EU level came from the Next Generation EU (NGEU) which was implemented from 2021 and focused on the post-pandemic recovery (European Commission, 2021^[17]). The main facility of the NGEU, the Recovery and Resilience Facility, running until 2026, was set at EUR 723.8 billion (around half in grants).

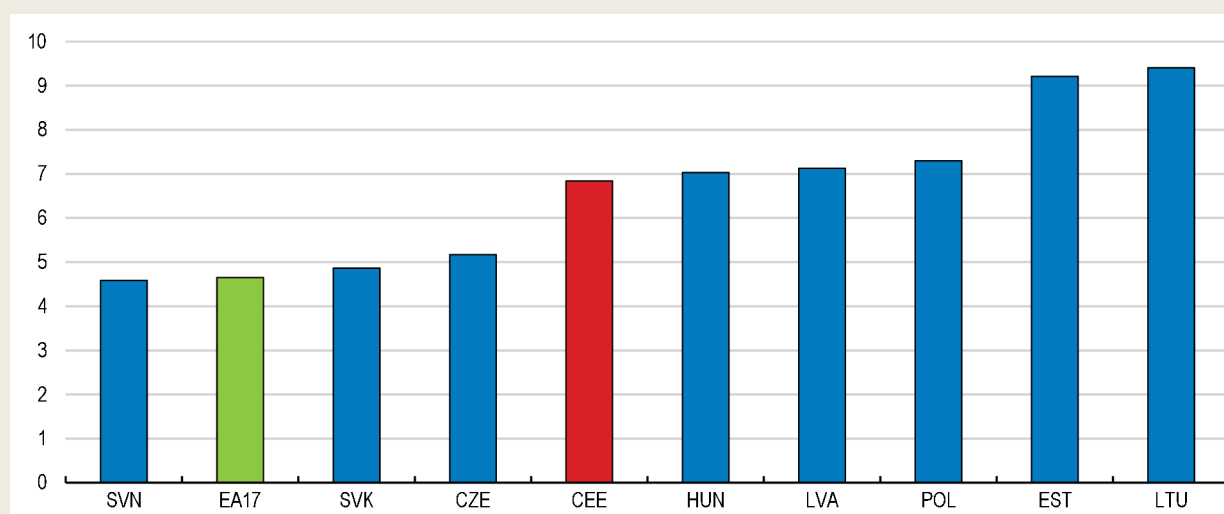
The strong joint emergency response of monetary and fiscal policy, alongside the collaborative approach to recovery at EU level, helped mitigate the pandemic's economic and social impact. However, as the economic recovery gained momentum, inflationary pressures started to emerge across countries to varying degrees in mid-2021. Inflation in Central and Eastern Europe (CEE) began rising earlier and reached higher levels than in other European countries, averaging 6.8% in the last quarter of 2021 – above the euro area average of 4.7% (Figure 6). This posed challenges for coordination between national and euro area-level macroeconomic policy responses, especially for smaller economies without an independent monetary policy and with a small weight in the euro area Harmonised Index of Consumer prices (HICP), targeted by the ECB. In 2021, the combined weight of the five CEE euro area countries was only 2.3% in the HICP, markedly lower than the 81.8% weight of the top five economies.

Fiscal policy might have been expected to step in to help. Examining policy responses of countries in the region, a majority of CEE euro area countries (Lithuania, Estonia and Slovenia) indeed turned to fiscal consolidation. This contrasts with the response of non-eurozone CEE countries, where two out of three (Czechia, Hungary) opted for almost no fiscal consolidation but raised policy interest rates instead and the third country (Poland) undertook both fiscal and monetary consolidation (Figure 7).

The anticipation and subsequent disbursement of the NGEU funds in 2021 affected the macroeconomic policy mix. The expected NGEU inflows to CEE countries – and first disbursements in late 2021 – implied a substantial fiscal stimulus at the time when national fiscal policies were consolidating, reaching between 2.8% of annual GDP in Estonia and 10.4% of annual GDP in Poland.

Figure 6. Most Central and Eastern European countries experienced relatively high inflation

Inflation, per cent, selected countries in Central and Eastern Europe, 2021 Q4

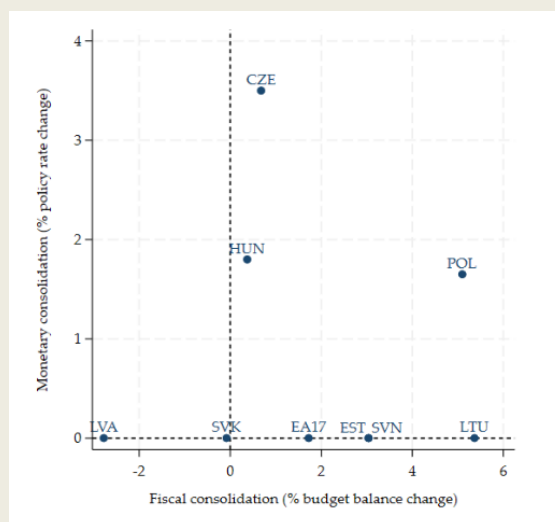


Note: CEE indicates the non-weighted average of eight OECD member countries in Central and Eastern Europe. EA17 denotes the weighted average in seventeen OECD member countries in the euro area. Inflation is calculated based on the Harmonised Index of Consumer Prices.

Source: Eurostat; and OECD calculations.

Figure 7. Non-euro area CEE countries started monetary tightening in 2021

Annual change in policy rate and fiscal balance change, selected countries in Central and Eastern Europe, 2021



Source: OECD Economic Outlook, vol. 113; and OECD calculations.

OECD policy advice evolved during the COVID-19 pandemic

An analysis of policy discussions in the Economic Outlook country notes illustrates the composition and evolution of the OECD macroeconomic policy advice during the COVID-19 pandemic (Box 2). Together

with the biannual EO's general assessment of the global macroeconomic situation, which discusses global policy requirements as well as those in major economies, the notes contain country-specific fiscal and monetary policy advice in a highly systematic and harmonised way, formulated and published for all OECD member countries at the same time. This provides a unique opportunity to follow the evolution of policy advice.

Box 2. Economic assessments and policy advice in Economic Outlook country notes

The EO country notes have the advantage that they contain economic assessments and fiscal and monetary policy advice in a highly systematic and harmonised manner. Macroeconomic projections and other economic variables contained in the database vintage associated with each EO, such as estimates of the output gap, contain the OECD's assessment of the state of each economy at the time when recommendations were formulated. Therefore, data reflect the information as available at the time of the release of the EO.

The analysis focusses on the 38 OECD member countries during the years 2020 and 2021 that correspond to the height of the pandemic and the first phase of the recovery. 2022 is not covered as Russia's invasion of Ukraine constituted a second major macroeconomic shock which affected countries in different ways. The analysis period is covered by four editions of the OECD Economic Outlook (EO107 in June 2020, EO108 in December 2020, EO109 in May 2021, and EO110 in December 2021). Projections and observed economic outcomes, especially relating to GDP growth, inflation, and the output gap are extracted from the EO database vintages corresponding to each of these editions. Projections and country notes are elaborated by desk economists in the OECD Economics Department, and reflect central guidance provided by specialised teams and the Department's management for overall consistency of individual country and cross-country aggregate projections and policy messages.

