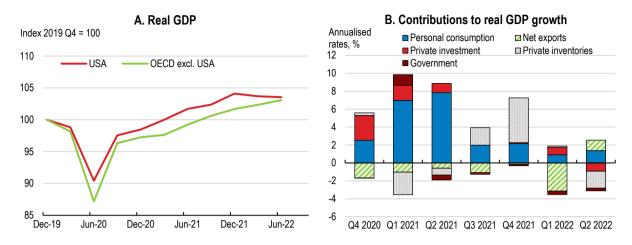
2. Key Policy Insights

The United States economy rebounded strongly from the depths of the pandemic recession, aided by a large and enduring government policy response. However, Russia's war against Ukraine and strong inflationary pressures have dampened the economic outlook. The administration is reinforcing public welfare through packages that invest in infrastructure and the climate transition, but an ageing population means fiscal pressures are on the horizon. In response, further efforts should focus on both broadening the tax base and improving public spending efficiency. For instance, stronger governance of infrastructure projects at the federal level would ensure that new spending has the highest societal return. Establishing a federal institution to provide ongoing cross-state and cross-sectoral advisory about infrastructure priorities and best practices would be beneficial in this regard. There is also substantial scope for improving health spending efficiency, including through further efforts to reduce the very high cost of pharmaceuticals and reforms that promote greater competition between health providers.

Economic growth has weakened following a robust economic recovery

Economic activity is now slowing notably, following a very rapid recovery through the pandemic. Unprecedented policy support combined with a rapid vaccination rollout (see Box 2.1) allowed real GDP to recover its pre-pandemic level by mid-2021 (Figure 2.1, Panel A). Subsequently, the recovery continued to progress, notwithstanding disruptions caused by supply chain issues and resurgences in COVID-19 infection rates. Real GDP contracted in the first half of 2022, largely reflecting declining inventories and net exports. Personal consumption continued to expand (Figure 2.1, Panel B), though recent indicators suggest that spending activity has slowed further in recent months.

Figure 2.1. The economy is slowing following a strong rebound

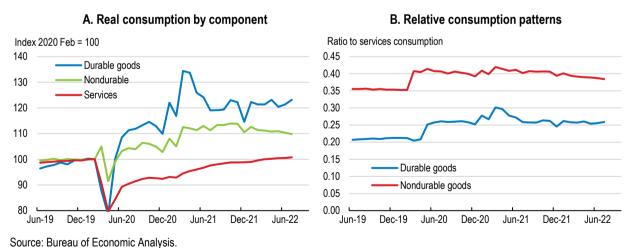


Source: Bureau of Economic Analysis; OECD Economic Outlook Database.

StatLink https://stat.link/c8h0ey

Consumer spending patterns continue to be skewed towards goods. Durable consumption rebounded rapidly through 2020, as fiscal stimulus combined with restrictions on face-to-face interactions prompted consumers to ramp up purchases of items such as motor vehicles and household furniture. Strong growth in durable good spending was observed in households across the income distribution. Over time, services consumption has gradually recovered as restrictions loosened and new strains of COVID-19 were resisted by increasing levels of partial immunity (Figure 2.2, Panel A). Even so, the ratio of both durable and non-durable goods to services consumption remains above pre-pandemic levels (Figure 2.2, Panel B). The reorientation of spending towards physical items through the pandemic led to supplier delivery times for manufacturers increasing to the highest levels on record through the second half of 2021, despite the number of containers processed at domestic ports being at unprecedented heights (Board of Governors of the Federal Reserve System, 2022a).

Figure 2.2. Non-services consumption remains elevated



There have been divergent investment trends through the pandemic. Heightened adoption of digital technologies prompted sustained investment in software and other intellectual property assets (Figure 2.3, Panel A). Dwelling investment surged following the initial wave of the pandemic, with spending driven by

StatLink https://stat.link/mhuawj

pent-up housing demand, low interest rates, accumulated savings and a shift towards greater working from home. However, supply chain issues have underpinned weaker investment in various assets in recent quarters. Investment in housing and non-residential structures have been impacted by rising interest rates and shortages of construction materials. Similarly, shortages of some transport equipment have impinged upon machinery and equipment spending.

Government spending is now a drag on economic activity, with support introduced during the pandemic having now unwound (Figure 2.3, Panel B). Supplementary unemployment benefits and nutrition assistance programmes expired in most states in mid-2021 and the expanded child tax credit expired at the end of the year. There are still some transfers from Federal to State and Local governments, as well as loans to businesses, that are yet to be fully spent and some households still hold accumulated savings from earlier fiscal support. However, these will only partially offset the fiscal drag. The passage of the *Infrastructure Investment and Jobs Act* (see Issues Note 1) will push public investment slightly higher in 2022 and 2023, but the ten-year investment horizon of the plan means that the annual contribution to overall GDP growth will be quite modest. Overall, fiscal policy will subtract from economic growth in 2022, but fiscal spending will remain higher than it would have based on extrapolating the pre-pandemic trend.

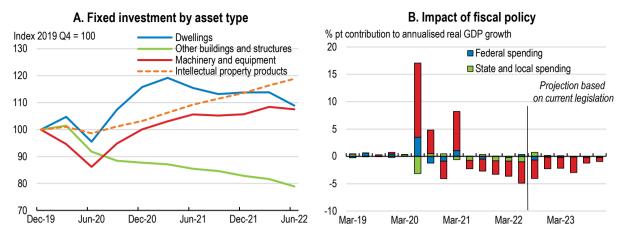
Box 2.1. Vaccinating against COVID-19 in the United States

The United States was a frontrunner in the rollout of COVID-19 vaccination. By the end of June 2021, 55% of the population had received at least one vaccination dose, some 10 percentage points above the OECD average. However, since mid-2021, the pace of vaccinations has slowed. This has been underpinned by significant heterogeneity in vaccination rates across states: while 86% of the 65+ population in Vermont has now received a booster dose, this is only the case for 39% of the 65+ population in North Carolina. Comparatively low vaccination rates are a factor that may explain the relatively high death rate from COVID-19 during the Omicron wave in the United States compared to other high income OECD countries.

Various factors have been cited for relatively low vaccine coverage in the United States. The uninsured population are less likely to be vaccinated and the United States has a much larger proportion of people without coverage than in other OECD countries (10% compared with less than 2% in the average OECD country). The *Household Pulse Survey* showed around a 20 percentage point gap between the vaccination rate of those with and without some type of health insurance. Less engagement with medical practitioners by the uninsured is one reason for this disparity. More limited sick leave entitlements in the United States may also dissuade some workers from being vaccinated in fear of side effects that keep them home. Lower income workers are underrepresented in vaccination uptake and "possible side effects" is the primary reason given for their reluctance in the *Household Pulse Survey*. This highlights the importance of demand-side factors, with some making the conscious choice not to be vaccinated. There is evidence that political affiliation is relevant in predicting vaccination status (Kaiser Family Foundation, 2021). Significant misinformation has also played a role, with one study finding that 78% of adults had heard at least one of eight different false statements about COVID-19 and either believed it to be true or were uncertain whether it was true or false (Hamel et. al. 2021).

Independent primary care practices have had limited engagement in the vaccine campaign so far (Klein and Hostetter, 2021), but they could be increasingly leveraged to support vaccine uptake. Most unvaccinated individuals cite their doctor's office as the preferred location for vaccination. Around 15% of unvaccinated respondents to a large-scale national survey noted they would be more inclined to be vaccinated if their health care provider recommended it to them (Ratzan, et al., 2021). Boosting primary care capacity to administer vaccines should be a focus of further attempts to increase vaccine uptake. This may require resources for training and technical assistance, as well as tools to ensure that accurate information is being disseminated in a consistent manner across jurisdictions (Lewis, et. al., 2021). There are operational barriers that also need to be addressed. These include reducing the burden of reporting and packaging vaccine doses into smaller units, while also ensuring processes are consistently followed that reduce wastage. Furthermore, as new variants emerge, the authorities will need to continue providing updated guidance to both healthcare professionals and the public on the benefits of staying up to date on vaccinations to maintain adequate protection.

Figure 2.3. Investment has recently weakened and fiscal policy support has been scaled back



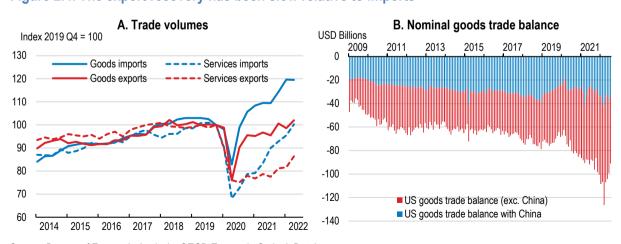
Source: Bureau of Economic Analysis; Brookings Institution Hutchins Center on Fiscal and Monetary Policy.

StatLink https://stat.link/vmlekt

Export activity has been gradually recovering with the abatement of supply constraints (Figure 2.4, Panel A). Goods exports were 2% above the December 2019 level by mid-2022. Services exports picked up in November 2021 with the reopening of US borders to vaccinated travellers and have continued to recover. Strong domestic goods consumption drove a noticeable import recovery, pushing the trade deficit higher (Figure 2.4, Panel B). The recent appreciation of the US dollar may also weigh on exports, given a high share are invoiced in US dollars.

Bilateral trade with China is an important determinant of the overall trade balance. The US-reported trade deficit with China has declined slightly since 2018 (Figure 2.4, Panel B), potentially reflecting trade restrictions enacted in recent years. There is some evidence that this has led to trade diversion, with US imports from countries such as Vietnam subsequently picking up (Bandyopadhyay and Bharadway, 2019; Choi and Nguyen, 2021). In addition, underreporting by producers as they attempt to evade tariffs may bias downwards the bilateral US-China trade deficit reported in the United States (Clark and Wong, 2021). Whilst there may be an incentive for overreporting by Chinese exporters (given an increase in export VAT tax rebate rates during the period), China's reported bilateral trade surplus with the United States continued to expand in recent years (ibid).

Figure 2.4. The export recovery has been slow relative to imports



Source: Bureau of Economic Analysis; OECD Economic Outlook Database.

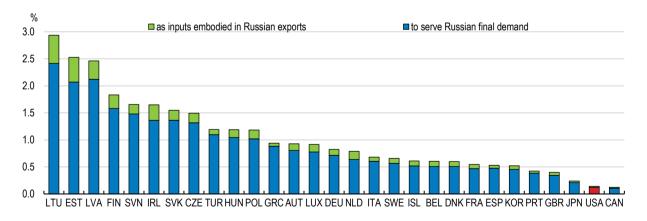
StatLink is https://stat.link/jane5z

There are trade implications of Russia's war against Ukraine and subsequent sanctions on Russia for certain sectors of the economy. Russia is currently the 26th largest goods trading partner of the United States (Figure 2.5). Notable bilateral exports from the US have included machinery and transport vehicles, while major imports have included mineral fuels, precious metal, steel and fertilisers. Energy dependence on Russia is low overall, as just 3% of crude oil imports and 1% of total crude oil processed by US refineries derives from Russia and the United States is a net exporter of natural gas. Nonetheless, there are some parts of the country, such as Hawaii, which have historically relied to a larger extent on imports of Russian energy. There are also potential vulnerabilities in some other commodities. The US imported 15% of its uranium from Russia on average in the 2017-21 period (nuclear power accounts for about 10% of US primary energy supply). Russia is also a key supplier of palladium, used in catalytic converters for cars, and nickel, used in steel production and the manufacture of batteries (OECD, 2022). Russia and Ukraine are also sources of inert gases such as argon and neon, used in the production of semiconductors, and large producers of titanium sponge, used in aircraft (ibid.).

There may be scope for the United States to ramp up production of some commodities to fill gaps in global supply. Indeed, the administration announced in March 2022 that it would attempt to increase liquefied natural gas exports to the European Union by 15 billion cubic metres by the end of the year. It now appears that they will overachieve this goal. The United States became the largest exporter of liquified natural gas in the world in the first half of 2022, with 39 billion cubic meters exported to Europe. If this pace of increase were to be maintained, the rise in exports to the European Union would be around 45 billion cubic meters in 2022 (i.e. three times the pledge of the administration). This owes to a rise in export and liquefaction capacity investments as well as diversion of exports from other countries. As the second largest exporter of wheat in the world, behind Russia, the US could also fill gaps in global wheat supply. However, drought conditions contributed to lower wheat supply in 2021. Minimising logistical and regulatory hurdles to further raising wheat exports will be critical for supporting global food supply.

Figure 2.5. Trade links with Russia are limited

Domestic value added exported to Russia (both directly and indirectly), 2018, percentage of countries' total value added



Source: TiVA indicators, 2021 edition; and OECD calculations.

StatLink https://stat.link/y57zhb

The labour market remains very tight

Employment gradually recovered following the massive labour market shock at the onset of the pandemic. The number of workers on temporary layoff is now back around pre-pandemic levels after spiking through the first half of 2020 (Figure 2.6, Panel A). The employment recovery was weaker than that for economic activity (Figure 2.6, Panel B), with various pandemic-impacted sectors such as food services and accommodation yet to recover their pre-pandemic employment levels. This largely reflects issues with labour supply, with some of the workers who left the labour force during the pandemic having not returned (Figure 2.6, Panel C). The participation rate also declined significantly in the years immediately following the financial crisis. Employers have struggled to reach and maintain desired staffing levels as a consequence. While the job opening rate has fallen in recent months, it remains at levels that are significantly higher than in the pre-pandemic period and well above the hiring rate (Figure 2.6, Panel D). As a result, labour market conditions remain very tight.

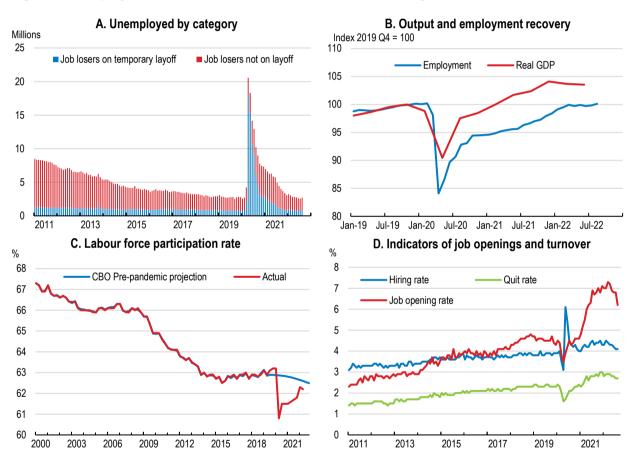


Figure 2.6. Employment has recovered and the labour market is tight

Note: Related to Panel C, updated population controls for 2022 shifted the labour force participation rate higher in January 2022. Source: Bureau of Labor Statistics; Bureau of Economic Analysis. The job openings rate is the number of job openings on the last business day of the month as a percent of total employment plus job openings.

StatLink https://stat.link/g4w38q

The decline in the labour force participation rate mostly reflects a decline in the participation rate of older workers (Figure 2.7). In particular, there has been a fall in the share of existing retirees transitioning back into the labour force (Nie and Yang, 2021). A continued decline in immigration, from a combination of the pandemic along with pre-pandemic policies, has also weighed on labour supply and the participation rate

as a relatively high share of immigrants are working age (Figure 2.7, Panel B). The Council of Economic Advisers estimate that the labour force would have been about 550,000 larger in January 2022 if immigration had followed its pre-2019 trend (Council of Economic Advisers, 2022). Concerns about contracting COVID-19 may have kept some from returning to work, especially those previously in face-to-face industries with heightened transmission risk.