Each country note also typically contains a recommendation on the direction of fiscal and monetary policy advice by the OECD to the respective country, informed by the economic assessments. These recommendations are formulated clearly and can be spread across various sections of the country notes.³ A holistic reading was applied to these sections and the direction of policy advice was classified. For fiscal policy, the text was classified as either recommending a continuation of current support or more/less support. For monetary policy, recommendations were classified as either maintaining the current monetary policy stance or easing/tightening monetary policy.⁴ In the few cases where different recommendations were distinguished for different time horizons, the analysis focussed on the shortest horizon mentioned. The overwhelming majority of policy recommendations was formulated with an explicit condition, either in terms of timing or the evolution of various conditioning factors such as the economic and health situation, the labour market, output gap, or inflation.

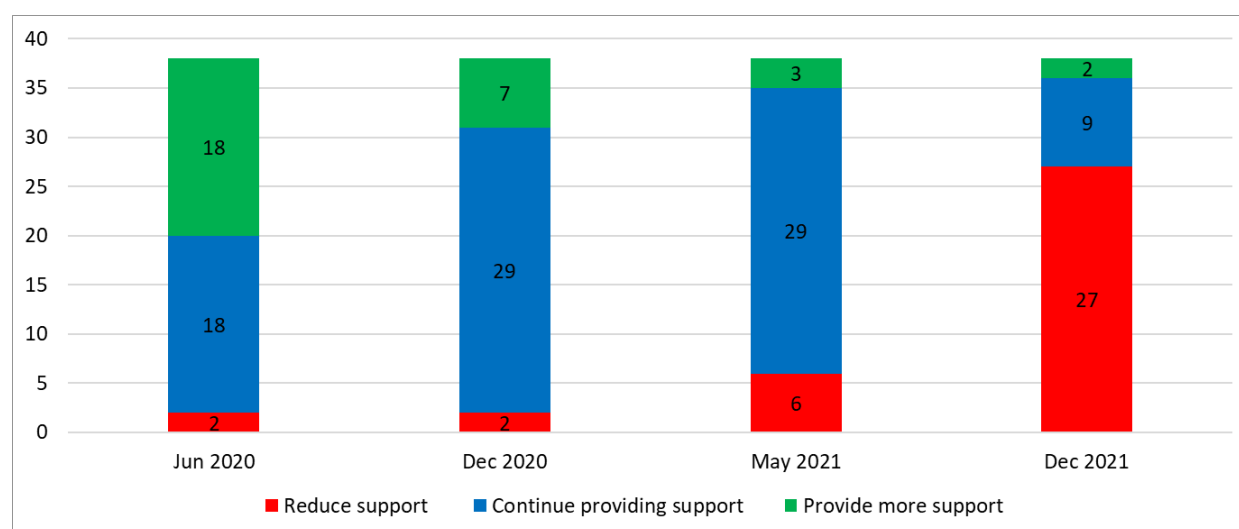
³ Specifically, a dataset was compiled containing the text of the second paragraph of the (bold) introduction and the last section on macroeconomic and structural policy recommendations. For these text fragments, sentences related to fiscal and monetary policy, respectively, were extracted and then analysed separately. In the cases where these text fragments did not contain a specific recommendation on monetary or fiscal policy, a middle section describing macroeconomic policies by the government was scanned for explicit or implicit endorsements of policy directions taken or planned by authorities.

⁴ For euro area members and countries with fixed exchange rate regimes, only the fiscal policy recommendation is taken into account while for the whole euro area, only the monetary policy recommendation is considered.

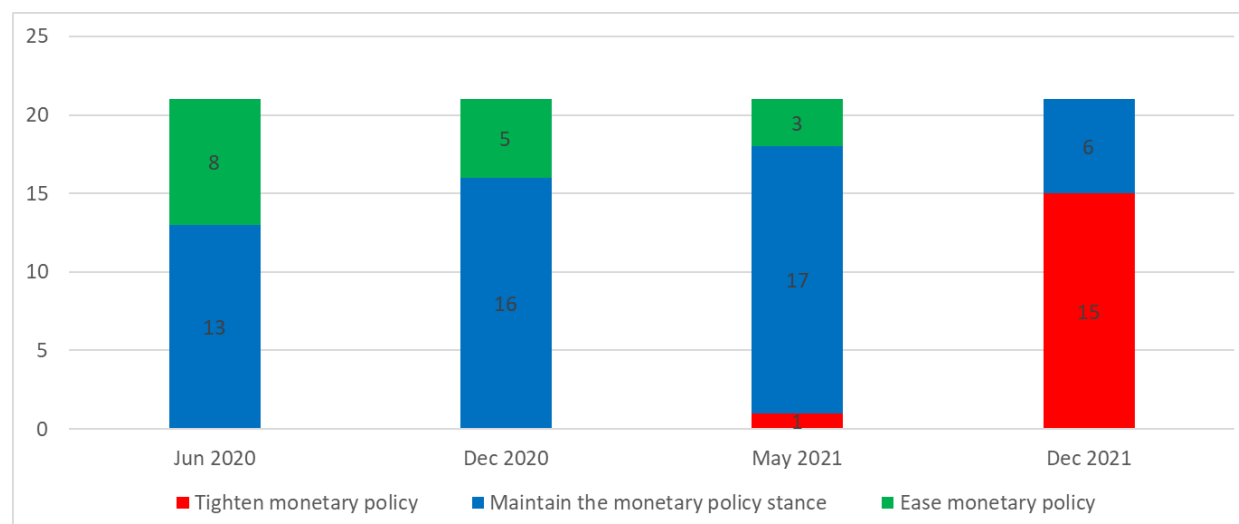
Looking at the direction of policy advice, OECD recommendations on fiscal policy early in the pandemic were overwhelmingly accommodative (Figure 8, Panel A). This echoed the massive support schemes that were put in place by governments to subsidise workers and firms that were forced to interrupt activity due to the stringent containment measures imposed to stop the spread of the virus. Recommendations in the Economic Outlook overwhelmingly supported maintaining these early pandemic support policies. In about half of the countries, a further expansion of support was recommended.

Figure 8. Fiscal and monetary policy recommendations turned restrictive through 2021

Panel A: Recommended direction of **fiscal** policy in Economic Outlook country notes



Panel B: Recommended direction of **monetary** policy in Economic Outlook country notes



Note: For Panel A, the sample covers the 38 OECD member countries. For Panel B, the sample covers 20 OECD member countries with independent monetary policy plus the euro area. For Denmark, the monetary policy recommendation is not classified since it corresponds to policies needed to maintain the peg to the euro, not independent monetary policy.

Source: OECD Economic Outlook, vol. 107-110 and OECD calculations.

A significant change in the recommended policy direction took place in the second half of 2021. In the Economic Outlook in December 2021, a majority of countries (27) received advice to scale back fiscal support. Even before this turning point, in most countries the recommendation of continuing support

measures was explicitly conditioned on the evolution of the economic and health situation, and an emphasis was put on the time limitation of support.

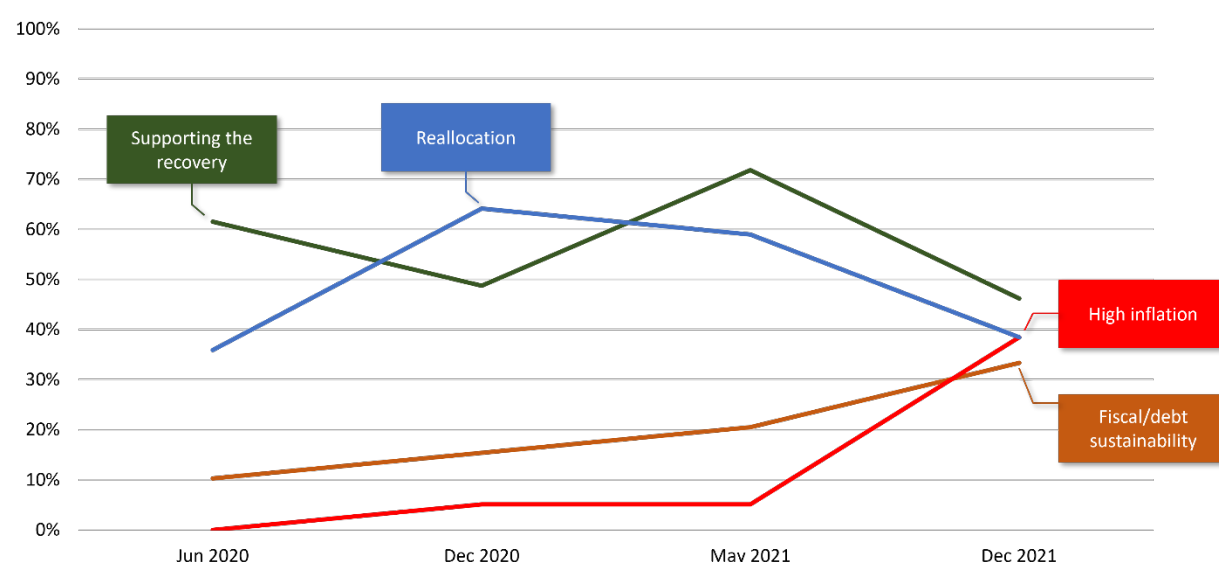
A similar picture emerges for monetary policy (Figure 8, Panel B). In 2020, all countries were either recommended to maintain their already very accommodative monetary stances or to ease monetary policy even further. In May 2021, the first country in which monetary policy tightening was recommended was Iceland, where inflation expectations had risen above the central bank's inflation target. Even though for some countries, EO country notes included recommendations to scale back unconventional measures or to be vigilant to future developments of inflation or inflation expectations, the vast majority (17 of the 21 countries included) were recommended to maintain their monetary policy stances in May 2021.

By late 2021 a clear turning point had been reached for monetary policy recommendations, just as for fiscal policy. Most jurisdictions were recommended to tighten their monetary policy, either unconditionally or with a view to evolving economic data. One notable exception is the euro area, which was recommended to maintain its accommodative monetary stance throughout 2020 and 2021. Therefore, the majority of OECD countries (23) still received the recommendation for a continuation of the monetary policy stance in December 2021.

Looking at the main themes of macroeconomic policy considerations in EO country notes provides further insights into evolving policy priorities (Figure 9). Supporting households and businesses was the most important policy concern early in the pandemic when mobility restrictions were strictest, and it remained so until the first half of 2021. Similarly, the main reason given to qualify or condition accommodative recommendations, especially for fiscal policy, were concerns about the need to continue supporting reallocation. However, in the second half of 2021 these themes diminished in importance. Instead, preoccupations with high inflation surged amidst indications of price pressures, reflected in 40% of EO country notes of December 2021. In a similar number of countries, concerns about limited fiscal space and the need to preserve fiscal sustainability became more prominent.

Figure 9. Concerns about reallocation and the recovery dominated during most of the time

Percentage of EO country notes mentioning selected keywords in the respective period



Source: OECD Economic Outlook, vol. 107-110; and OECD calculations.

A similar picture appears for the other main source of OECD macroeconomic policy advice, the OECD Economic Surveys published under the responsibility of the Economic Development and Review

Committee (EDRC). However, a main drawback of this information source is that at most one Survey was published for each country during the analysis period, at a random point in time defined by the (largely pre-determined) EDRC calendar (Annex Table A.2). Even given these restrictions, which make a direct comparison challenging, and the small number of countries covered in each semester, the evolution of fiscal and monetary policy advice and keywords appears similar in the roughly ten OECD countries covered by a Survey every semester to that in the EO (Figure A.2 and Figure A.3).

An examination of macroeconomic policy advice during the COVID-19 pandemic

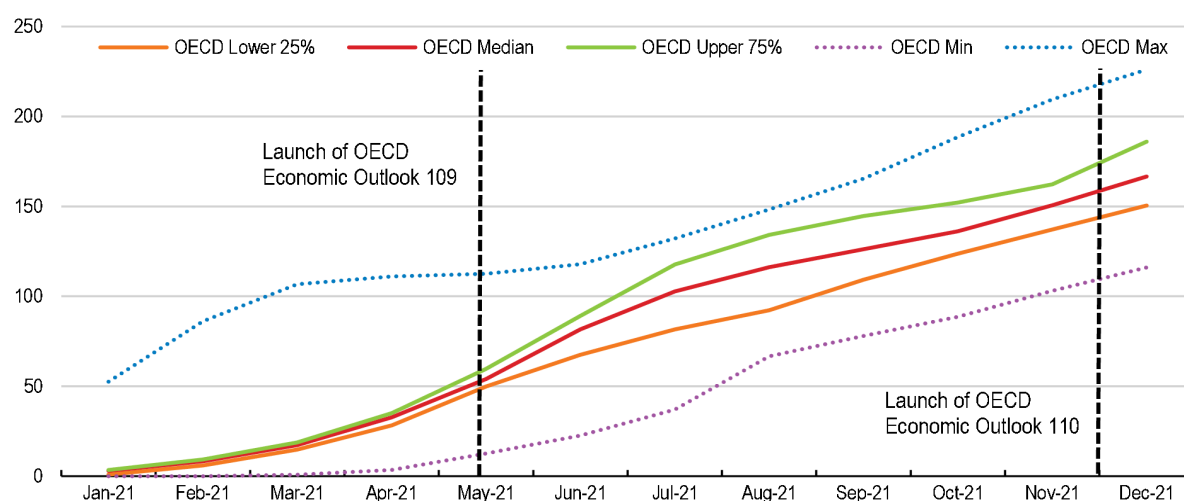
The third substantive section of this paper discusses the determinants of OECD policy advice during the pandemic. It examines the narrative of the OECD Economic Outlooks during 2020 and 2021 and draws on contextual data to look at how policy advice was formulated in real time. Four contextual factors stand out. First, massive national vaccination campaigns were just taking off, promising an end to pandemic restrictions and recurrent lockdowns but under significant uncertainty. Second, in the period leading up to the pandemic, inflation expectations had been well-anchored for a long time in many OECD economies, and inflation had been undershooting its target. Third, supply bottlenecks appeared during the economic reactivation in 2021 but were judged to be of temporary nature. Fourth, the errors in initial GDP estimates documented above, as well as an unusual situation in the labour market, led to a misapprehension of the degree of slack in the economy.

Vaccination campaigns were taking off with uncertain outcomes

As vaccination campaigns began in early 2021, hope for economic reopening grew, especially in advanced economies. By the release of the Economic Outlook in May 2021, about 50 vaccine doses per 100 people had been administered in the median OECD country (Figure 10). Despite these positive developments, however, there were disparities in vaccination distribution and the rollout of vaccination campaigns. In addition, there had been delays in the delivery of vaccine batches earlier in 2021, especially in Europe. In May 2021, access to vaccines was in many countries still reserved for priority groups (elderly, people with larger health risk factors, emergency workers) and not yet open to the general public. Only about 5% of the world population was fully vaccinated by mid-May 2021 (OECD, 2021^[2]). Finally, there was significant uncertainty about the effectiveness of the vaccines, which had been developed very recently and rapidly.

Figure 10. Vaccination rates rapidly increased in mid-2021, with varying rates across countries

Vaccine doses administered per 100 people, 38 OECD countries



Source: Our World in Data; and OECD calculations.