The direct health impacts of COVID-19 may have also reduced the ability to work for some individuals. The American Academy of Physical Medicine and Rehabilitation estimated that around 11 million Americans were living with "long COVID-19" in 2021. Around 13% of non-retired respondents to the Household Pulse Survey who were not working in February 2022 (amid the Omicron wave) cited either being sick with COVID-19 or caring for someone with COVID-19 as the reason. Offsetting this was an increase in participation by disabled workers, which may have been enabled by the increase in telework opportunities since the onset of the pandemic. In recent months, as COVID-19 cases have remained low relative to early 2021, the proportion of individuals being held back from work by COVID-19 has fallen. By August 2022, only 4% of the non-retired respondents not working when they took the Household Pulse Survey cited being sick with COVID-19 or caring for someone with the virus as the reason.

A. Labour force participation rate B. Net international migration Millions % pts change from Dec-2019 12 0 1.0 -1 -2 0.8 -3 0.6 -4 -5 0.4 -6 0.2 -7 ■ Apr-20 ■ Aug-22 -8 0.0 Men 16-24 Men 25-54 Men 55+ Women 16- Women 25-Women 55+ 2011 2015 2017 2019 2021 24 54

Figure 2.7. Older cohorts have experienced a decline in labour force participation

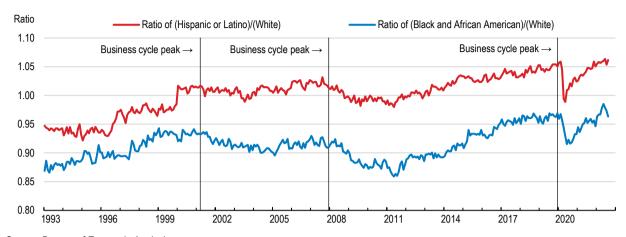
Source: Bureau of Labor Statistics; and Census Bureau population estimates.

StatLink https://stat.link/cp2n18

The employment impacts of past recessions have been disproportionately felt by selected racial groups. The previous two recessions were followed by a more significant decline in the employment to population ratio of Black and African American workers compared to the white population (Figure 2.8). The labour market gradually became more inclusive at later stages of the recovery during these episodes, but it took some time. Fortunately, such disproportionate racial impacts have been less persistent during the pandemic downturn. The relative employment to population ratio of Black and African American workers (to the white population) fell very sharply at the onset of the pandemic, but had recovered its pre-pandemic level by the second half of 2021. Nonetheless, as at August 2022, the employment to population ratio of Black and African American workers remained over 2 percentage points below that of white workers and around 6 percentage points below that of Hispanic or Latino workers. In that context, further public investment in training and employment services that more successfully integrate this racial group into the labour market should be a priority.

Figure 2.8. Disparate labour market impacts between races have been less persistent

Relative employment to population ratios, by race



Source: Bureau of Economic Analysis.

StatLink sis https://stat.link/ckx861

Tightening conditions in the labour market, combined with high price inflation, have translated into stronger wage growth. This has been especially the case for lower wage workers. In contrast to the period following the financial crisis, wage growth of the lowest quartile of wage earners has been rising rapidly (Figure 2.9, Panel A). This reflects large wage gains in industries that typically have a high share of low wage workers such as leisure and hospitality and retail trade (Figure 2.9, Panel B). Job switchers are being rewarded through particularly strong wage growth (Figure 2.9, Panel C) and there is some evidence of stronger rates of labour reallocation relative to the pre-pandemic period. For example, a lower proportion of those moving from unemployment back into jobs returned to their previous job through the pandemic (Figure 2.9, Panel D). There has also been a notable increase in the quit rate that has been associated with strong labour demand (Box 2.2).

A. Wage growth by quartile B. Average quarterly wage growth by % industry 8 Leisure and hospitality · · 2nd wage quartile 1st wage quartile Retail trade 3rd wage quartile 4th wage quartile Wholesale trade Other services 6 Real estate and rental and Health care and social assistance 5 Professional and business. Transportation and warehousing Education and health services 3 Manufacturing ■ 2020-2022Q2 Construction 2 **2019** Finance and insurance Information Utilities 0 2022 0.5 1.5 2008 2010 2012 2014 2016 2018 2020 C. Median wage growth D. Flows from unemployment back to same job 12m m.a y-o-y % changes % of unemployed 8 25 Job stayer Job switcher 6 24 3 23 22 1997 2000 2003 2006 2009 2012 2015 2018 2021 2018 2020 2019

Figure 2.9. Lower wage workers are experiencing particularly rapid increases

Note: Panel A shows 12 month moving average of monthly median wage growth for each average wage quartile. Wages are computed on an hourly basis. Panel B is based on nominal wages and salaries for private industry workers. Panel D, shows the proportion of people moving from unemployment back to employment in the same job that they had prior to the bout of employment. It is expressed as a percentage of unemployment in the previous period.

Source: Federal Reserve Bank of Atlanta; Bureau of Labor Statistics.

StatLink https://stat.link/5nzb79

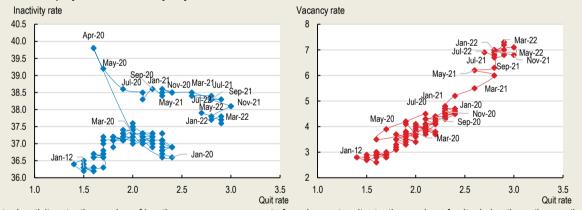
Increases to statutory minimum wages have also pushed aggregate wages higher. This has been due to actions by the states, with minimum wages increasing in 25 states in 2021 and 28 states in 2022. In the United States system, the state minimum wage will apply if it is above the federal minimum wage level. A proposal by the administration to raise the federal minimum wage from US\$7.25 (where it has been since 2009) to US\$15 per hour has not passed Congress. Analysis by the Congressional Budget Office highlights that such a reform would have some negative impact on employment, but would reduce poverty overall and raise the real family income of all but the highest income households (CBO, 2021a).

Box 2.2. The Great Resignation: Pull or Push?

After remaining below pre-pandemic levels for over a year during the first year of the pandemic, quits reached record highs in the second half of 2021 in the United States, prompting talk of a "Great Resignation". Increases in quits have been recorded in almost all sectors, but have been particularly pronounced in low-pay service industries such as leisure and hospitality. Quits were also more common among young workers and racial/ethnic minorities groups (Parker and Horowitz, 2022). Outside of the United States, the evidence of a significant increase in quits is more limited. In the United Kingdom, quit rates are unusually high, while in Germany and France quit rates returned to pre-crisis levels.

In principle, rising quit rates could reflect supply-side (i.e. "push") factors, for example due to a pandemic-induced shift in preferences over wages and working conditions, or demand-side (i.e. "pull") factors, due to the expansion of job opportunities and their quality. There is limited evidence of supply side factors eroding the United States labour force: the inactivity rate has broadly continued its steady decline since April 2020 while quit rates increased (Figure 2.10, Panel A). Furthermore, the vast majority of those who quit their job in 2021 found a new job without significant difficulties (Parker and Horowitz, 2022). Instead, the increase in quits mainly reflects the unprecedented rebound of economic activity coupled with a surge in job vacancies (Figure 2.10, Panel B). In the United States, vacancy and quit rates approximately doubled, from a low in April 2020, when the labour market had come to a virtual standstill, to mid-2022. Significant increases in vacancy rates were also observed in many other OECD countries for which data are available (e.g. Australia, Austria, Canada, New Zealand, the United Kingdom, and Switzerland).

Figure 2.10. Resignations have been triggered by the rebound in economic activity Share of employment, seasonally adjusted



Note: Inactivity rate: the number of inactive persons as a percent of employment, quit rate: the number of quits during the entire month as a percent of total employment, vacancy rate: the number of job openings as a percent of by the sum of employment and job openings. Source: Bureau of Labor Statistics.

StatLink https://stat.link/s1v29w

The surge in vacancies partly reflects a catch-up effect, as firms and workers pursue hiring and job-moving decisions that were placed on hold. In countries that made limited use of job retention schemes to preserve jobs – like the United States – the rebound was particularly robust due to the need to re-fill positions temporarily closed after the various waves of the pandemic. However, the surge in job vacancies was also fuelled by the strong growth in demand observed in the second half of 2021, amid significant government support. In addition, mounting wage pressures represented another pull-factor that is likely to have contributed to the rise in quits.

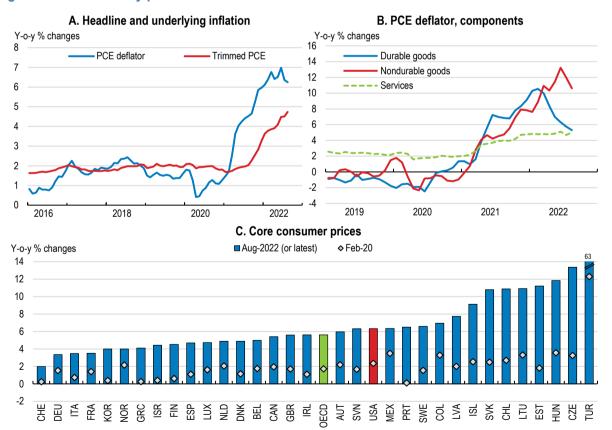
Source: Chapter 1 of OECD Employment Outlook 2022. This contribution was received from the OECD Directorate of Employment, Labour and Social Affairs in the context of the implementation of the OECD Jobs Strategy. The Jobs Strategy goes beyond job quantity and considers job quality and inclusivenss as central priorities, while emphasising the importance of resilience and adaptability for good economic and labour market performance in a changing world of work. For further details see http://www.oecd.org/employment/jobs-strategy/

Inflationary pressures have broadened

The combination of supply shortages and strong consumer demand that unexpectedly pivoted towards goods consumption has contributed to higher consumer price inflation over the past year. Russia's war against Ukraine has also pushed up energy and food prices, exacerbating inflationary pressures. The Personal Consumption Expenditure deflator rose 6.2% over the year to August 2022 (Figure 2.11, Panel A). Indicators of underlying inflation have also increased, with the trimmed mean measure published by the Federal Reserve Bank of Dallas rising at an annual rate of 4.7%. Even so, a cross country comparison of consumer price inflation excluding food and energy prices highlights a number of OECD countries with currently higher inflation rates (Figure 2.11, Panel C).

The pick-up in inflation in the United States was initially most notable for durable and non-durable goods. Particularly fast growing price growth was observed for motor vehicles. Indeed, calculations by the Council of Economic Advisers highlight that inflation, excluding new and used cars, was broadly similar in the United States and the euro area in 2021 (Council of Economic Advisers, 2022). However, home furnishings, food and beverages and gasoline were other categories of goods that also experienced a notable rise in inflation in the United States. Over time, services inflation also began to rise, with sequential price growth in services further accelerating in 2022 (Figure 2.11, Panel B). Prices in transport, housing and utilities, food services and accommodation, professional services, personal care and clothing services and household maintenance services all rose by above 5% over the year to August 2022. This suggests a broadening of price pressures, with services accounting for well over 50% of the personal consumption basket.

Figure 2.11. Inflationary pressures have broadened



Note: In Panel A, the Trimmed Mean PCE inflation rate is published by the Federal Reserve Bank of Dallas and is an alternative measure of core inflation in the price index for personal consumption expenditures.

Source: Federal Reserve Bank of Dallas; Bureau of Economic Analysis; and OECD Analytical Database.

StatLink https://stat.link/o1w7gz

Housing has begun to increasingly contribute to services inflation. The two largest components of residential services, owner's equivalent rent of residence and rent of primary residence, have a large combined weight in inflation aggregates; around 30% in the Consumer Price Index (CPI) and 15% in the PCE deflator. The shelter component of the CPI has accelerated, rising 6.2% over the year to August 2022 (Figure 2.12, Panel A). Indicators of market rent – which can significantly lead official inflation measures given only a small share of housing turns over in each period – picked up swiftly but have now begun to ease. Still, the Zillow Observed Rent Index rose by 12.3% over the year to August 2022, suggesting that housing rents will continue to contribute significantly to inflation for some time.

Agricultural and energy commodity prices were boosted by Russia's war against Ukraine but have recently moderated. Wheat and other crop prices rose strongly through first half of the year before falling. Similarly, retail gasoline prices rose by 50% in the first six months of 2022 before declining by around 30% in subsequent months. In response to rising gas prices, some state governments temporarily suspended state gas taxes (e.g. Connecticut, Georgia, Maryland) and the Federal administration announced the release of strategic oil reserves.

Measures of short-term inflation expectations have risen sharply in response to rising inflation (Figure 2.12, Panel B). Nonetheless, longer-term inflation expectations remain stable, despite having drifted up slightly over the past year. The prospect of persistent inflation has translated into cost of living adjustments in some major union contracts, in order to maintain workers purchasing power. Low rates of unionisation in the United States limit the macroeconomic implications of such adjustments, but they signal workers' and firms' expectations. The impacts of higher inflation will have disparate impacts depending on household consumption patterns. In 2021, the Bureau of Labor Statistics published experimental estimates that incorporated the diverse consumption baskets of households at different points in the income distribution (Klick and Stockburger, 2021). That work highlighted that inflation for the lowest income quintile has moderately outpaced that for the highest income quintile over the past two decades. Given the relevance for policymakers, these estimates could be further refined with a view to publishing them on a regular basis.

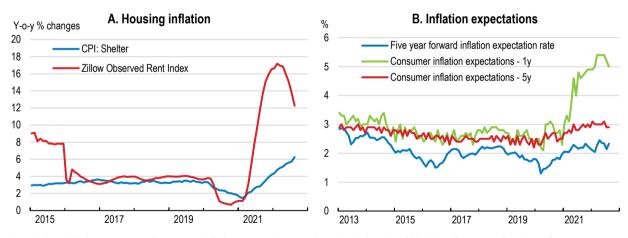


Figure 2.12. Long-term inflation expectations remain contained

Note: In Panel B, the measures of consumer inflation expectations are from the University of Michigan Consumer Sentiment Survey. Source: Bureau of Labor Statistics; Zillow Research; and Refinitiv.

StatLink https://stat.link/upshq6

Economic growth will slow further

The pace of GDP growth is anticipated to weaken further. Real GDP is projected to grow by 1.5% in 2022 and 0.5% in 2023 (Table 2.1). Rising inflation has eroded purchasing power of households and will combine with tightening financial conditions to further crimp spending plans across the economy. With the notable slowing in domestic production, the pressure in the labour market will begin to be relieved: the unemployment rate is projected to rise above 4½% by the end of 2023. Wage growth will moderate in response. The further reorientation of domestic demand back toward the services sector should help attenuate supply shortages, though the ongoing impacts of Russia's war against Ukraine and COVID-related lockdowns in China may linger for some time. Price pressures will recede, but core inflation is projected to remain materially above the Federal Reserve 2% target at the end of 2023. The recent broadening of inflationary pressures increases the risk that sustained higher prices eventually cause long-term inflation expectations to become de-anchored.