Given this uncertainty and the experience with repeated waves of relaxed and then again strengthened mobility restrictions, the Economic Outlook adopted a stance of cautious optimism and recommended continued but more targeted support measures, coupled with a coordinated and responsive approach to vaccination deployment. Continuation of support measures, in this context, was further seen as warranted in the context of ongoing sanitary and mobility restrictions which implied mandated restraints on economic activity – yet which could be expected to be removed in the near future if and when vaccinations would provide effective protection against the virus (OECD, 2021^[2]). Another argument for maintaining support a little longer was risk management. While the recovery from the pandemic was incomplete, there was a risk that a premature withdrawal of support would harm the recovery and medium-term growth prospects.

The pandemic topped a period of low inflation often below target

Low inflation was prevalent in many OECD countries before the pandemic and in 2020 (see Figure 3). In particular, low inflation persisted in the euro area from 2013 to 2019, due to complex factors including cyclical economic slack from the two recessions in 2009 and 2012, and secular structural trends such as population ageing, which might have lowered the natural rate of interest (Koester et al., 2021^[18]). This history of low inflation was seen as a problem which policymakers would need to address, and a temporary overshooting of inflation above its target was seen as tolerable or even desirable (Andrade, Le Bihan and Matheron, 2017^[19]; Bianchi, Melosi and Rottner, 2021^[20]). Between the GFC and the pandemic, major central banks communicated their tolerance for a temporary overshooting of actual inflation to support output and employment, without leading to lasting increases in inflation⁵. The OECD Economic Outlook in December 2020 reflected this line of thinking:

In the longer term, the main challenge for monetary policy will be how to achieve sustainably higher inflation. Central banks already faced this challenge before the COVID-19 crisis, in the context of a secular decline in growth, inflation and estimates of the neutral interest rate. This has prompted reviews of the monetary policy frameworks by the main central banks. [...] However, in advanced economies, a combination of structural changes over recent decades related to the production and distribution of goods and services, firms' business models, and demand structure, may complicate the achieving of higher inflation, leading to a prolonged period of low interest rates.

(OECD, 2020^[13]), p. 42

Academic literature on central bank inflation-targeting regimes provided the conceptual ground for monetary policy to tolerate above-target inflation in the short term. Credible central banks that succeed in anchoring inflation expectations have scope to see through transitory inflation and stabilise output without jeopardising long-term price stability (Svensson, 2010^[21]; Woodford, 2012^[22]). Consistent with this logic, the May 2021 Economic Outlook assigned a low probability of prolonged inflation following the recent uptick:

Prolonged high or rising inflation is unlikely if central banks take necessary measures to keep inflation expectations anchored at target and if structural changes that limited pressures on aggregate inflation in the advanced economies during the past three decades continue.

(OECD, 2021^[2]), p. 34

In response to these conditions, the EO in May 2021 recommended maintaining an accommodative stance in advanced economies, permitting a temporary overshooting of headline inflation to support the recovery, provided that core inflation remained stable. The EO also acknowledged that expedited vaccinations could

⁵ See for instance a speech by the then-Governor of the Bank of England and a working paper on the Bank of Japan's "inflation-overshooting commitment" (Bank of England, 2016^[37]; Kawamoto, Nakajima and Mikami, 2021^[38]).

significantly bolster the economic recovery across nations, albeit potentially contributing to inflationary pressures through increased demand, including for commodities.

Supply constraints were seen as temporary

Many firms found themselves unable to meet the surge in demand in 2021, which was more vigorous than expected. Bottlenecks in intermediate production processes, especially of semiconductors, and disruptions in transportation and logistics chains constrained the output of manufacturing industries, such as automotive and electronic equipment (OECD, 2021^[14]; Ramani, Ghosh and Sodhi, 2022^[23]). Both the service and manufacturing sector suffered from labour shortages (Causa et al., 2022^[24]; OECD, 2021^[14]). These supply-side disruptions constrained economic growth while contributing to the initial buildup of price pressures in 2021 (Attinasi et al., 2021^[25]; Bańbura, Bobeica and Hernández, 2023^[26]; Bai et al., 2024^[27]; Kemp, Portillo and Santoro, 2023^[28]). Supply bottlenecks were an important risk mentioned in the May 2021 Economic Outlook but were considered temporary, which called for policy to remain vigilant but not to tighten as long as inflation expectations remained anchored and sizeable output gaps remained (OECD, 2021^[2]):

Temporary supply shortages in specific sectors, including semiconductors and shipping, and signs of skills shortages for some small businesses, are also contributing to the higher input cost pressures apparent in business surveys.

(OECD, 2021^[2]), p. 30

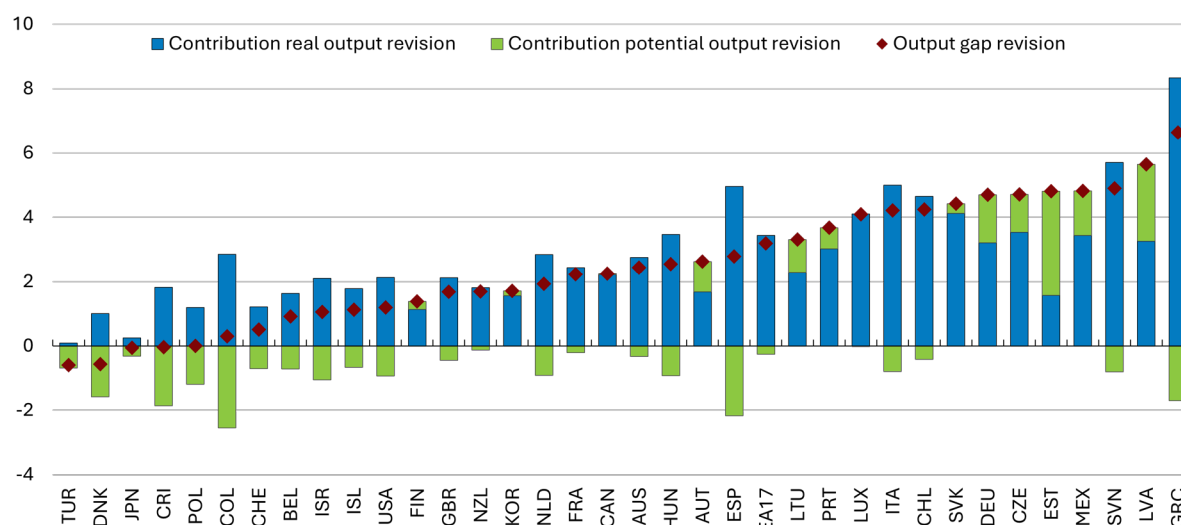
National accounts at the time gave a wrong impression about the state of the recovery

As noted above, GDP data from national accounts released during the pandemic systematically underestimated the level of output and hence the degree of the recovery. These errors were not fully detected until more than two years later, when data in many countries were strongly revised upward. The revisions imply that in the first half of 2021, output gaps had already closed more, and the economic recovery was further advanced, than the data available at the time indicated. A second potential source of uncertainty in the output gap estimates during the pandemic stemmed from the difficulties of estimating potential output during these unprecedented times.

As a result of these two forces, in 33 out of 38 countries, the real-time estimate of the output gap was below (i.e., more strongly negative) the more recent estimates (Figure 11). The countries with the strongest deviation include Chile, Mexico, Czechia, the Slovak Republic, and Latvia – all among the countries with the strongest subsequent rise in inflation. A decomposition further reveals that the main driving force of strong output gap revisions for Q1 and Q2 2021 between the December 2021 and December 2024 Economic Outlooks was the correction of GDP national accounts data. The contributions of revisions in the OECD estimate of potential output were comparatively small with a median of -0.41 percentage points across countries (i.e., working if anything in the opposite direction of *reducing* the output gap). The finding that output gap revisions could mostly be explained by actual rather than potential output is in line with the results of Koske and Pain (2008^[29]).

Figure 11. The degree of economic slack in H1 2021 was systematically overestimated

H1 2021 output gap revision, decomposed into the contributions of real and potential output, in percentage points



Note: The figure shows the revision of the H1 2021 output gap estimate between the December 2021 and December 2024 Economic Outlook vintages and the relative contributions of revisions to actual and potential output. The output gap estimate is based on the aggregation of Q1 and Q2 potential and real output figures. To account for base year changes between vintages, the underlying time series for actual and potential output are converted to indices with Q1 2019 as the base period. Ireland and Norway are omitted due to being large outliers.

Source: OECD Economic Outlook, vol. 107 (December 2021) and vol. 116 (December 2024).

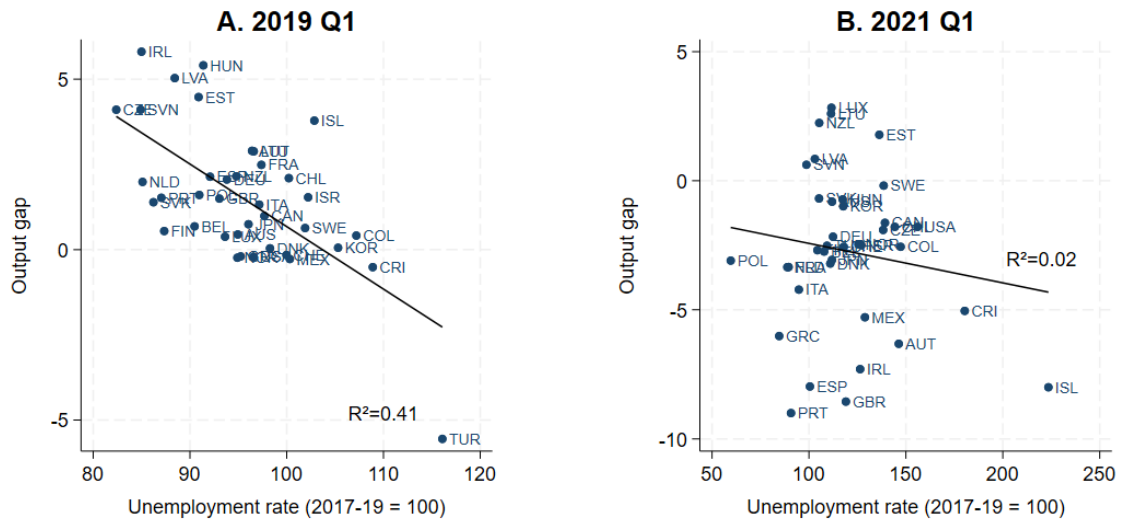
A prominent alternative measure of the position in the business cycle and the degree of slack in the economy is the unemployment rate. Together with the increasing evidence of a flattening of the Philipps curve (Galí and Gambetti, 2019^[30]; Negro et al., 2020^[31]; Beaudry, Hou and Portier, 2024^[32]), evidence of unemployment rates above pre-pandemic levels might have influenced the OECD's assessments:

Fiscal and monetary policy support should be maintained while there is still labour market slack and limited signs of sustained price pressures.

(OECD, 2021^[2]), p. 48

However, the approximate equivalence between the output gap and the unemployment rate as measures of economic slack, which was justified by an at least moderate correlation between the two measures in the pre-pandemic period – a systematic relationship known as Okun's law (Ball, Leigh and Loungani, 2017^[33]) – broke down in the pandemic period (Figure 12). When compared to the later estimate of the output gap – thus abstracting from the issue of a biased real-time measurement of GDP – the previously negative relationship between unemployment and the output gap becomes flat, with an essentially zero correlation. This further complicated the assessment of the macroeconomic situation, as the most readily available advance indicator of economic slack – the unemployment rate – stopped being informative. One reason for the disappearance of this link might have been the pandemic support programmes, which focussed on preserving jobs in the face of mobility restrictions and a large temporary drop in GDP. This then not only clouded the depth of the fall in GDP but also its recovery, which – contrary to past periods – did not necessarily go together with a strong measured growth in employment or fall in unemployment.

Figure 12. The unemployment rate was uninformative of the output gap during the pandemic



Note: The unemployment rate is measured as its deviation from the pre-pandemic (2017Q1 to 2019Q4) average. Estimates of the unemployment rate are taken from the December 2021 EO vintage, i.e. as measured during the pandemic. Estimates of the output gap are taken from the December 2024 EO vintage.

Source: OECD Economic Outlook, vol. 107 (December 2021) and vol. 116 (December 2024).

The assessment of the degree of the recovery matters, because it was one of the main underlying rationales for concluding that a continuation of accommodative policies was warranted and would not result in intensified price pressures. These arguments were reflected in the EO's General Assessment:

Additional fiscal stimulus this year is helping to boost demand, reduce spare capacity and lower the risks of sizeable long-term scarring from the pandemic.

(OECD, 2021^[2]), p. 12

Signs of higher input cost pressures have appeared in recent months, but sizeable spare capacity throughout the world should prevent a significant and sustained pick-up in underlying inflation. The recent upturn in headline inflation rates reflects the recovery of oil and other commodity prices, a surge in shipping costs, the normalisation of prices in hard-hit sectors as restraints are eased, and one-off factors such as tax changes, and should ease in the near term. With unemployment and employment rates unlikely to attain their pre-pandemic levels until after end-2022 in many countries, there should be only modest pressures on resources over the coming 18 months.

(OECD, 2021^[2]), p. 12

By late 2021 there was more confidence in the ongoing recovery. As the OECD Economic Outlook of December 2021 argued,

The recovery in global economic activity since mid-2020 has been more vigorous than expected, with output in most OECD countries now close to or above pre-pandemic levels. This reflects the prompt and massive policy support for firms and households from the outset of the crisis, including the additional measures announced this year, successful public health measures to limit transmission of the COVID-19 virus and, above all, the rapid rollout of effective vaccines.

(OECD, 2021^[14]), p. 14

This changed assessment – which in effect overturned several of the conditions and assumptions made earlier – led to an upward revision of inflation and output projections and of OECD policy advice. In light of

clear signals above the ongoing recovery – and even though in retrospective, the degree of the recovery and therefore slack in demand was still underestimated in the real-time data – and visible inflationary pressures, most OECD countries were recommended to scale back their expansionary fiscal and monetary policies.

Assessment and conclusion

As the pandemic hit in 2020, governments around the OECD and the world started to put in place massive support programmes. Although the benefit of hindsight reveals that the Economic Outlook at the time overestimated the degree of the economic downturn, this would have not changed the direction of its advice, which was favourably disposed to the massive fiscal support measures to support households, workers and firms while government-mandated restrictions on mobility, person-to-person contact, and activity were put in place. Similarly, with inflation well below target in most OECD economies, and a decade or more of well-anchored inflation expectations while maintaining ultra-low interest rates, the highly expansionary monetary policy stances taken by countries were appropriately endorsed by the OECD.

Turning to 2021, among the chief concerns mentioned in the OECD Economic Outlook, both its General Assessment and its country notes, was the need to support the recovery by propping up demand in the light of supply restrictions. This was consistent with the need for continued but increasingly targeted support for sectors, firms and workers that were still under the effects of mandatory and voluntary supply restrictions, especially contact-intensive services such as travel and accommodation. Such targeting seemed to be further justified by distributional concerns – as some sectors were allowed to open while others had to stay closed – and a concern to prevent scarring effects. The expectation of an imminent opening of the remaining sectors thanks to the full successful rollout of vaccination campaigns only served to amplify these considerations. At the same time, successive EO editions struck a cautious tone with its emphasis on the need to allow for necessary reallocation to happen.