Risks to the growth projections are immense and tilted to the downside. Inflationary pressures may prove surprisingly persistent, prompting more aggressive tightening of monetary policy by the Federal Reserve. With fiscal support now having been wound back, this could particularly impact indebted firms in sectors that were heavily impacted by the pandemic or supply chain issues. Further disturbances to global markets in response to Russia's war against Ukraine could also have substantial negative impacts. Another variant of COVID-19 that significantly disrupts economic activity would weaken growth, especially in those parts of the country with more limited vaccine coverage. On the upside, recent easing in supply chain bottlenecks and commodity prices could contribute to a faster moderation in inflationary pressures than is currently projected.

Table 2.1. Growth and inflation are projected to ease

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|----------------------------|--|-------|-------|-------|
| | Current prices USD billion | Percentage changes, volume (2012 prices) | | | |
| GDP at market prices | 21 372.6 | -3.4 | 5.7 | 1.5 | 0.5 |
| Private consumption | 14 428.7 | -3.8 | 7.9 | 2.3 | 0.5 |
| Government consumption | 2 973.9 | 2.0 | 1.0 | -1.0 | 0.4 |
| Gross fixed capital formation | 4 492.6 | -1.5 | 6.1 | 0.9 | 0.9 |
| Final domestic demand | 21 895.2 | -2.5 | 6.5 | 1.5 | 0.6 |
| Stockbuilding ¹ | 73.6 | -0.5 | 0.3 | 0.7 | -0.1 |
| Total domestic demand | 21 968.8 | -3.0 | 6.9 | 2.3 | 0.5 |
| Exports of goods and services | 2 519.7 | -13.6 | 4.5 | 6.1 | 3.2 |
| Imports of goods and services | 3 116.0 | -8.9 | 14.0 | 10.0 | 2.6 |
| Net exports ¹ | - 596.3 | -0.3 | -1.4 | -0.8 | 0.0 |
| Memorandum items | | | | | |
| GDP deflator | _ | 1.2 | 4.2 | 6.9 | 3.4 |
| Personal consumption expenditures deflator | _ | 1.2 | 3.9 | 6.2 | 3.4 |
| Core personal consumption expenditures deflator ² | _ | 1.4 | 3.3 | 4.7 | 3.1 |
| Unemployment rate (% of labour force) | _ | 8.1 | 5.4 | 3.7 | 4.3 |
| Household saving ratio, net (% of disposable income) | _ | 17.1 | 12.7 | 6.3 | 7.8 |
| General government financial balance (% of GDP) | _ | -15.4 | -11.8 | -3.6 | -3.9 |
| General government gross debt (% of GDP) | _ | 134.4 | 127.9 | 125.2 | 125.5 |
| Current account balance (% of GDP) | _ | -3.0 | -3.7 | -4.3 | -4.3 |
| Output gap (% of potential GDP) | _ | -5.2 | -1.5 | -1.8 | -3.1 |

^{1.} Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook database (September 2022).

^{2.} Deflator for private consumption excluding food and energy.

There are various other lower probability vulnerabilities that could have a substantial impact on the economic outlook if they were to transpire (Table 2.2). These include deeper US involvement in a military conflict, a large-scale cyber attack in the United States or a ratcheting up of trade tensions with some major trading partners that amplify uncertainty and hamper economic policy processes. A large and catastrophic natural disaster, potentially linked to climate change, would also have substantial impacts on the economic outlook.

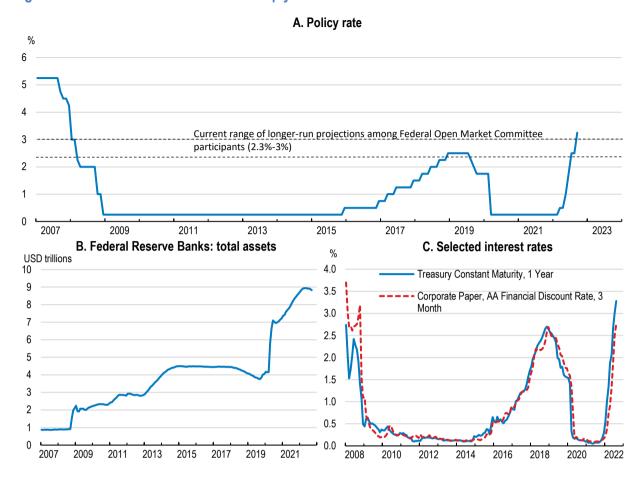
Table 2.2. Events that could lead to major changes in the outlook

| Shock | Likely impact | Policy response options |
|---|--|---|
| The emergence of a new variant of COVID-19 with increased transmissibility or severity of disease. | A substantial further wave of cases with potentially increased severity of case numbers could put health systems under strain. In turn, this could lead to the imposition of new restrictions for the public. | Reintroduce well targeted fiscal support for businesses or individuals adversely impacted by new restrictions. Draw from the evidence gathered from earlier waves about the most effective interventions for containing the virus at least cost. |
| Further ramping up of trade tensions with export partners. | The further imposition of bilateral trade restrictions with a major trading partner, such as China, could dent the pace of economic recovery. | Move towards reductions in bilateral trade restrictions. Further explore the potential for trade diversion to other export markets in certain items. |
| A large and catastrophic natural disaster linked to climate change and other environmental degradation. | A series of extreme weather events could materially lower economic activity in certain sectors and may have significant costs in terms of property damage, the health and wellbeing of the population. | Participate actively in multilateral efforts to curb emissions and lower the rise in global temperatures. Undertake pre-emptive measures to strengthen resilience in addition to crisis and response scenarios. If such an event occurs, provide targeted fiscal support. Coordinate effectively between levels of government to swiftly establish a coherent government policy response. |
| Military conflict involving US forces | A subsequent increase in military spending could result in public expenditure being diverted from other programmes or an increase in public debt. Depending on the location, a significant military conflict could also result in supply disruptions that push inflation higher. | Continue to buttress public finances through reforms that broaden the tax base. Develop trade diversion strategies based on various conflict scenarios. |
| Large-scale cyber attack | A cyber attack could disrupt business operations or shutdown domestic infrastructure vital for the functioning of the economy. | Invest further in cybersecurity, with the central government playing a coordinating role. |

Monetary policy is being rapidly tightened

The Federal Open Market Committee is now rapidly normalising monetary policy settings in response to the surge in inflation. The Federal Funds Rate has been lifted by 3% since the hiking cycle began at the March 2022 meeting (Figure 2.13, Panel A and B) and central bank holdings of Treasury securities and agency debt and agency mortgage-backed securities are being reduced. Market interest rates have risen sharply, reflecting both actual policy decisions and the expectation of further monetary policy tightening ahead (Figure 2.13, Panel C). Even so, elevated inflation has meant that real market interest rates remain low relative to estimates of the neutral real interest rate, even if the latter has declined somewhat in recent years (Aronovich and Meldrum, 2021).

Figure 2.13. Interest rates have risen sharply



Source: Refinitiv.

StatLink https://stat.link/m64tao

Equity market indices have recently fallen, after recording substantial gains in the low interest rate environment (Figure 2.14, Panel A). House prices also rose strongly through the pandemic, with the aggregate house price to rent ratio elevated (Figure 2.14, Panel B). States in the West of the country experienced particularly rapid house price growth, including Arizona, Utah, Idaho, Montana and Nevada. At this stage, there is little evidence of deteriorating credit standards or highly leveraged investment activity in the housing market. Even so, asset prices remain vulnerable to a decline in investor risk sentiment and the rise in mortgage interest rates. Since early 2022, the Fannie Mae Home Purchase Sentiment Index has shown a steady decline in the net share of consumers who expect home prices to increase. Any sharp decline in asset prices may further weaken economic activity through wealth effects. Post-meeting statements of the Federal Market Open Market Committee typically note that financial developments are taken into account in the assessment of the appropriate stance of monetary policy.

A. Cyclically Adjusted Price/Earnings Ratio, S&P Composite Stock Price Index Recession Shiller Price-Earnings Ratio (CAPE) B. House price to rent ratio Index 2015 = 100 USA OECD

Figure 2.14. Asset prices rose markedly through the pandemic

Source: Panel A shows the Cyclically Adjusted Price Earnings Ratio (CAPE, P/E10). In Panel B, the price to rent ratio is the nominal house price index divided by the housing rent price index.

Source: Refinitiv; and OECD Analytical Database.

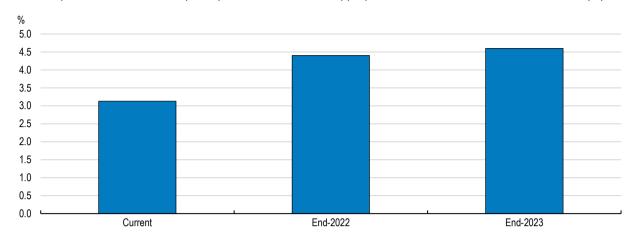
StatLink https://stat.link/vfogrc

Further tightening of monetary policy is warranted

A flexible approach to monetary policy deliberations is required at the current juncture. Policy decisions should continue to abstract from a temporary spike in commodity prices resulting from Russia's war against Ukraine and carefully monitor the impact of sanctions, production shutdowns and the tightening in financial conditions on the pace of the output recovery. Nonetheless, further tightening of monetary policy is likely to be needed in order to achieve the committee's objectives (See Box 2.3), given strong underlying inflationary momentum. The primary means for adjusting the stance of monetary policy should continue to be through the Federal Funds Rate, as foreshadowed by the Committee (Board of Governors of the Federal Reserve System, 2022b). Based on the current economic outlook, the Federal Funds Rate should be further lifted at the meetings in late 2022 and early 2023, though flexibility is warranted given the currently high level of uncertainty. In September 2022, the median Federal Open Market Committee participant expected the Federal Funds Rate to rise to the target range of 4¼-4½% at end 2022 and 4½-4¾% by end 2023 (Figure 2.15). As of September 2022, Federal Open Market Committee participants' estimates of the long-run Federal Funds Rate were in the 2.3-3% range.

Figure 2.15. A significant increase in the Federal Funds Rate is foreshadowed

Federal Open Market Committee participants' assessment of appropriate Federal Funds Rate, median value (%)



Note: Taken from the Summary of Economic Projections of 21 September 2022.

Source: Board of Governors of the Federal Reserve System.

StatLink https://stat.link/a1xecq

The committee is also continuing to reduce asset holdings of Treasury securities and agency debt and agency mortgage-backed securities in the System Open Market Account. Elevated inflation means that the reduction in the size of the balance sheet should be more rapid than during the 2017-19 period of balance sheet reduction. Balance sheet reduction will primarily be achieved by only reinvesting principal payments from securities to the extent that they exceed monthly caps. The initial balance sheet reduction has occurred in two steps. For Treasury securities, the cap was set at US\$30 billion per month for the first three months before increasing to US\$60 billion per month from September 2022. For agency debt and mortgage-backed securities, the cap was set at US\$17.5 billion per month and rose to US\$35 billion per month from September 2022. The impact of this process on financial markets should continue to be carefully monitored, given it entails private sector balance sheets absorbing more of the net increase in Treasury and agency mortgage-backed security issuance. Monetary policy normalisation may have implications for those emerging market economies that have experienced strong capital inflows during the period of low US interest rates. This may be especially the case for those countries with relatively high levels of dollar denominated debt, such as Chile and Colombia (Canuto, 2021). The accompanying appreciation in the US dollar may also push inflation higher in those major trading partners that have a high share of imports invoiced in US dollars.

Box 2.3. Changes to the United States monetary policy framework

The framework for conducting monetary policy was updated in August 2020, following a comprehensive and public review. Consistent with the Federal Reserve's statutory mandate, monetary policy objectives are to remain price stability and maximum employment, but key changes to the framework were outlined. These included:

- The adoption of a flexible average inflation targeting regime whereby the committee seeks to achieve inflation that averages 2% over time. The implication is that following periods of inflation running persistently below 2%, policy will aim to achieve inflation moderately above 2% for some time
- An adjustment to the employment goal, so that monetary policy responds to "shortfalls of employment from its maximum level" rather than the previous "deviations from its maximum level". This suggests the committee will not pre-emptively tighten monetary policy when unemployment is approaching estimates associated with maximum employment if not accompanied by signs of inflationary pressures.
- An update to the framework that views full employment as a "broad-based and inclusive goal" and is consistent with evidence that hot labour markets in the United States disproportionately benefit disadvantaged groups (Aaronson, et. al., 2019; Carpenter, et. al., 2022).
- Updates to the strategy statement explicitly acknowledging the challenges for monetary policy in a persistently low interest rate environment.

The committee intends to review its monetary policy strategy, tools and communication practices every five years. Looking forward, some aspects of the new framework could be further clarified. These include the period over which actual inflation is averaged to judge performance against the target and the factors that are taken into account in determining whether a broad-based and inclusive level of full employment has been achieved.

Financial stability risks remain significant given the high degree of uncertainty

The 2008 financial crisis highlighted the importance of well-functioning U.S. financial markets to global finance. At this time of elevated uncertainty, ensuring financial stability risks are well managed is essential. The financial system weathered the pandemic shock well. Dysfunction in credit markets at the onset of the pandemic prompted the Federal Reserve to introduce a suite of new liquidity facilities (OECD, 2020b) that were discontinued in late 2020 or early 2021 as the economic recovery took hold. Nonetheless, pockets of risk have emerged as interest rates have risen and government support policies have been withdrawn. Furthermore, there could be further impacts on the US financial system from Russia's war against Ukraine. While there are limited direct linkages for US banks, heightened volatility in asset markets (especially in commodity markets), disruptions to payment, clearing and settlement systems due to sanctions and adverse impacts on the European banking system could indirectly create vulnerabilities in parts of the US financial system (Board of Governors to the Federal Reserve System, 2022c).

The banking system appears to be well capitalised and profitable. Domestic banks rely only modestly on short-term wholesale funding and have continued to maintain sizable holdings of high-quality liquid assets. The substantial increase in household savings through the pandemic meant strong deposit inflows and reduced funding risks, though this trend has recently begun to reverse. Return on equity in the banking sector has rebounded to be higher than at any time since before the financial crisis (Figure 2.16, Panel A). This is despite net interest margins trending lower with the decline in interest rates (Figure 2.16, Panel C).

Impaired loans have not picked up so far and are at very low levels by historical standards (Figure 2.16, Panel D). The overall Common Equity Tier 1 capital ratio remains at around pre-pandemic levels (Board of Governors to the Federal Reserve System, 2022). In June 2021, the results of Federal Reserve stress tests suggested that the large banks remained well above their risk-based minimum capital requirements during a severe hypothetical recession. These tests included, among other features, substantial stress in US commercial real estate, housing, and corporate debt markets.

There have been several changes to macroprudential policies in recent years. In March 2020, the "stress capital buffer" was introduced for firms subject to the Federal Reserve's CCAR supervisory stress tests. This integrated the Board's stress test results with its non-stress capital requirements, ensuring that required capital levels for each firm more closely match its risk profile and likely losses as measured via the Board's stress tests (Board of Governors to the Federal Reserve System, 2021). Although capital levels are now higher than prior to the changes, some of the associated changes have the potential to weaken required tier 1 capital and common equity for certain financial institutions. In particular, the reduction in the requirements for financial institutions to prefund distributions, the elimination of a stress leverage requirement that would have applied to the Tier 1 leverage ratio and the assumption that a firm maintains a constant level of assets over the planning horizon (rather than a growing balance sheet; Brainard, 2020).

The United States macroprudential framework relies on higher structural capital levels than those in other jurisdictions. However, the stress capital buffer has an element of procyclicality (Kohn, 2021a), as it requires banks to increase their capital holdings as signs of stress become more visible. Following the introduction of this measure, the Federal Reserve may need to consider more active use of other counter-cyclical macroprudential tools. For example, many other central banks released the counter-cyclical capital buffer at the onset of the pandemic, providing substantial liquidity support when needed (Kohn, 2021b). In Sweden, the countercyclical capital buffer was reduced by 250 basis points (Banque de France, 2021). This was enabled by these central banks typically requiring a positive counter-cyclical capital buffer in a normal risk environment. In contrast, the Federal Reserve has chosen to leave the counter-cyclical capital buffer at zero in normal times. Looking forward, it should consider raising the buffer to a positive value in a normal risk environment, allowing it to be released in times of financial stress to have a strong counter-cyclical impact on financial stability. Doing so would likely require other macroprudential tools to be recalibrated to minimise unwanted impacts on lending behaviour.

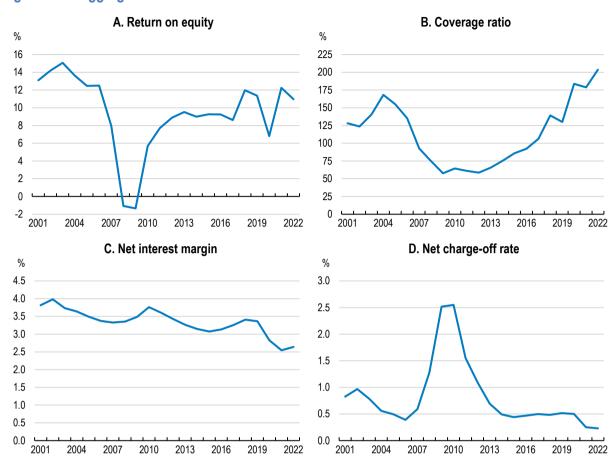


Figure 2.16. Aggregate indicators of bank balance sheet health have remained stable

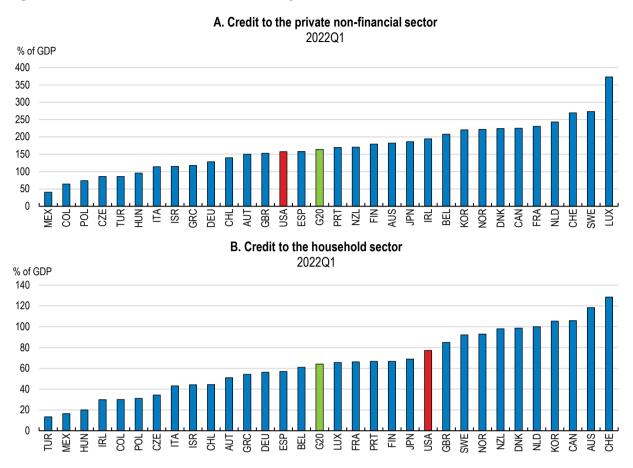
Notes: Net charge-offs refer to total loans and leases charged off (removed from balance sheet because of uncollectability), less amounts recovered on loans and leases previously charged off. The difference between interest and dividends earned on interest-bearing assets and interest paid to depositors and other creditors, expressed as a percentage of average earning assets. The coverage ratio is calculated as loss reserve as a percentage of noncurrent loans.

Source: Federal Deposit Insurance Corporation.

StatLink https://stat.link/lvjsb2

Despite the apparent health of the banking sector, risks to the financial system related to the most COVID-impacted industries remain. Corporate debt as a share of GDP rose through the pandemic (from 151.5% of GDP in Q4 2019 to 159.6% of GDP by Q3 2021), but it has begun to fall over recent quarters and is below the OECD average (Figure 2.17, Panel A). Data from the Shared National Credit Program, which assesses risk in the largest and most complex syndicated corporate loans, suggests a noteworthy decline in credit quality in the leisure and transport sectors during the pandemic (Figure 2.18, Panel A). In entertainment and recreation and commercial real estate, credit quality continued to deteriorate in 2021. For the latter, this was especially pronounced in the hotel, office and retail sub-sectors.

Figure 2.17. Business credit remains relatively low



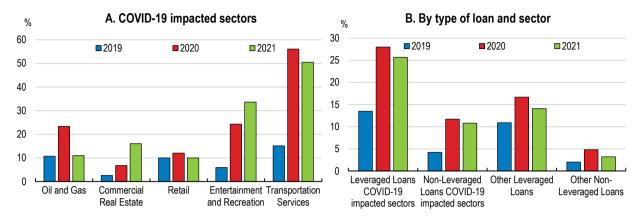
Source: Bank for International Settlements.

StatLink is https://stat.link/jokh7m

Leveraged loans in COVID-impacted industries are of particular concern. These are a type of syndicated loan to businesses that are highly indebted or have a low credit rating. One in four leveraged loans in COVID-19 impacted sectors had the lowest supervisory rating in the Shared National Credit Program in 2021 (Figure 2.18, Panel B). Loans to COVID-19 sectors in the Shared National Credit Program totalled US\$1.08 billion in 2021 (equivalent to 20% of total loans outstanding), with US\$475 billion of these being leveraged. The ongoing withdrawal of pandemic-related fiscal support to these sectors may expose further fragilities. The fact that these loans usually have a floating interest rate also means that rising market interest rates may exacerbate pressure on borrowers. The majority of these loans that have the lowest supervisory rating are held in the non-bank financial sector, especially in mutual funds and insurance companies. Direct exposures for banks to leveraged loans typically comprise investment grade equivalent revolving facilities, which are lower risk.

Figure 2.18. Credit quality has declined in COVID-related industries

Percentage of loans with the lowest supervisory rating in the Shared National Credit Program



Source: Board of Governors of the Federal Reserve System (2022d).

StatLink https://stat.link/p4vic0

There are also signs that institutions in the non-bank sector have become more highly leveraged. Bank lending to non-bank financial institutions has risen notably and there are signs that leverage at life insurance companies and hedge funds is elevated (Board of Governors to the Federal Reserve System, 2021). Furthermore, these institutions have considerable exposure to lower rated forms of corporate debt. However, monitoring evolving risks in the non-bank sector is a challenge due to data limitations. Addressing data gaps related to parts of the non-bank sector should remain a priority of relevant agencies, including through the interagency Hedge Fund Working Group established by the Financial Stability Oversight Council.

Stablecoins are a new part of the financial system that also pose regulatory challenges. These are digital assets that are issued and transferred using distributed ledger technologies, designed to maintain a stable value relative to a national currency (usually the US dollar) or other reference asset(s) (Board of Governors to the Federal Reserve System, 2021). The value of stablecoins grew threefold over the year to March 2022, to stand at around US\$180 billion. This rapid scaling up means that regulators have begun to consider the financial stability implications of these assets. In addition, in March 2022, the President signed the *Executive Order on Ensuring Responsible Innovation in Digital Assets*, which outlined the first ever, whole-of-government approach to addressing the risks and harnessing the potential benefits of digital assets and their underlying technology.

Certain stablecoins, including the largest ones, promise to be redeemable at any time at a stable value in U.S. dollars. However, they are in part backed by assets that may lose value or become illiquid. This raises doubts over the ability for issuers to be able to meet redemptions and leaves them susceptible to runs. Furthermore, regulatory gaps exist, with oversight fragmented across agencies and no consistent set of regulatory standards. In response, the President's Working Group on Financial Markets has recommended to Congress that legislation be enacted that treats issuers similar to insured depository institutions. The working group has also recommended custodial wallet providers be subject to federal oversight, requirements be introduced that limit affiliation with commercial entities (to reduce systemic risk) and standards implemented to promote interoperability among stablecoins (President's Working Group on Financial Markets, 2021). Continuing to consult with this burgeoning industry as the regulatory framework is designed will be important to ensure that the welfare-enhancing elements of these assets are maintained, at the same time as financial stability and consumer welfare risks are managed.

Risks related to unbacked digital assets also need to be carefully monitored. The strong growth in these asset markets over recent years has coincided with increased exposure by financial institutions (Financial

Stability Board, 2022). In addition, such assets do not possess the safeguards associated with bank deposits and other financial instruments, or the basic investor protections that are afforded to other asset classes. In March 2022, the administration released an *Executive Order on Ensuring Responsible Development of Digital Assets*. The Executive Order outlines a national policy for digital assets across six key priorities: consumer and investor protection, financial stability, illicit finance, US leadership in the global financial system and economic competitiveness, financial inclusion and responsible innovation.

Recognising climate-related financial risks

A further challenge for the financial system and regulators relates to both the physical and transition threat posed by climate change. The long-term nature of these risks and difficulty in evaluating them means that they are not adequately priced in many financial market transactions. In May 2021, the President issued an *Executive Order on Climate-Related Financial Risk* that directed relevant agencies to enhance disclosure of climate-related financial risk in a way that is consistent, clear, intelligible, comparable and accurate. In response, the Financial Stability Oversight Council issued its *Report on Climate-Related Financial Risk* in October 2021, which outlined over 30 recommendations to financial regulators (Financial Stability Oversight Council, 2021). Focus areas included building capacity to accurately monitor and report on climate-related financial risks, addressing climate-related data and methodological gaps, enhancing public climate-related disclosures and undertaking scenario analysis for assessing climate-related financial risks.

The Federal Reserve has begun developing a program of climate-related scenario analysis (Board of Governors to the Federal Reserve System, 2021). This is separate from the existing regulatory stresstesting regime. No new capital requirements are expected to be introduced based on the results of the climate-related scenario analysis, but they could be used to inform supervisory reviews. All countries currently face methodological challenges with undertaking such analysis (see Box 2.4 for details of climate risk scenario analysis in three OECD countries). For instance, financial institutions have difficulty assessing market risk over such a long time horizon, the mechanisms for transmitting climate shocks to the real and financial economy are not yet well understood and the exercise remains sensitive to the choice of different scenarios (OECD, 2021a). These exercises also require granular exposure data, ideally by sector and region, and a modelling framework that traces the impact of changes in climate variables through the macroeconomy to the financial sector (Bank for International Settlements, 2021). Nonetheless, climate stress tests or scenario analysis have uncovered important insights in those OECD countries which have undertaken them. Stress testing by the Banque de France showed that insurance companies are particularly exposed to physical risks: the cost of claims could rise by a factor of 5 to 6 in certain French departments between 2020 and 2050 (Banque de France, 2021). Further developing a rigorous framework for this type of analysis is increasingly urgent for effective regulatory oversight given that physical and transition risks are becoming more visible.

Box 2.4. Climate-risk scenario analysis in other OECD countries

Central banks in different countries are integrating climate-risk scenarios in different ways into their risk assessment frameworks. As an example, the main features of climate risk stress tests recently undertaken in three other OECD countries, France, Netherlands and the United Kingdom, are detailed in Table 2.3.

Table 2.3. Main features of recent climate-risk scenario analysis

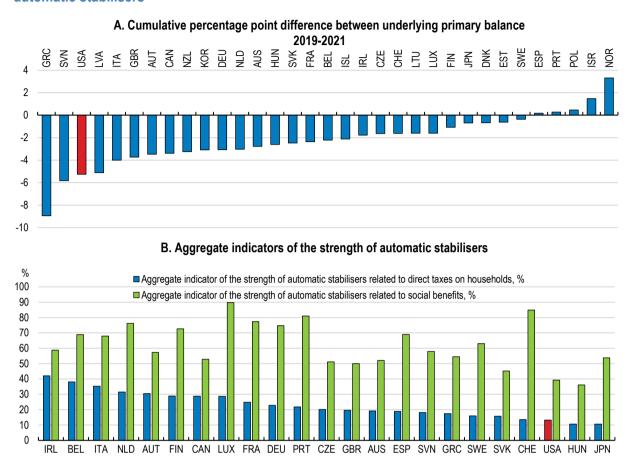
| | Bank of France/French Prudential Supervision and Resolution Authority | Netherlands Bank | Bank of England/Prudential Regulation Authority |
|---------------------------------------|--|---|---|
| Sample | Banks and insurance companies | Banks, insurance companies and pension funds | Banks and insurance companies |
| Scenarios | | | |
| - Types of risk | Physical risk and transition risk | Transition risk | Physical risk and transition risk |
| - Time horizon | 30 years | Five years | 30 years |
| - Number of scenarios | Three for transition risk and one for physical risk | Four for transition risk | Two for transition risk and one for physical risk |
| Modelling approach | | | |
| - Model used | Integrated Assessment Modelling (IAM) and National Institute Global Econometric Model (NiGEM) | NiGEM | IAM and NiGEM |
| - From macro to sectoral breakdown | Static, multi-country model assesses the impact of carbon prices and productivity shocks on 55 WIOD sectors | Sector vulnerability determined through factors based on embedded CO ₂ emissions for 56 sectors. | Sector vulnerability determined through factors based on embedded CO ₂ emissions and on physical risl exposures. |
| - Number of scenarios | Bank of France rating model to determine probability of default. Stock market valuation changes based on computed elasticities of valuations to carbon price changes and on credit spreads. | Use of a top-down approach to calculate losses for financial institutions, based on losses in exposures (corporate loans, bonds and equities), with loan losses according to sectoral classification. | Modelled by financial institutions, but some reference yield curves provided by the BoE. |
| Communication of results | System-wide results disclosed and feedback provided to individual firms. | Impacts on aggregate Common Equity Tier 1 published. | System-wide results disclosed and feedback provided to individual firms. |

Source: Bank for International Settlements, 2021.

Fiscal sustainability should be improved

Substantial fiscal support has been key in protecting the economy from lasting damage during the pandemic. The discretionary fiscal stimulus was among the largest across the OECD (Figure 2.19, Panel A) and was delivered swiftly. This required the passage of a series of discrete pieces of legislation and directives by the President given the limited role of automatic stabilisers in the United States (Figure 2.19, Panel B).

Figure 2.19. A very large discretionary stimulus was deemed necessary given relatively weak automatic stabilisers



Source: In Panel B, the measures are taken from Maravelle and Rawdanowicz (2021). The strength of automatic fiscal stabilisers related to direct taxes on households can be approximated by the elasticity of after-tax household income. This elasticity measures the sensitivity of household net income to changes in gross wages, and takes into account most characteristics of the personal income tax system, including tax reliefs, tax allowances, tax credits, tax rate structures, employee and employer social security contribution payable on wage earnings and government household cash transfers. The strength of automatic stabilisers related to social benefits is approximated by the aggregate net replacement ratio for an average household in case of 12-month unemployment.

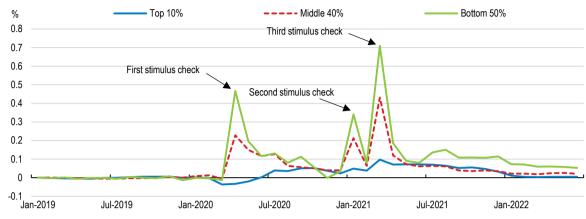
Source: OECD Economic Outlook Database; Maravelle and Rawdanowicz (2021).

StatLink https://stat.link/khimjp

Core components of the United States pandemic stimulus programme were eligibility expansion and supplements to unemployment benefits, Economic Impact Payments (direct stimulus payments to households) and the Paycheck Protection Programme (low-interest loans to firms with under 500 employees, forgivable if employment and wage levels were maintained). Such measures boosted household and corporate incomes. Personal disposable income grew 7½% in 2020, far exceeding the 3.8% reported in 2019. Disposable income grew particularly strongly for lower income households (Figure 2.20). One estimate suggests that nearly 50 million additional Americans would have been in poverty in 2021 without the government benefits in place (Wheaton et. al., 2021). Economic Impact Payments were found to have a particularly large overall antipoverty impact (ibid.), with the Expanded Child Tax Credit being found to have reduced child poverty without having disincentive effects on labour supply (Curran, 2021).