In retrospect, an ex-ante estimation of significant slack in the economy was a key factor behind the assessment that massive accommodative policies would not result in underlying inflationary pressures in the short term. The real-time need for policy to support the recovery seemed much more pressing at the time. Real-time national accounts data subsequently showed ex post that output gaps were less wide than estimated, which led to an underestimation of inflationary pressures. A better ex-ante estimate of the output gap might have conceivably resulted in an earlier reconsideration of the recommendation for maintaining the accommodative monetary policy stances that characterised the beginning of the pandemic, especially given the inability to target monetary policy to specific sectors in the uneven recovery.

From this, several lessons can be drawn to improve policy advice in the future:

1. The formulation of policy advice could be made even more explicitly conditional, and risk management criteria could be strengthened. Although fiscal policy recommendations commonly referred to the state of the recovery, and monetary policy recommendations were conditioned first on the recovery and later on anchored inflation expectations in times of heightened uncertainty, the conditioning of advice at the country level – and not only in the General Assessment – could better reflect risks associated with the baseline scenario and provide greater transparency on key assumptions. More broadly, it could enhance awareness of the importance of turning points in rapidly changing macroeconomic environments, the effects of which are hard to anticipate especially if shocks are unprecedented.
2. Indicators to assess economic activity should be broadened. The OECD developed and monitored several new indicators on the evolution of the COVID-19 pandemic and the changing economic situation, such as the OECD COVID-19 Policy Response Tracker (Bulman and Koirala, 2020^[11]) or the OECD Weekly Tracker of Economic Activity, a real-time high-frequency indicator based on a machine learning model applied on Google Trends data (Woloszko, 2020^[34]). These data and

indicators fed into the EO projections and country notes. Future work could seek to identify which indicators in hindsight best approximated real-time economic developments, including unforeseen spillovers such as on inflation, following on some evaluations by national authorities. For instance, the Reserve Bank of Australia found its monthly activity indicator improved forecasting power (Hartigan and Rosewall, 2024^[35]) and the French Trésor found that supply-related predictors outperformed conventional demand-oriented models in presence of supply shortages (Bourassi, Claisse and Phung, 2024^[36]).

3. Future work could address to what degree forecast errors reflected only ex-post information (such as data revisions) or whether they could have been reduced by incorporating more real-time data. Given the unprecedented global and simultaneous nature of the COVID-19 economic shock, it could be valuable to explore how national forecasts could have better incorporated the synchronised global recovery, which may not be fully reflected in country-level data. Similarly, the role of underlying assumptions such as on commodity prices could be examined.

References

- Adrian, P. et al. (2024), *Working from home after COVID-19: Evidence from job postings in 20 countries*. [3]
- Andrade, P., H. Le Bihan and J. Matheron (2017), *What would be wrong with lowering the inflation target*, <https://www.banque-france.fr/en/publications-and-statistics/publications/what-would-be-wrong-lowering-inflation-target>. [19]
- Attinasi, M. et al. (2021), *Supply chain disruptions and the effects on the global economy*, European Central Bank, https://www.ecb.europa.eu/press/economic-bulletin/focus/2022/html/ecb.ebbox202108_01~e8ceebe51f.en.html. [25]
- Bai, X. et al. (2024), *The Causal Effects of Global Supply Chain Disruptions on Macroeconomic Outcomes: Evidence and Theory*, Munich Society for the Promotion of Economic Research, <https://doi.org/10.2139/ssrn.4723723>. [27]
- Ball, L., D. Leigh and P. Loungani (2017), “Okun’s Law: Fit at 50?”, *Journal of Money, Credit and Banking*, Vol. 49/7, pp. 1413-1441, <https://doi.org/10.1111/jmcb.12420>. [33]
- Bañbura, M., E. Bobeica and C. Hernández (2023), *What Drives Core Inflation? The Role of Supply Shocks*, European Central Bank, <https://doi.org/10.2139/ssrn.4635969>. [26]
- Bank of England (2016), *The Spectre of Monetarism*, Speech given by Mark Carney, Governor of the Bank of England, Bank of England, London, <https://www.bankofengland.co.uk/-/media/boe/files/speech/2016/the-spectre-of-monetarism.pdf>. [37]
- Beaudry, P., T. Carter and A. Lahiri (2023), *The Central Bank’s Dilemma: Look Through Supply Shocks or Control Inflation Expectations?*, National Bureau of Economic Research, Cambridge, MA, <https://doi.org/10.3386/w31741>. [4]
- Beaudry, P., C. Hou and F. Portier (2024), “Monetary Policy When the Phillips Curve Is Quite Flat”, *American Economic Journal: Macroeconomics*, Vol. 16/1, pp. 1-28, <https://doi.org/10.1257/mac.20220088>. [32]
- Bianchi, F., L. Melosi and M. Rottner (2021), “Hitting the elusive inflation target”, *Journal of Monetary Economics*, Vol. 124, pp. 107-122, <https://doi.org/10.1016/j.jmoneco.2021.10.003>. [20]
- Bourassi, L., A. Claisse and L. Phung (2024), *Nowcasting French GDP Growth During Exceptional Periods*, Directorate General of the Treasury (DG Trésor), <https://www.tresor.economie.gouv.fr/Articles/b60b36aa-d98d-4df5-b137-ab360a01c664/files/b4a5d59e-5399-4b4d-9e84-cdfa774ae853>. [36]

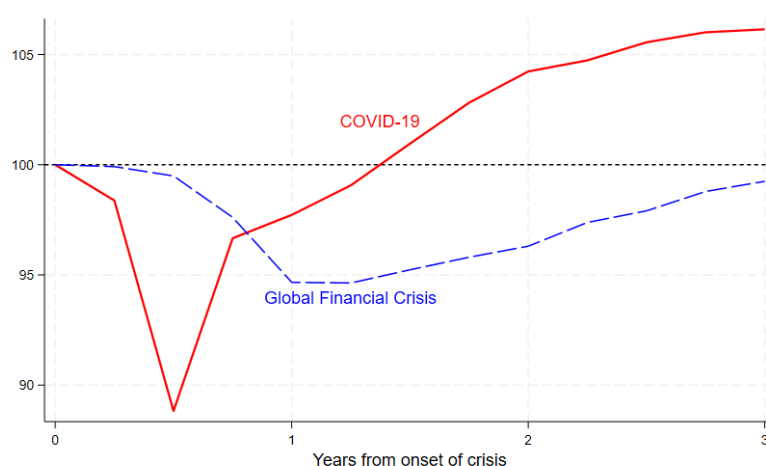
- Bulman, T. and S. Koirala (2020), *The OECD COVID-19 Policy Tracker: What are governments doing to deal with the COVID-19 pandemic?*, <https://oecdecoscope.blog/2020/05/15/the-oecd-covid-19-policy-tracker-what-are-governments-doing-to-deal-with-the-covid-19-pandemic/>. [11]
- Causa, O. et al. (2022), “The post-COVID-19 rise in labour shortages”, *OECD Economics Department Working Papers*, No. 1721, OECD Publishing, Paris, <https://doi.org/10.1787/e60c2d1c-en>. [24]
- Chahad, M. et al. (2022), *What explains recent errors in the inflation projections of Eurosystem and ECB staff?*, https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202203_05~6d1fb8f5b0.en.html. [9]
- Chen, W., M. Mrkaic and M. Nabar (2019), “The Global Economic Recovery 10 Years After the 2008 Financial Crisis”, *IMF Working Paper WP/19/83*. [7]
- ECB (2025), *Key interest rates*. [15]
- ECB (2025), *Pandemic emergency purchase programme*, <https://www.ecb.europa.eu/mopo/implement/pepp/html/index.en.html>. [16]
- European Commission (2021), *Questions and answers: Communication on fiscal policy response to coronavirus pandemic*, https://ec.europa.eu/commission/presscorner/detail/fi/qanda_21_885. [17]
- Gali, J. and L. Gambetti (2019), *Has the U.S. Wage Phillips Curve Flattened? A Semi-Structural Exploration*, National Bureau of Economic Research, Cambridge, MA, <https://doi.org/10.3386/w25476>. [30]
- Hartigan, L. and T. Rosewall (2024), *Nowcasting Quarterly GDP Growth during the COVID-19 Crisis Using a Monthly Activity Indicator*, University of Sydney, School of Economics., <https://www.rba.gov.au/publications/rdp/2024/pdf/rdp2024-04.pdf>. [35]
- IMF (2023), “The IMF’s emergency response to the COVID-19 pandemic : evaluation report 2023”, *Independent Evaluation Office of the International Monetary Fund*. [8]
- Kawamoto, T., J. Nakajima and T. Mikami (2021), *Inflation-Overshooting Commitment: An Analysis Using a Macroeconomic Model*, Bank of Japan, Tokyo, https://www.boj.or.jp/en/research/wps_rev/wps_2021/wp21e09.htm. [38]
- Kemp, H., R. Portillo and M. Santoro (2023), *Assessing the Impact of Supply Disruptions on the Global Pandemic Recovery*, International Monetary Fund, <https://doi.org/10.5089/9798400235672.001>. [28]
- Koester, G. et al. (2021), “Understanding Low Inflation in the Euro Area from 2013 to 2019: Cyclical and Structural Drivers”, *ECB Occasional Paper*, No. 2021280, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3928302. [18]
- Koske, I. and N. Pain (2008), “The Usefulness of Output Gaps for Policy Analysis”, *OECD Economics Department Working Papers*, No. 621, OECD Publishing, Paris, <https://doi.org/10.1787/241172520210>. [29]
- Negro, M. et al. (2020), “What’s Up with the Phillips Curve?”, *Brookings Papers on Economic Activity*, Vol. 2020/1, pp. 301-373, <https://doi.org/10.1353/eca.2020.0004>. [31]

- OECD (2022), *OECD Economic Outlook, Volume 2022 Issue 2: Confronting the Crisis*, OECD Publishing, Paris, <https://doi.org/10.1787/f6da2159-en>. [10]
- OECD (2021), *OECD COVID-19 Policy Response Tracker*, <https://oecd.github.io/OECD-covid-action-map/>. [12]
- OECD (2021), *OECD Economic Outlook, Volume 2021 Issue 1*, OECD Publishing, Paris, <https://doi.org/10.1787/edfbca02-en>. [2]
- OECD (2021), *OECD Economic Outlook, Volume 2021 Issue 2*, OECD Publishing, Paris, <https://doi.org/10.1787/66c5ac2c-en>. [14]
- OECD (2020), *OECD Economic Outlook, Volume 2020 Issue 1*, OECD Publishing, Paris, <https://doi.org/10.1787/0d1d1e2e-en>. [1]
- OECD (2020), *OECD Economic Outlook, Volume 2020 Issue 2*, OECD Publishing, Paris, <https://doi.org/10.1787/39a88ab1-en>. [13]
- Pain, N. et al. (2014), “OECD Forecasts During and After the Financial Crisis: A Post Mortem”, *OECD Economics Department Working Papers*, No. 1107, OECD Publishing, Paris, <https://doi.org/10.1787/5jz73l1qw1s1-en>. [6]
- Ramani, V., D. Ghosh and M. Sodhi (2022), *Understanding systemic disruption from the Covid-19-induced semiconductor shortage for the auto industry*, Omega, <https://doi.org/10.1016/j.omega.2022.102720>. [23]
- Reis, R. (2022), “The Burst of High Inflation in 2021-22: How and Why Did We Get There?”, *CEPR Discussion Paper No. 17514*, <https://cepr.org/publications/dp17514>. [5]
- Svensson, L. (2010), *Inflation Targeting*, <https://doi.org/10.1016/B978-0-444-53454-5.00010-4>. [21]
- Woloszko, N. (2020), “Tracking activity in real time with Google Trends”, *OECD Economics Department Working Papers*, No. 1634, OECD Publishing, Paris, <https://doi.org/10.1787/6b9c7518-en>. [34]
- Woodford, M. (2012), *Methods of policy accommodation at the interest-rate lower bound*, Federal Reserve Bank of Kansas City. [22]

Annex A. Additional Figures and Tables

Figure A.1. The recovery from the 2008/2009 Global Financial Crisis was much slower

Real GDP, onset of crisis = 100, average OECD country

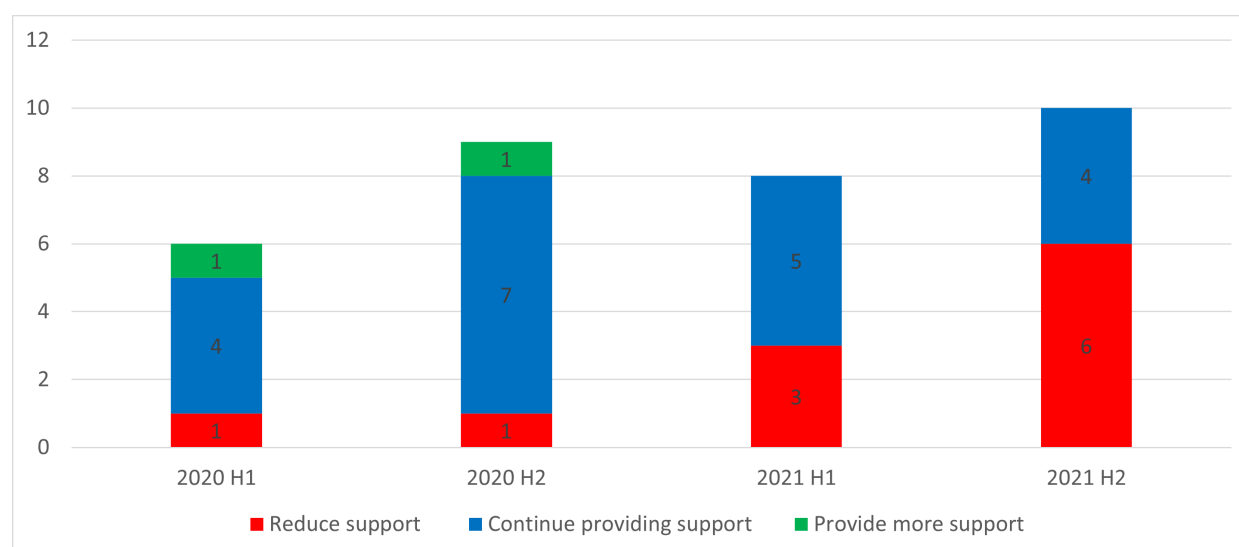


Note: The chart shows the evolution of real quarterly GDP in the average OECD country during two different economic crises. The onset of the crisis is defined as the last quarter before GDP began to fall in the average country: 2008Q1 for the Global Financial Crisis, and 2019Q4 for the COVID-19 pandemic.