Figure 2.20. Government support boosted household income of low and middle income households

Real household disposable income growth, by group in the income distribution



Source: Realtime Inequality.

StatLink https://stat.link/f2jb94

As discussed earlier, fiscal support has been unwound. In the short-term, the stance of fiscal policy will need to carefully monitor the macroeconomic impacts of Russia's war against Ukraine and the tightening of monetary policy, exercising considerable flexibility in response. Any new government support to cushion the impact of Russia's war against Ukraine will be distinct from the types of measures put in place during the pandemic. As in other countries, the priority in the United States may be offsetting the impact of energy price rises on certain vulnerable groups. New policy measures need to be well targeted towards these groups and temporary, such as cash transfers, while ensuring that they do not distort price signals and avoid subsidising energy demand.

Buttressing the fiscal framework against further economic shocks

While public spending played an effective role in insulating the economy from the pandemic shock, some of the main tools were not very precisely targeted. For instance, Economic Impact Payments and the Payment Protection Program loans issued in 2020 were not conditional on recipients proving they were adversely impacted by the pandemic. The Paycheck Protection Program issued loans to 94% of all small and medium-sized businesses in the country in just two months, with estimates suggesting the programme cost US\$170-US\$257,000 per job-year retained (Autor et. al., 2022). Weak targeting partly reflected the speed with which programmes were designed and deployed, but also the limitations of administrative systems for targeting payments more tightly.

Economic and fiscal resilience to future shocks could benefit from ensuring that the administrative infrastructure can deliver targeted stimulus at short notice. A tradeoff between speed of delivery and targeting was experienced across the OECD, but various countries made substantial use of subsidies that were confined to businesses with a specified revenue decline or Short-Time compensation programmes limited to businesses that cut worker hours or employment (OECD, 2020a). While the latter were available in 27 US states following the passage of the CARES Act, weak take up was partly attributed to administrative bottlenecks (Box 2.5). Employers were typically required to complete and mail a form detailing the information of affected workers to state agencies and then wait for approval. Such approvals were slow, with agencies facing inadequate funding and administrative capacity to process applications (Dube, 2021). Looking forward, enabling online applications that leverage pre-existing data from regular employer filings would streamline the process and make wider participation in Short-Time work schemes possible. Consideration could also be given to establishing a federal system of job retention support (Box 2.5).

Box 2.5. Supporting jobs and income – complementary policies in an economic downturn

The comparison of the labour market policy response to the COVID-19 crisis between the United States and Europe is often framed in terms of a choice between supporting incomes or jobs, with the United States having invested massively in unemployment benefits and European countries in scaling up job retention support (Landais, Lapeyre and Giupponi, 2022). However, supporting incomes and supporting jobs are best seen as complementary strategies. Economic downturns typically represent a combination of temporary shocks, which can in part be weathered through labour hoarding, particularly when public support for job retention is available, and permanent shocks that require structural adjustments along with effective income and employment policies to support displaced workers.

- The United States invested strongly in unemployment insurance. Compared with European countries, unemployment benefits normally have a short maximum duration in the United States, the share of benefit recipients among the unemployed is low and social assistance is less developed. In response to the pandemic, the United States strengthened its unemployment benefit system by extending eligibility, increasing its maximum duration and raising its generosity. Eligibility was extended to the self-employed. Before the pandemic, the United States was one of 11 OECD countries (out of 32 with available information) where the self-employed had no access to unemployment benefits. To extend coverage, the CARES Act introduced Pandemic Unemployment Assistance for the self-employed, gig-workers and other non-standard workers on the same basis as for dependent employees. Nearly all other OECD countries expanded income support for the self-employed as well, by extending coverage and increasing generosity. However, the emergency extensions to the self-employed in the United States expired in September 2021.
- The United States also invested in job retention support. Supplements paid to unemployment benefit recipients were also paid to recipients of the state-run short-time work compensation programmes, irrespective of the reduction in working time. Since the reduction in working time is subject to a maximum (between 40 and 60% depending on the state), this made short-time compensation in the United States more generous for workers than anywhere else in the OECD (OECD, 2021). Yet, take-up rose only mildly. These schemes were not sufficiently attractive for employers due to administrative bottlenecks, the requirement for employers to continue paying social security contributions for hours not worked and the limit on the maximum reduction in working time. In most other OECD countries with similar programmes, the administrative process of applications, approvals and payments was largely automated, the cost of short-time work for employers was temporarily set to zero and there were no maximum limits on the reduction in working time (OECD, 2021). In addition, the US had other programmes designed to promote job retention. These included the Employee Retention Tax Credit (a refundable tax credit of up to 50% of up to US\$10,000 in wages) and the Paycheck Protection Program (low interest loans for payroll and certain other costs).

An important question is whether a new federal system of job retention support should be put in place to complement state-run short-time work compensation programmes. This would not have to be a permanent programme but could be a temporary one that may be triggered along with federal extensions of unemployment insurance. While the possibility of recalling workers who have been laid off at will reduces incentives for labour hoarding and the attractiveness of job retention schemes for employers, well-designed job retention programmes could still play a useful role by helping firms internalise the value of job matches for workers and society.

Source: Chapter 2 of the OECD Employment Outlook 2022. This box was contributed by the OECD Directorate of Employment, Labour and Social Affairs in the context of the implementation of the OECD Jobs Strategy. For further details see http://www.oecd.org/employment/jobs-strategy/

The pandemic experience of the unemployment insurance system also highlighted the need for investment in greater administrative capacity. New programmes were rapidly established that expanded eligibility and benefit amounts and applications skyrocketed; unemployment insurance payments rose from less than US\$50 billion in Q1 2020 to more than US\$1 trillion in Q2 2020 (Boesch, et al., 2021). With this dramatic increase, delays in processing unemployment insurance claims were experienced in most jurisdictions (Stettner and Novello, 2020). The proportion of unemployment insurance payments more than 21 days past due rose across states in 2020 and have remained elevated (Figure 2.21). As at July 2022, around 16% of payments were 21 days past due in the median state. To expedite payments through the pandemic, some programmes relied on claimants to self-certify their eligibility, but this resulted in a significant increase in fraudulent payments (Weidinger, 2022). In addition, outdated software systems placed limitations on the design of the scheme (Dube, 2021); it was not technically possible in most state systems to provide supplementary benefits through an increased wage-replacement rate (i.e. a specified percent of previous wages). As a consequence, a flat weekly supplement across all workers was adopted. This resulted in some recipient's wage replacement rates rising well above 100% (Boesch, et al., 2021).

Acknowledging the shortcomings of existing processes, the administration set aside US\$2 billion for modernising the unemployment insurance system in the *American Rescue Plan* in early 2021. This included funding to tackle common short-term problems across states, while also working to address long-term challenges. For example, it was intended that new centrally developed systems would be designed to integrate with state systems and address shared challenges, while continuing to encourage jurisdictions to make state-specific upgrades (Department of Labor, 2021). Coordination is being overseen by a new Office of Unemployment Insurance Modernization in the Department of Labor.

The modernisation of state unemployment insurance systems presents an opportunity to more closely link benefit payments with active labour market services, such as job search assistance, public works programmes, up-skilling and retraining programmes. While income support measures aim to prevent households from falling into poverty, active labour market policies aim at increasing the quantity and quality of jobs and matches between employers and employees (see Box 2.7 for a quantification of the economic benefits). Past *OECD United States Economic Surveys* have highlighted the need for the United States to raise spending on the latter (OECD, 2020b). Faced with labour shortages, implementing such policies effectively has become increasingly important. As discussed in Chapter 3, these programmes will also be critical amid the climate transition and the need to reallocate workers from emission intensive activities to new jobs and industries. Systems that integrate unemployment insurance and active labour market policies can improve policy targeting and contribute to more efficient allocation of labour. Better use of data is a key channel for improving the integration of these services and the targeting of programmes to the most suitable participants. This is a challenge currently being addressed by other OECD countries, such as Finland (Box 2.6).

Box 2.6. Finland's attempt to develop a holistic approach to supporting the long-term unemployed

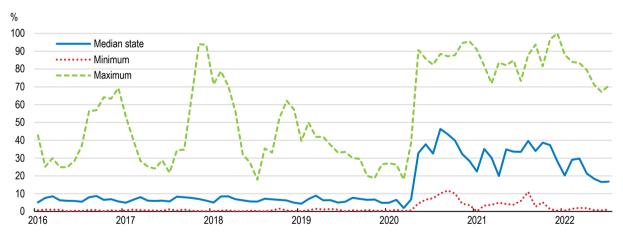
Finland has been testing different approaches to integrating social service providers and public employment services. For example, joint services called Labour Market Service Centres were introduced in 2004 to support long-term unemployed people with multiple challenges. The joint services started as voluntary co-operation between public employment services, the social insurance institution KELA and municipalities. Regardless of formalising this co-operation across country in 2015, the services have stayed fragmented, particularly due to data exchange challenges.

For youth not in employment, education or training "Ohjaamo centres" have been established to provide platforms for one-stop-shops that bring together service providers from both the public and private sectors. The key staff are youth and employment counsellors from Public Employment Services and social workers from municipalities, but also study counsellors, psychologists, nurses, outreach workers and role models.

Source: OECD (2021b)

Figure 2.21. Delays in processing unemployment insurance claims have been significant

Proportion of total unemployment benefit payments more than 21 days past due, by State



Note: Based on first payments within the state and includes regular unemployment insurance, unemployment compensation for ex-service members and unemployment compensation for Federal employees.

Source: Department of Labor, OECD calculations.

StatLink https://stat.link/132t8k

Box 2.7. Quantifying the GDP impact of proposed structural reforms

Quantification of the impact on GDP per capita of selected structural reforms are quantified in the table below. Some of the estimates reported are based on empirical relationships between past structural reforms and productivity, employment and investment. These relationships allow the potential impact of structural reforms to be gauged. The effects are based on estimates, not necessarily reflecting the particular institutional settings of the United States. This includes how representative changes in policies under the control of the states are for the whole country. As such, these quantifications are illustrative.

Table 2.4. Potential impact of structural reforms on per capita GDP

| Reform | Long-run effect |
|---|-----------------|
| Labour market policies | |
| - Increase in spending on active labour market policies per unemployed spending (as a percentage of GDP per capita) that is typical of recent policy changes in OECD countries (i.e. an increase of 3.2). | 1.3% |
| Housing reforms | |
| - Remove restrictive land use planning and increase housing supply in growth areas. | 0.7-2.0% |
| Product market reforms | |
| - A reform that reduces US product market regulations to be equivalent to that in Germany (i.e. a 9.4% reduction).* | 1.0% |
| Social safety net | |
| - An increase in family benefits in kind equivalent to 0.1% of GDP (equivalent to a typical reform observed in OECD countries) | 0.7% |

^{*} The variable in the model is the OECD Product Market Regulation indicator fo Energy, Transport and Communication sectors. The OECD Product Market Regulation indicators measure the regulatory barriers to firm entry and competition in a broad range of key policy areas, ranging from licensing and public procurement, to governance of SOEs, price controls, evaluation of new and existing regulations, and foreign trade.

Source: OECD calculations based on Egert and Gal (2017) and OECD (2020b).

The pandemic has also highlighted the strong reliance of discretionary policy decisions in delivering fiscal support in the United States. This was evident in the case of unemployment benefit supplements (i.e. Federal Pandemic Unemployment Compensation), that faced expiration several times during the pandemic, with last minute extensions pieced together when bipartisan agreement could not be established, through either Presidential memorandum or budget reconciliation. During this process, the rate of the supplement was cut significantly and 26 states ended payments before the expiry of the Federal programme. These developments produced considerable uncertainty for households relying upon the payments. Such uncertainty in the policy path in a crisis is undesirable, not least because it reduces the likelihood that recipients will spend the associated payments and hence may dampen the macroeconomic impact.

There was similar uncertainty related to federal financial aid to state and local governments through the pandemic. Faced with balanced budget constraints and declining state revenues as economic activity plunged, these governments were faced with significantly cutting spending and employment (Green and Loualiche, 2021). The potential pro-cyclical influence of state and government finances was seen clearly through the great recession (Bivens, 2016). Despite that experience, after an initial disbursement as part of the CARES Act, additional funding from the federal government as subsequent waves of the pandemic unfolded was slow to arrive. Most states were able to draw down on rainy day funds that they had accumulated, but there was significant heterogeneity across jurisdictions. Some states, including New Jersey and Nevada, had exhausted their savings by the end of the 2020 fiscal year (Rosewicz et al., 2021).

Looking forward, the government should consider making some disbursements in times of an economic shock automatic once specific economic indicators move through pre-defined thresholds. Automatic stabilisers would effectively be strengthened as a result, without fundamentally changing the size of the public sector as a share of the economy. This would reduce the information, decision, design and implementation lags in fiscal policy in a future downturn (Rawdanowicz, et al., 2021). The budgetary cost of automatically raising transfers could be met through the establishment of a federal rainy-day fund, financed by broadening the tax base, or reduced transfers being triggered when the economy is in an upswing.

Fiscal pressures will mount

The government will need to address the fiscal cost legacy of the pandemic in terms of larger deficits and higher debts in coming years. However, more substantial fiscal pressures will arise from the fast ageing population (Figure 2.22, Panel A) and important societal challenges such as much-needed improvements in the social safety net and the ongoing fight against climate change. A significant step in addressing the latter was made in August 2022 with the passage of the *Inflation Reduction Act*, which contained a range of spending initiatives on climate mitigation. It also included tax reforms that meant the overall legislation was estimated to reduce the fiscal deficit by an estimated US\$90 billion over the 2022-2031 period (Congressional Budget Office, 2022a). Nonetheless, subsequent legislation that provides student debt relief for borrowers earning less than US\$125,000 per year (or US\$250,000 for married couples) will more than offset the deficit reduction from the *Inflation Reduction Act*, though the full cost of student debt relief will depend on behavioural responses (Penn Wharton Budget Model, 2022). The Congressional Budget Office estimates that the cost of student loans will increase by about an additional US\$400 billion in present value as a result of the action (Congressional Budget Office, 2022b).

The OECD Long-term Model estimates that ageing- related fiscal costs will increase by over 8% of GDP between 2021 and 2060 (Figure 2.22, Panel A) in the absence of policy reforms. Over half of this is attributed to increases in public spending on health and pensions, according with projections from the Congressional Budget Office that show spending on social security, Medicare and Medicaid rising 4.8% of GDP between 2021 and 2051. The implication is that a similar reduction in spending or increase in revenue (or combination thereof) will be needed just to stabilise the gross debt-to-GDP ratio (Figure 2.22, Panel B). Prospects for future interest costs are highly uncertain at present and a further upward shock could push the debt to GDP ratio notably higher.

A. Change in general government expenditure from 2021 to 2060 % pts. of potential GDP % pts. of potential GDP 20 ■ Health and long-term care expenditure ■ Pension expenditure Other factors Other primary expenditure ■ Interest on COVID legacy debt ∧ Total
 15 15 10 10 -5 -10 (<u>v</u> JUN AUS CHE ISR SAN 칰 B. Gross general government debt % of GDP 350 With reforms to offset ageing costs 300 Without reforms to offset ageing costs Without reforms to offset ageing costs & +1 pp interest rate shocks 250 200 150 100 50 2000 2005 2010 2015 2020 2025 2030 2035 2040 2045 2050 2055 2060

Figure 2.22. The ageing population will push fiscal spending higher

Note: In Panel A, "Other primary expenditure" is projected based on the assumption that governments will seek to provide a constant level of public spending per capita in real terms. Under some reasonable assumptions, the evolution of this expenditure category relative to GDP becomes an inverse function of the projected evolution of the population-to-employment ratio, as expenditure (numerator) follows population whereas GDP (denominator) follows employment. The "other factors" component captures anything that affects debt dynamics other than the explicit expenditure components (it mostly reflects the correction of any disequilibrium between the initial structural primary balance and the one that would stabilise the debt ratio). In Panel B, underlying projected growth rates, interest rates, etc., are from the baseline long-term scenario (for further details, see Guillemette and Turner, 2021). The debt path in the "With measures offsetting ageing-related costs" scenario assumes the primary budget converges to -2% by 2030 and then to -1% by 2050 and stays there over the next decade.

Source: OECD Long-Term Model.

StatLink https://stat.link/2q7i58

In addition, the social security system in the United States has a long-term financial shortfall that will need to be addressed. Social Security is largely a pay-as-you-go programme. The Old-Age Survivors Insurance Trust Fund and the Disability Insurance Trust Fund are the intermediaries that receive payroll taxes and other earmarked income and are responsible for paying social security benefits and administrative expenses. For many years these funds collected more than they paid out, but in 2021 they began redeeming reserves to help pay benefits. With the ageing population, it is estimated that the combined trust funds will be depleted around 2034 (Board of Trustees of the Federal Old-age and Survivors Insurance and Federal Disability Insurance Trust Funds, 2021). At that time, Social Security would only be able to finance 78% of promised benefits, absent new measures put in place to close the funding gap. Similarly, the Highway Trust Fund (which funds various transport projects financed by transport-related taxes) and the Medicare Hospital Insurance Trust Fund (which provides inpatient hospital payments financed by payroll tax) will also become insolvent in coming years, requiring abrupt cuts to spending and

benefits. Potential steps to close the gap include future increases in the retirement age and adopting an alternative measure of consumer price inflation (i.e. the chained CPI) for indexing various Federal programmes (Box 2.9 further down). Thereafter, indexation of the retirement age to life expectancy could be considered. At present, the full retirement age depends on a workers year of birth, but is not especially low compared with other OECD countries (for workers born after 1959, the full retirement age is currently 67). Furthermore, substantial differences in life expectancy between different income and racial/ethnic groups would need to be taken into account in the indexation of the retirement age to avoid exacerbating existing inequalities.

The favourable debt dynamics in a world where nominal GDP growth surpasses the nominal interest rate has been well documented (Blanchard, 2019), but in an environment of considerable uncertainty and these long term fiscal pressures, fiscal prudence should not be abandoned. The administration publishes fiscal deficit and public debt projections to 2050 based on current and proposed policies in the Budget of the United States Government. For Fiscal Year 2023, alternative scenarios were also produced that outline the fiscal impacts of alternative assumptions related to climate change, healthcare costs and discretionary outlays. Looking forward, the medium-term budgetary framework should continue to be developed, with transparent medium-term fiscal objectives and ongoing monitoring of progress against them.

While fiscal retrenchment does not need to be overly rapid in the short-term, the administration should aim to gradually reduce budget deficits so as to eventually stabilise the public debt to GDP ratio. This will require both improvements in public spending efficiency and revenue collection. Key areas for improving the former are covered in the Issues Notes further below: improving health spending efficiency and the governance of large-scale infrastructure projects. In addition, the administration should consider channels for broadening the tax base.

Broadening the tax base to meet rising fiscal costs

In broadening the tax base, the first priority should be reducing existing distortions in the tax code that erode the revenue base and have unwanted economic consequences. The administration has emphasised the need to address the significant rise in income and wealth inequality observed over recent decades, meaning that distributional implications of various tax reforms warrant careful consideration. As part of the *Inflation Reduction Act*, the administration introduced a 15% minimum corporate tax on large corporates and a 1% tax on share buybacks by corporations (Box 2.8). Looking forward, there are additional tax reforms that should be considered that would reduce distortions and help fund further public expenditures.

Box 2.8. The Inflation Reduction Act

In August 2022, Congress passed the *Inflation and Reduction Act*, a major climate and tax bill that included spending initiatives and tax changes to finance them.

The legislation included the following measures that have fiscal implications:

Lowering consumer energy costs

- US\$9 billion in consumer home energy rebate programs, focused on low-income consumers, to electrify home appliances and energy efficient retrofits.
- The existing credit for energy efficiency home improvements (e.g. for heat pumps, rooftop solar and water heaters) increased from 10% to 30% and extended until 2032.
- A consumer tax credit of up to US\$4,000 for lower/middle income individuals to buy second hand clean vehicles.
- An extension of the existing US\$7,500 tax credit to buy qualified new clean vehicles. Eligibility
 is partly based on local-content requirements that consider the country of production and
 assembly of the vehicle and battery components.
- US\$1 billion grant programme to make affordable housing more energy efficient.

Improving energy security and domestic manufacturing

- Production tax credits to accelerate U.S. manufacturing of solar panels, wind turbines, batteries, and critical minerals processing, estimated to cost US\$30 billion.
- A US\$10 billion investment tax credit to build clean technology manufacturing facilities (e.g. those producing electric vehicles, wind turbines and solar panels).
- US\$500 million in the Defense Production Act for heat pumps and critical minerals processing.
- US\$2 billion in grants to retool existing auto manufacturing facilities to manufacture clean vehicles.
- Up to US\$20 billion in loans to build new clean vehicle manufacturing facilities across the country.
- US\$2 billion for National Labs to accelerate breakthrough energy research.

Decarbonising the economy

- Expanded clean energy tax credits for wind, solar, nuclear, clean hydrogen, clean fuels and carbon capture (includes production tax credits and the extension of the investment tax credit).
- US\$30 billion in grant and loan programs for states and electric utilities to accelerate the transition to clean electricity.
- Tax credits and grants for clean fuels (e.g. a new low-carbon transportation fuel production credit) and clean commercial vehicles.
- Grants and tax credits to reduce emissions from industrial manufacturing processes, including almost US\$6 billion for a new Advanced Industrial Facilities Deployment Program to reduce emissions from the largest industrial emitters.
- Over US\$9 billion for Federal procurement of American-made clean technologies to create a stable market for clean products.
- US\$27 billion clean energy technology accelerator to support deployment of technologies to reduce emissions, especially in disadvantaged communities.

- The introduction of a methane emissions charge on applicable oil and gas facilities that report emissions in excess of 25,000 metric tons of carbon dioxide equivalent gas per year and exceed certain waste emissions thresholds.
- A Methane Emissions Reduction Program to reduce leaks from the production and distribution of natural gas.

Environmental justice

- US\$3 billion in grants to invest in community-led projects in disadvantaged communities and capacity building centers to address disproportionate environmental and public health harms related to pollution and climate change.
- US\$3 billion in grants to support neighbourhood equity, safety, and affordable transportation access.
- US\$3 billion in grants to reduce air pollution at ports.
- US\$1 billion for clean heavy-duty vehicles, like school and transit buses and garbage trucks.

Agriculture and rural communities

- US\$24.9 billion to support climate-smart agriculture practices.
- US\$5 billion in grants to support healthy, fire resilient forests, forest conservation and urban tree planting.
- Tax credits and grants to support the domestic production of biofuels and to build the infrastructure needed for sustainable aviation fuel and other biofuels.
- US\$2.6 billion in grants to conserve and restore coastal habitats and protect communities that depend on those habitats.

Health care

- The extension of Affordable Care Act subsidies for an additional three years. Financial assistance for those enrolled in Affordable Care Act plans for three years, extending programme expiring this year and expanding the eligibility to allow more middle-income people to receive assistance and an increased amount overall.
- Empower Medicare to begin negotiating directly for the price of prescription drugs in 2023. It would start with a list of 10 high-cost, single-source drugs in 2026, rising to 20 drugs by 2029, with a ceiling on the negotiated price.
- Expand premium and co-pay assistance on prescription drugs for low-income individuals.
- Institute a new "inflation rebate" under Medicare. This measure requires drug companies to rebate back the difference to Medicare if they raise prices higher than inflation.
- Cap Medicare patients' out of pocket costs at US\$2,000 per year.
- Provide free vaccines for seniors.

Taxation

- The introduction of a 15% minimum corporate tax that applies to corporations that, for three taxable years, have average annual adjusted financial statement income greater than US\$1 billion. The Joint Committee on Taxation estimates that about 150 taxpayers annually will be subject to the proposed book minimum tax (Joint Committee on Taxation, 2022). This provision is estimated to raise US\$313 billion in revenue over the next 10 years.
- Investing US\$80 billion in the Internal Revenue Service to improve tax enforcement and compliance.
- 1% tax on share buybacks by corporations.

The mortgage interest tax deduction should be further phased out. This deduction is a longstanding feature of the United States tax code, though it was scaled back as part of the 2017 *Tax Cuts and Jobs Act*. In the United States system, taxpayers claim the greater of a standard deduction or the sum of various itemized deductions, including mortgage interest. While there is a justification for interest payments on a taxable investment return being deductible, this is not the case for mortgage interest as imputed housing rents (the investment return) are untaxed. In addition, the deduction encourages housing investment at a time when measures of housing affordability have fallen significantly. The deduction is also highly regressive (Gale, 2020) and disproportionately favours white households (Slemrod, 2022), running counter to a key priority of the current administration to improve racial equity. One option for further phasing out the deduction is to incrementally reduce the maximum mortgage principal eligible for deductible interest.

Similarly, the ability to deduct state and local government taxes paid from federal tax bills is highly regressive: almost all of the benefit is received by the top 20% of the income distribution (Pulliam and Reeves, 2021). Other OECD countries with federal systems, such as Australia and Canada, do not have such deductions. This is because state taxes are typically used to fund state services, meaning there is no issue of double taxation. Some proponents of the deduction argue that its elimination would result in mass emigration of high income households from high taxing jurisdictions. However, the evidence of departures following the 2017 implementation of a cap on the state and local tax deduction is limited so far. Looking forward, the administration should aim to phase out the state and local tax deduction once the existing cap expires in 2025.

There are other base broadening reforms that would expand revenues while not raising marginal tax rates. As detailed in the previous *OECD Economic Survey*, taxing pass-through owners on the basis of the Self-Employment Contributions Act rather than the Federal Insurance Contribution Act would raise an additional US\$20 billion per year and treat different types of owners equally (OECD, 2020b). It would also remove incentives to use different business forms for tax planning and help simplify the tax code. The administration previously proposed adjusting the step up provision that currently bases capital gains on inherited assets on the difference from the value on transfer to the original purchase price. Such an adjustment is estimated to raise an additional US\$11 billion per year (Box 2.9) and would promote greater equality in the distribution of wealth.

Box 2.9. Fiscal policy effects

The following estimates roughly quantify the fiscal impact of selected recommendations and options to enhance fiscal sustainability. The estimated fiscal effects abstract from short-term behavioural responses that could be induced by the given policy change. These estimates are savings (+) and costs (-) and give the average budgetary impact over the 2021-2030 period.

Table 2.5. Illustrative impact of selected reforms

| Policy | Measure | Impact on the annual fiscal balance, US\$ billion | Impact on the fiscal balance, % of GDP |
|----------------------|---|--|--|
| Spending initiatives | Active labour market policies | -12 | -0.1 |
| Tax base | Eliminate itemized deductions | 171.8 | 0.7 |
| Tax base | Change the tax treatment of capital gains from sales of inherited assets | 11.0 | 0.05 |
| Indexation | Use the chained consumer price index (instead of the headline CPI) to index social security and other mandatory programmes. | 22.3 | 0.1 |
| Indexation | Raise the full retirement age for social security by two months per birth year for workers born between 1961 and 1978, so the retirement age increases to 70 for workers born in 1978 or later. | 7.2 | 0.03 |

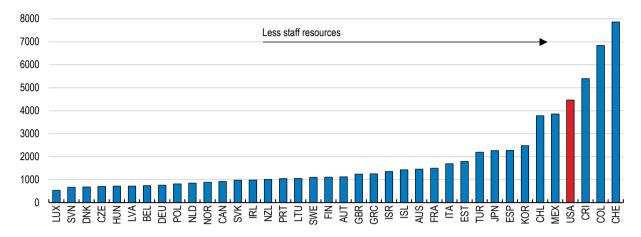
Notes: The estimate presented here is the net of US\$2 billion in additional outlays on IRS funding and an estimated increase in revenues of US\$6 billion.

Source: CBO (2020), CBO (2021c), Committee for a Responsible Federal Budget (2021).

Investment in the tax administration can also yield notable revenue gains. The capacity of the Internal Revenue Service has been negatively impacted by a 20% real decline in its Budget over the past decade (Department of the Treasury, 2021), which has manifested in a notable fall in audit rates. From 2010 to 2020, full-time personnel declined by over 33,000 with more than one third of those in key enforcement positions (Internal Revenue Service, 2021). Compared to other OECD countries, full time equivalent staff in tax administration is limited in the United States (Figure 2.23). As part of the *Inflation Reduction Act*, the administration will increase the funding for the IRS by US\$80 billion over ten years. The Congressional Budget Office estimates that this could increase revenues by approximately US\$200 billion (CBO, 2021b), though the payoff could be even larger if these investments have a significant deterrent effect on tax evasion (Center for American Progress, 2021). Looking forward, continued investment in the Internal Revenue Service will be needed to combat tax evasion. An area that should continue to be reinforced is the capacity to use Big Data in tax administration. Such efforts will be enhanced by the improved exchange of information on cross border activities that has accompanied Country-by-Country reporting, the exchange of rulings and the OECD/G20 Common Reporting Standard (OECD, 2021c).

Figure 2.23. The tax administration is under-resourced

Population per total tax administration full time equivalents, 2019



Source: OECD Tax Administration 2021.

StatLink https://stat.link/gfshy8

The United States has taken significant steps to strengthen the international aspects of its tax system in recent years, including by implementing key recommendations of the OECD/G20 Base Erosion and Profit Shifting (BEPS) project. In addition, the introduction of the Global Intangible Low-Taxed Income (GILTI) regime has provided an important impetus for the reform of the international tax rules, which culminated in the historic international tax agreement reached in October 2021. The United States authorities have played a leading role in the negotiations, carried out through the OECD/G20 Inclusive Framework on BEPS, which resulted in 137 jurisdictions agreeing to the two-pillar solution to address the tax challenges arising from the digitalisation of the economy.

The timely and widespread implementation of the agreement would provide a variety of benefits to the United States, as well as to jurisdictions globally. The agreement would provide additional tax certainty to the international environment faced by US businesses and would support cross-border trade and investment at a critical time for the global economy. In particular, the swift, successful and widespread implementation of the agreement would help limit the negative impacts that could result from unilateral actions taken by other jurisdictions to address the tax challenges of the digitalisation of the economy, such as digital services taxes, which would disproportionately impact US businesses. Implementation of the agreement should also raise additional revenues for the United States.