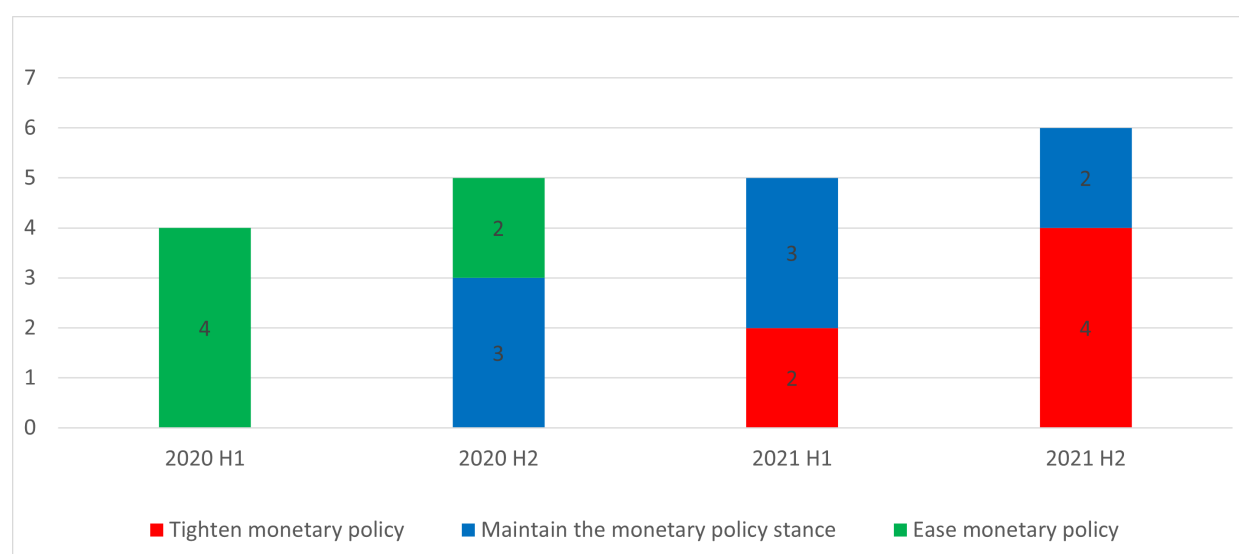
Source: OECD Economic Outlook, vol. 107-115; and OECD calculations.

Figure A.2. Policy advice in OECD Economic Surveys during 2020/2021

Panel A. Recommended fiscal policy direction



Panel B. Recommended monetary policy direction

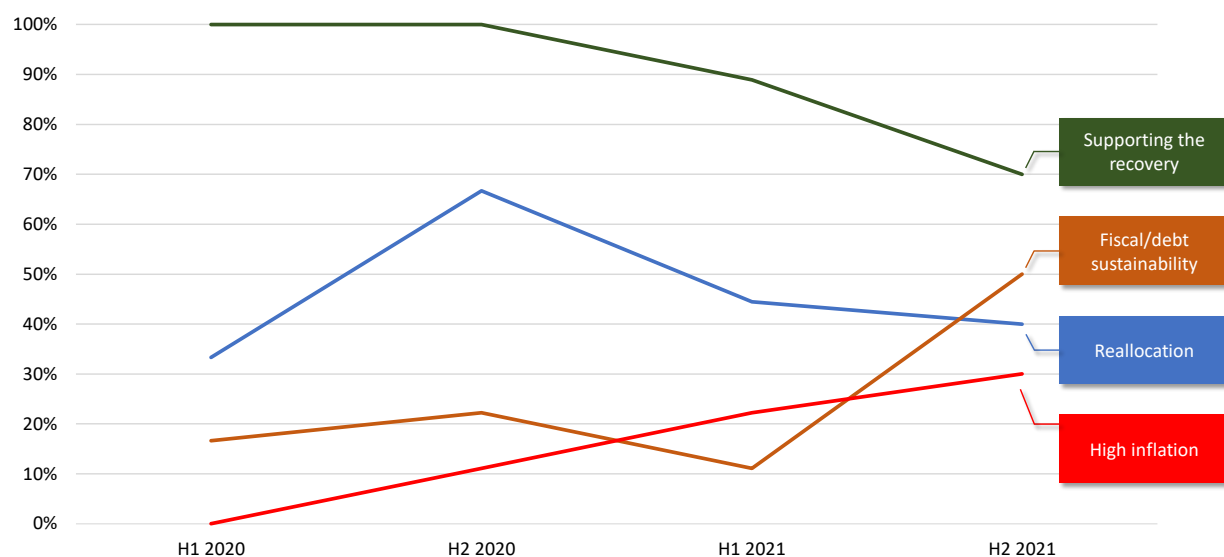


Note: The graph shows the classified direction of recommended fiscal and monetary policy actions in the OECD Economic Survey key recommendations of each semester. 2020 H1 refers to the months March to June.

Source: OECD, Economic Surveys, and OECD calculations.

Figure A.3. The narrative underlying Economic Survey key recommendations changed from concerns for supporting the recovery to fiscal and debt sustainability

Percentage of Economic Survey key recommendations tables mentioning selected keywords in respective semester



Note: The chart shows the evolution of real quarterly GDP in the average OECD country during two different economic crises. The onset of the crisis is defined as the last quarter before GDP began to fall in the average country: 2008Q1 for the Global Financial Crisis, and 2019Q4 for the COVID-19 pandemic.

Source: OECD Economic Outlook, vol. 107-115; and OECD calculations.

Table A.1. Analysis of inflation forecast errors

Key measures of forecast errors of 2021 annual inflation, by Economic Outlook vintage

	June 2020	December 2020	May 2021	December 2021
Economic Outlook				
Average error	-2.2	-1.9	-1.1	-0.2
Standard deviation	2.3	1.3	0.8	0.2
RMSE	3.2	2.3	1.4	0.3
Consensus Forecast				
Average error	-1.7	-1.7	-1.1	-0.2
Standard deviation	1.5	1.3	0.8	0.6
RMSE	2.2	2.1	1.4	0.6

Note: RMSE stands for root mean squared error. The choice of forecast error measures follows (Pain et al., 2014^[6]). Forecast errors are the difference between the projected value and the observed value in the first available next vintage of the Economic Outlook database, which is typically the next EO. This assesses projections against the data as measured/estimated at the time, abstracting from the role of subsequent data revisions.

Source: OECD calculations.

Table A.2. Overview of Economic Survey EDRC discussion dates

2020		2021	
Country	Quarter of EDRC Discussion	Country/jurisdiction	Quarter of EDRC Discussion
Israel	Q1 2020	Canada	Q1 2021
Slovenia	Q1 2020	Sweden	Q1 2021
Greece	Q1 2020	France	Q1 2021
South Korea	Q1 2020	Denmark	Q2 2021
Costa Rica	Q1 2020	Netherlands	Q2 2021
United States	Q1 2020	Euro Area	Q2 2021
Chile	Q3 2020	Portugal	Q2 2021
United Kingdom	Q3 2020	Iceland	Q2 2021
Poland	Q3 2020	Hungary	Q2 2021
Lithuania	Q3 2020	Italy	Q3 2021
Czech Republic	Q4 2020	Australia	Q3 2021
Finland	Q4 2020	Japan	Q3 2021
Germany	Q4 2020	Latvia	Q3 2021
Türkiye	Q4 2020	Switzerland	Q3 2021
Spain	Q4 2020	Mexico	Q4 2021
		Slovakia	Q4 2021
		New Zealand	Q4 2021
		Austria	Q4 2021
		Colombia	Q4 2021

Source: OECD elaborations.