Issues Notes

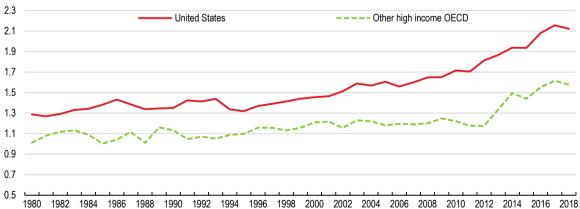
Improving health spending efficiency

Improving health spending efficiency should be a focus given the projected rise in future health expenses and the fact that it already makes up a substantial share of fiscal outlays (i.e. around 18% of total spending). The United States healthcare system is largely based on private providers and private insurance, but a rising share of healthcare funding has been provided by government over time, with around 35% of households in 2020 receiving care either through government insurance or direct public provision (Keisler-Starkey and Bunch, 2021). Estimates suggest that the United States spends almost twice as much on health per capita than comparable OECD countries (Kurani and Cox, 2020) and such spending has risen more rapidly in the United States over the past decade. Despite this, and that fact that the United States is a leader in medical technology innovation, life expectancy at birth is comparatively low and has not increased over the past decade to the same extent as in other OECD countries.

About three quarters of the health cost differential between the United States and OECD countries is accounted for by inpatient and outpatient care (Kurani and Cox, 2020). This includes payments to hospitals, clinics, and physicians for services and fees such as primary care or specialist visits, surgical care, and facility and professional fees. A key factor cited for high and rising health costs in the United States has been strong market power of healthcare providers that can lead to anticompetitive practices.

There has been substantial consolidation in the healthcare industry over recent years, through increased vertical and horizontal merger and acquisition activity between hospitals and physicians (Fulton et. al, 2021). As a result, market concentration has risen in these markets (ibid), with it likely to increase further in the wake of the pandemic given the financial difficulties faced by many providers (Gustaffson and Blumenthal, 2021). Rising concentration is not necessarily a bad thing. It may reflect economies of scale that benefits patients. However, various US-specific studies have highlighted the role of market concentration in raising prices paid by private insurance (Gaynor and Vogt, 2003; Haas-Wilson and Garmon, 2011; Dafny et. al., 2019; Koch and Ulrick, 2017) and negatively impacting patient outcomes (Short and Ho, 2019; Koch et. al., 2018). Indeed, markups (charges over cost) in the United States health sector are notably higher than in other high income OECD countries and have risen steeply in recent years (Figure 2.24). This suggests anticompetitive practices may be accompanying burgeoning market concentration.

Figure 2.24. Markups in the United States health sector are comparatively high Median markups in healthcare, US compared to other high income OECD countries



Note: Other high income OECD countries are Australia, Canada, Germany, France, United Kingdom, Japan, Korea and Sweden. Firms in the healthcare sector encompass healthcare equipment, healthcare providers and services, pharmaceuticals, and medical research. The analysis is based on Worldscope data and the methodology for calculating the markups follows the work of Diez et al. (2018). Source: Lin et. al., 2021.

StatLink https://stat.link/ldp9k7

In response to these trends, antitrust enforcement in the health sector is being prioritised by the administration. The *Executive Order on Promoting Competition in the American Economy* encouraged the Justice Department and Federal Trade Commission to review and revise merger guidelines in the health sector. Antitrust suits that break up dominant firms are uncommon (Gaynor, 2021), but competition authorities are now more actively monitoring these markets. In 2020, the Federal Trade Commission ordered six insurance companies to provide information to allow the effects of consummated physician group and healthcare facility mergers during the 2015-2020 period to be studied. In addition, in January 2022, the Federal Trade Commission and Antitrust Division of the Department of Justice sought public comment on how the agencies can modernise enforcement of the antitrust laws regarding mergers. An area for consideration includes removing the exemption of merging parties in smaller transactions in healthcare from reporting (Gustaffson and Blumenthal, 2021). Any such reform should be accompanied by additional resources being allocated to the Federal Trade Commission and Department of Justice for merger review. Public spending on antitrust enforcement has declined by around 18% since 2000, despite the increasing concentration in US markets (Baer, 2020).

Table 2.6. Past OECD recommendations on promoting competition

| Key recommendations in previous Survey | Actions taken since the previous Survey (July 2020) |
|---|---|
| Anti-trust policy should police markets vigorously to ensure competition remains healthy. | The Whitehouse Competition Council has taken a series of actions-to- date in promoting competition in the areas of healthcare, labour markets, finance, food and agriculture, technology and transportation. |
| Encourage states to delicense occupations with very limited concerns for public health and safety and act against anticompetitive behaviour. | As part of the Executive Order on Promoting Competition in the American Economy, the President encouraged the Federal Trade Commission to ban unnecessary occupational licensing restrictions that impede economic mobility. At the same time, the Executive Order acknowledged the public safety rationale for occupational licensing in industries such as skilled construction trades. |
| Use federal law to impose recognition of out-of-State licensures, allowing States to set stricter requirements only if they can prove it is necessary to protect the public. | As above |
| Address excessive employment barriers that create obstacles for ethnic minorities and foreign nationals. | |
| Outlaw the use of non-competes except where employers can prove benefit to workers. Set a minimum earning or minimum skill threshold for using non-competes to protect low-income workers. | As part of the Executive Order on Promoting Competition in the American Economy, the President encourages the Federal Trade Commission to ban or limit non-compete agreements. |

Competition in health markets can also be enhanced by ensuring that unnecessary barriers to firm entry are alleviated. There are a range of regulations, at both the federal and state level, put in place to improve patient wellbeing but that may negatively impact on competition. These include Any Willing Provider Laws (requiring insurers to include any provider who desires to be in their network, paying them at set rates) and Certificates of Public Advantage (which shield merging health providers from antitrust scrutiny, with the promise of oversight by state authorities who may or may not have the requisite capability; Gaynor, 2021). The latter are of particular concern for competition authorities, with the Federal Trade Commission undertaking ongoing market studies on these laws since 2017 (Federal Trade Commission, 2017).

The potential anticompetitive impact of Certificate of Need laws should also be closely evaluated. These regulations exist in thirty six states and the District of Columbia and require a state health planning agency to approve the construction of any new healthcare facility. The laws are intended to avoid costly duplication of technology or facilities in a system where cost-based reimbursement and third-party payments could result in excessive proliferation of health services (Conover and Bailey, 2020). However, past studies highlight that the regulations have often not reduced health costs while having anticompetitive effects, functioning as a form of industry protection (Federal Trade Commission and Department of Justice, 2004). In some jurisdictions, the laws have reduced the number of facilities providing a given regulated service

without changing the number of procedures undertaken overall (Conover and Bailey, 2020), suggesting they have contributed to increased market concentration. Certain states have begun to scale back their Certificate of Need laws, with New Hampshire repealing them in 2016 and Florida repealing most of the requirements in 2019. The evidence suggests that the net costs of these laws can outweigh their benefits and states should be encouraged to continue evaluating the extent to which their provisions are welfare enhancing.

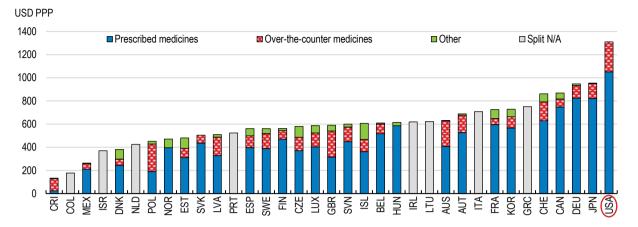
Promoting greater patient choice could also be an important channel for injecting competition into the health sector (OECD, 2018). An impediment has been data blocking practices aimed to prevent or impede the clinical information of patients flowing to alternative providers. However, the Office of the National Coordinator finalised rules in 2020 to increase penalties for data blocking and to mandate technologies to allow patients access to their health data (Peters and Testa, 2021). Opportunities for data portability would be enhanced by comprehensive laws at the national level related to data protection (Castro, 2021). At present, there are a patchwork of sectoral and state-level data protection laws that contain data portability requirements. Looking forward, enhanced portability of health data can best spur competitive dynamics if combined with incentives for those choosing services to select lower-cost and higher-quality providers (Sinaiko, et. al., 2021), aided by the availability of reliable price and quality information. It is also important that regulators play an active role in supervising interoperability standards so that any data portability requirements have the greatest effect.

Further upward pressure on health spending is being exerted by prescription drug prices, which are significantly above those in most OECD countries and lead to comparatively high spending on pharmaceuticals per capita (Figure 2.25; Dubois et al. 2021). In 2018, brand name drug prices in the United States were 344% of those in 32 OECD comparison countries (Mulcahy et. al., 2021). Prescription drug prices under Medicare have been higher than under other federal programs (CBO, 2021d), partly reflecting the inability of Medicare to directly negotiate prices, unlike the Veterans Health Administration, the Department of Defense or Medicaid (Martin, 2021). Other OECD countries, such as the United Kingdom, leverage the position of the public health system as a single buyer to effectively control overall spending on medicines. As part of the recent *Inflation Reduction Act*, Medicare will be able to directly negotiate prescription drug prices with manufacturers and impose a tax penalty if drug companies increase their prices faster than inflation. Prior to the legislation being enacted, estimates suggested that this would reduce public health spending by about US\$160 billion over a decade (0.7% of GDP; CBO, 2021c).

Under the new arrangement, drugs become eligible for negotiation once they have been on the market for a fixed number of years: 9 years for small molecule drugs and 13 years for biologics. Medicare will eventually negotiate up to 20 drugs per year and all insulin products. While this is a very small subset of available drugs, the rise in prices has been particularly pronounced for a narrow group of "specialty" drugs that treat chronic, complex or rare conditions. Brand-name specialty drugs have accounted for about 30% of net spending on prescription drugs under Medicare Part D, but only 1% of prescriptions dispensed (Anderson-Cook, 2019). In future, the authorities should consider expanding the number of drugs subject to negotiation by Medicare, after monitoring the impact of the recent changes on prices and pharmaceutical innovation.

Figure 2.25. Spending on pharmaceuticals is much higher than other OECD countries

Expenditure on retail pharmaceuticals per capita, 2021 or latest available



Note: Data for Italy, Lithuania, Greece, Ireland, Portugal and the Netherland includes medical non-durables (resulting in an overestimation of around 5-10%). Data for Mexico only include private expenditures.

Source: OECD Health Statistics.

StatLink https://stat.link/zmd60v

Improving governance of large-scale infrastructure projects

In November 2021, the United States Congress passed the *Infrastructure Investment and Jobs Act*, which provided around US\$550 billion of additional infrastructure spending over a ten year horizon. The legislation included new spending on road, rail, port and broadband infrastructure. It also emphasised environmental objectives, through funding for environmental remediation (e.g. cleaning up brownfield sites and reclaiming abandoned mine land), modernising the electricity grid and for zero- and low emission public transport infrastructure. In total, the additional annual spending is equivalent to over 15% of prepandemic public infrastructure spending.

Most OECD countries have emphasised infrastructure spending in recovery plans (OECD, 2021d), but the need for upgrades to infrastructure in the United States was well recognised prior to the pandemic. While the United States boasts world leading infrastructure in some sectors, such as commercial freight, it lags behind in other areas. In recent years, the United States ranking in cross-country measures of infrastructure quality, such as that from the World Economic Forum Global Competitiveness Report, slipped. Many of the initiatives in the *Infrastructure Investment and Jobs Act* accord with the spending priorities outlined in past *OECD United States Economic Surveys*. For example, the need to increase public spending on transport infrastructure, broadband and clean technologies have been emphasised in recent *Surveys* (Table 2.7). Work by the Congressional Budget Office has highlighted the potential for substantial positive productivity benefits from the initiatives (CBO, 2021e). Such benefits can come directly through raising the value added of infrastructure sectors (i.e. utilities, telecommunications and transport) and indirectly through the positive impact on downstream sectors that use such infrastructure as an intermediate input. Even so, the productivity payoff from infrastructure spending is highly uncertain and depends critically on the frameworks determining the selection and implementation of projects.

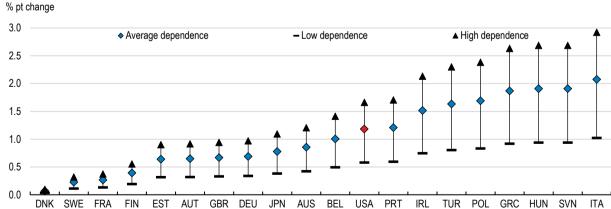
Table 2.7. Past OECD recommendations on building physical infrastructure

| Key recommendations in previous Survey | Actions taken since the previous Survey (July 2020) |
|---|--|
| Invest in new telecommunication infrastructure where supported by appropriate evaluation such as cost benefit analysis. | |
| Improve the maintenance of the road network. | The Infrastructure Investment and Jobs Act included US\$110 billion in additional funding to repair roads and bridges and support major transformational projects. The legislation also included the first ever Safe Streets and Roads for All program to support projects to reduce traffic fatalities. |
| Provide fiscal incentives for states and localities to relax land use restrictions and promote multi-use zoning. | As part of the American Jobs Plan (released March 2021), the administration proposed a new competitive grant programme that awards flexible and attractive funding to jurisdictions that take concrete steps to eliminate exclusionary zoning and harmful land use policies. |
| Help states and localities better co-ordinate land-use, transportation and housing policies. | |
| Require metro mass transit fund recipients to integrate transport policy with land-use and housing policy. | |
| Invest in extreme weather and climate-resilient infrastructure. | The Infrastructure Investment and Jobs Act included US\$50 billion to protect against droughts, heat, floods and wildfires, in addition to a major investment in weatherisation. |

Demmou and Franco (2021) estimated noteworthy effects of differences in infrastructure governance across countries on productivity growth. Infrastructure governance can be understood as the policies, frameworks, norms, processes and tools used by public bodies to plan, make decisions, implement and monitor the entire life cycle of public infrastructure (OECD, 2020d). The increase in productivity growth following a significant reform to governance practices could be over 1½ percentage points for an average US firm in an infrastructure dependent sector (Figure 2.26). Some infrastructure governance challenges in the United States have been identified, including inadequate capacity in some states for managing projects, excessive project scope (i.e. overenginnering), insufficient coordination between governments, poor regulatory standards for some infrastructure and abusive use of permitting processes (Demsas, 2021).

Figure 2.26. Improving infrastructure governance could bring significant productivity gains

Productivity gains of raising infrastructure governance to those of the best performing country



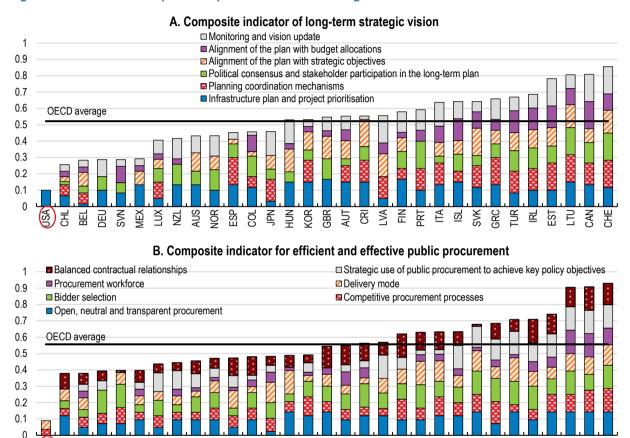
Note: The figure shows the downstream productivity growth increase from moving to infrastructure governance best practices (Netherlands in the estimation sample) for the average firm in a low (professional services)/average (manufacture of food products, beverages and tobacco products)/high (manufacture of paper and printing of media) infrastructure dependent sector. Infrastructure governance is proxied by the overall index from the Hertie Business School.

Source: Demmou and Franco (2020).

StatLink https://stat.link/8v3921

The OECD is currently developing *Infrastructure Governance Indicators* to support member countries in the assessment of decision-making processes, tools and monitoring strategies for infrastructure investment and delivery. Based on the 2020 *Survey on the Governance of Infrastructure*, these indicators highlight some shortcomings in the governance of infrastructure in the United States. These are most apparent in the composite indicators related to "long-term strategic vision for infrastructure" and "efficient and effective procurement" (Figure 2.27).

Figure 2.27. There is scope for improved infrastructure governance



Note: In Panel A, the composite indicator of long-term strategic vision for the United States is based on long-term national cross-sectoral infrastructure plans. The country currently does not have a long-term national cross-sectoral infrastructure plan, which explains the low indicator value. In Panel B, the United States does not traditionally rely on public procurement of major infrastructure at the Federal level, with such projects instead being carried out at the sub-national level and subject to the legal frameworks and requirements of those sub-national jurisdictions. The composite indicator for efficient and effective public procurement looks at national-level public procurement thus explaining the low indicator value for the United States.

일 됨

Ζ

Source: OECD Infrastructure governance.

StatLink https://stat.link/0xv4ar

A sound long-term strategic vision for infrastructure involves rigorous planning and coordination mechanisms with strong stakeholder engagement and alignment with strategic objectives and budget allocations. Strategic infrastructure planning is critical to support resilient critical and networked infrastructure and to meet climate objectives (OECD, 2021e). In the United States, sectoral plans tend to be shorter than 10 years and there is no explicit alignment with other strategic objectives, such as climate change. In addition, the United States has traditionally not made use of national cross-sectoral

infrastructure plans. Such plans recognise the interlinkages between different types of infrastructure (i.e. transport, water, energy, communications and social) and align infrastructure project decisions accordingly. Digital and energy infrastructure have been identified as having particularly important linkages to other sectors, as most forms of infrastructure are energy-dependent and have become increasingly reliant on digital control systems (ITF, 2021). If well executed, cross-sectoral plans should improve the resilience of infrastructure networks (ibid.). The United Kingdom and Australia are two countries that have recently acknowledged that interconnected risks between infrastructure sectors may increase vulnerability through potential cascading failures (NIC, 2020; Infrastructure Australia, 2019).

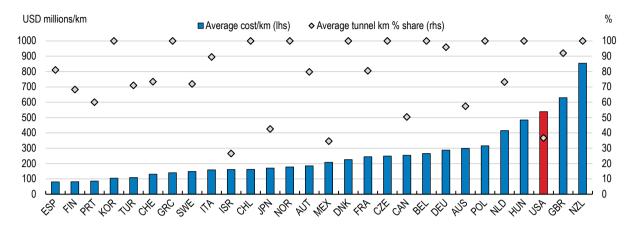
The need for a cross-sectoral infrastructure plan at the national level reflects the presence of interjurisdictional spillovers (both positive and negative) that are unlikely to be taken into account by state-level authorities. Infrastructure projects with strong network effects may be undervalued if such spillovers are not incorporated in decision-making (Bivens, 2017). National-level planning can also play an important role in maximising the compatibility and interconnection of infrastructure between states. This may be especially important as the country transforms the existing energy infrastructure amid the climate transition.

Various OECD countries have established independent infrastructure advisory bodies in recent years to take an ongoing role in national cross sectoral infrastructure planning (ITF, 2021). A welcome development in the United States has been the establishment of a Secretary-level task force and a senior adviser in the White House for coordinating the implementation of the *Infrastructure Investment and Jobs Act*. Looking forward, the administration should consider retaining some of these temporary institutional arrangements on an ongoing basis. The need for an infrastructure bank - like the European Investment Bank - is debatable in the United States context given federal government financial support is already provided in the form of tax incentives on municipal bonds, which local governments mostly rely upon to finance infrastructure projects. However, there is value in considering a new federal institution tasked with ongoing cross-sectoral and cross-state advisory about infrastructure priorities and best practices. In many OECD countries these institutions are strictly independent from the government in order to ensure impartiality. In the United Kingdom, the National Infrastructure Commission provides expert impartial advice on infrastructure, undertaking specific studies and shaping the national infrastructure assessment. Infrastructure Australia is also an independent government advisory agency which updates the Australian Infrastructure Plan (not a politically sanctioned document) every five years and regularly publishes a shortlist of priority investments based on consultation with states, local governments and the private sector. In addition, US infrastructure planning could further benefit from an overview of infrastructure stock, condition and performance at all levels of government, similar to the model of Canada's Core Public Infrastructure Survey.

The OECD *Infrastructure Governance Indicators* also suggest scope for improving the mechanisms used to ensure open, neutral and transparent procurement processes and identifying proposals offering the best value for money. Some measures highlight relatively high costs of infrastructure projects in the United States (Figure 2.28). While there is significant heterogeneity in the quality of implementation of US infrastructure projects (Brooks and Liscow, 2020), various factors have been identified for inflated costs in some instances. These include poor procurement practices, poor project management and regulatory constraints, including "Buy American" laws (Levy, 2021).

Figure 2.28. Indicators of infrastructure costs are elevated

Cost of selected urban rail projects



Note: The data covers only a portion of rail projects in each city/country and, in many instances, is not representative of all the lines constructed in that city/country. The indicator value from the United States is based on 19 rail projects.

Source: Transit Costs Project.

StatLink https://stat.link/x068ka

Many OECD countries face challenges in developing public procurement practices that effectively deliver the desired infrastructure at least cost. This is due to the complexity of infrastructure projects and the multitude of decisions that can influence their outcome. The fact that there is no "one size fits all" approach to procurement has meant that choices often rely on subjective judgment that may not always be evidence based. The OECD is addressing this through developing the Support Tool for Effective Procurement Strategy (OECD 2021f). This not only guides decisions around conceptualisation (i.e. bidder selection and choice of delivery model) but also on the preceding decisions of contract scoping and the capabilities that should be outsourced in a particular project or developed in-house.

In procurement choices and in selection of infrastructure projects more broadly, impacts on climate pollution should be systematically taken into account. The federal government plays a major role in funding infrastructure investments, but project selection decisions are largely the purview of state governments. Hence, state governments could work together to identify good practices in the management and sustainability of procurement of construction and related services, particularly in terms of lowering costs. Regarding sustainability, a social cost of carbon is already incorporated into regulatory cost-benefit analysis. This is an estimate of the monetised damages associated with incremental increases in carbon. However, there is no mandate that federal grants to states for infrastructure projects require a calculation of the social cost of greenhouse gases in the projection selection phase. Not doing so risks locking in high emissions infrastructure that is not consistent with the goal of reaching net zero emissions by 2050.

In January 2021, an Executive Order announced the re-establishment of the Interagency Working Group on the Social Cost of Greenhouse Gases. This group was tasked with updating estimates of the social cost of carbon, social cost of nitrous oxide and social cost of methane. The group will also provide recommendations to the President regarding areas of decision making, budgeting and procurement where these estimates should be applied. Decisions related to infrastructure projects should be one such area. Going forward, these estimates should also be updated regularly and transparently, based on the best available science, in order to provide some certainty to businesses and households.

Continuing to buttress the anti-corruption framework

The perception of corruption is low in the United States, but remains somewhat weaker than in most other G7 countries (Figure 2.29, Panel A). The control of corruption indicator is also relatively weak and has dipped lower in the past few years (Figure 2.29, Panel B and C). According to the Varieties of Democracy Project, the main areas of weakness compared with peer countries relate to public sector embezzlement and legislature corruption (Figure 2.29, Panel D).

A. Corruption Perceptions Index B. Control of corruption Scale: 0 (worst) to 100 (best), 2021 Scale: -2.5 (worst) to 2.5 (best), 2020 90 2.5 80 1.5 70 60 0.5 50 40 -0.530 20 -1.5 10 -2.5 ĭ SA ₹ 9 C. Evolution of "Control of Corruption" D. Corruption by sector, "Control of Corruption" Scale: -2.5 (higher) to 2.5 (lower corruption) Scale: 0 (worst) to 1 (best), 2021 Worst performer OECD USA -BRIICS **PEERS** 2.5 Executive bribery 2.0 07 1.5 Executive Judicial corruption 0.50 embezzlement 1.0 0.5 Legislature corruption Public sector bribery -0.5 Public sector 2002 2005 2008 2011 2014 2017 2020 embezzlement

Figure 2.29. Indicators of control of corruption dipped in recent years

Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.

Source: Transparency International (Panel A); World Bank (Panels B & C); Varieties of Democracy Project (Panel D).

StatLink https://stat.link/5lbusi

In recent years, the administration has put a strong emphasis on improving the anti-corruption framework. In mid-2021, the fight against corruption was established as a Core United States National Security Interest. A National Strategy on Countering Corruption was subsequently published in December 2021. This sought to provide a whole-of-government response to the issue, with a particular emphasis on understanding and responding to transnational corruption risks. The strategy was organised around five pillars; i) modernising, coordinating, and resourcing U.S. Government efforts to fight corruption, ii) curbing illicit finance, iii) holding corrupt actors accountable, iv) preserving and strengthening the multilateral anti-corruption architecture, and v) Improving diplomatic engagement and leveraging foreign assistance resources to achieve anti-corruption policy goals. Federal departments and agencies will report annually to the President on progress made against the Strategy's objectives.

In terms of tax transparency, which reduces the scope for tax evasion, the United States is largely compliant and similar to other G7 countries (Figure 2.30, Panel A). With respect to the effectiveness of anti-money laundering measures, the United States performs better or at least equivalent to other G7 countries (Figure 2.30, Panel B). However, concerning the technical compliance of anti-money laundering measures, the Financial Action Task Force judged the United States non-compliant in four areas as of March 2020: transparency and beneficial ownership of legal persons, customer due diligence, other measures and regulation and supervision of designated non-financial businesses and progressions (Financial Action Task Force, 2020). Looking forward, achieving continued progress in technical compliance in all anti-money laundering measures should be a priority.

In January 2021, Congress passed the *Corporate Transparency Act*. The legislation requires all entities formed in or registered to do business in the United States to report beneficial ownership information to the Financial Crimes Enforcement Network by no later than 1 January 2022. Before this measure was introduced, very few states required information about beneficial owners when a corporation or limited liability company was formed. This lack of information could be exploited by criminals for a variety of illegal activities, including money laundering and tax evasion. It is expected that the new provisions will significantly enhance the ability of the United States authorities to detect and investigate financial crimes. In addition, new legislation has been proposed (called the *Enablers Act*) that would amend the *Bank Secrecy Act* to require various intermediaries including trust companies, financial advisers, lawyers and art dealers to investigate clients seeking to move money and assets into the American financial system. Banks are already required to undertake such due diligence, but these other intermediaries would also be required to report any suspicious activity to the Treasury Department under the proposal.

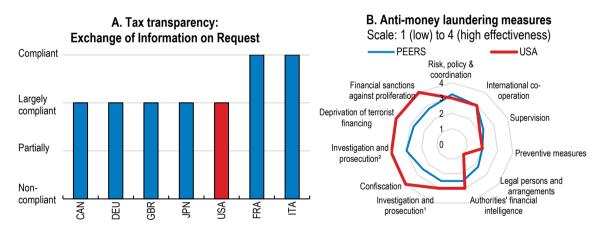


Figure 2.30. Tax transparency and anti-money laundering measures are mostly effective

Note: Panel A summarises the overall assessment on the exchange of information in practice from peer reviews by the Global Forum on Transparency and Exchange of Information for Tax Purposes. Peer reviews assess member jurisdictions' ability to ensure the transparency of their legal entities and arrangements and to co-operate with other tax administrations in accordance with the internationally agreed standard. The figure shows first round results; a second round is ongoing. Panel B shows ratings from the FATF peer reviews of each member to assess levels of implementation of the FATF Recommendations. The ratings reflect the extent to which a country's measures are effective against 11 immediate outcomes. "Investigation and prosecution" refers to money laundering. "Investigation and prosecution" refers to terrorist financing. Source: OECD Secretariat's own calculation based on the materials from the Global Forum on Transparency and Exchange of Information for Tax Purposes; and OECD, Financial Action Task Force (FATF).

StatLink https://stat.link/ise7u1

Table 2.8. Policy recommendations from the Key Policy Insights

| MAIN FINDINGS | RECOMMENDATIONS (Key recommendations in bold) |
|---|--|
| Ensuring a sustained r | ecovery in output and jobs |
| The pace of COVID-19 vaccination has slowed, with significant heterogeneity in vaccination rates across states. Most unvaccinated individuals cite their doctor's office as the preferred location for vaccination. However, independent primary care practices have had limited engagement in the vaccine campaign so far. | Further raise COVID-19 vaccination rates, including by boosting primary care capacity to administer vaccines and by building confidence in accurate information about vaccines. |
| Inflation has spiked and there are signs of broadening price pressures. However, these have not yet translated into long-term inflation expectations becoming de-anchored. Experimental estimates suggest that inflation has been higher for the lowest income quintile than the highest income quintile over the past two years. | Publish inflation aggregates for separate households in the income distribution, based on their different average consumption baskets. |
| Monetary policy has begun to tighten. Elevated inflation and convergence to full employment will likely require further tightening of monetary policy. | Continue to raise the Federal Funds Rate and further reduce asset holdings, with the pace of normalisation remaining highly responsive to changes in economic conditions. |
| The banking system appears to be well capitalised and profitable. However, capital requirements under some macroprudential tools exhibit procyclicality. There are signs that institutions in the non-bank financial sector have become more highly leveraged and have significant exposure to leveraged loans that have experienced declining credit quality. However, assessment of non-bank risks is complicated by data limitations. | Improve data collection on the activities of non-bank financial institutions, including hedge funds and life insurance companies. Consider targeting a positive countercyclical capital buffer, instead of zero, in a normal risk environment. Develop the regulatory framework for Stablecoins, including clear assignment of responsibilities across regulators. |
| The Federal Reserve is developing a programme of climate-related scenario analysis. However, methodological challenges exist related to both obtaining the necessary granular data and developing a modelling framework. | Continue to develop a rigorous framework for climate-related scenario analysis that can provide regulators and markets with timely insights on climate-related financial risks. |
| The pandemic-related fiscal measures announced in 2020 and early 2021 have now expired. Even so, earlier stimulus checks, supplementary unemployment benefit payments and expanded benefit coverage, have resulted in accumulated savings that could continue to support consumer spending in the short-term. Russia's war against Ukraine is likely to negatively impact output growth at the same time as the rise in commodity prices pushes inflation higher. | Further reduce the fiscal deficit while continuing to invest in combatting climate change and improving the social safety net. Continue to develop the medium-term budgetary framework. Consider introducing new temporary fiscal measures targeted at vulnerable groups if the impacts of Russia's war against Ukraine or an economic slowdown are unexpectedly pronounced. |
| Expansions in unemployment insurance eligibility and benefit amounts during the pandemic were accompanied by significant delays in processing claims in most states. In addition, outdated software systems placed limitations on the design of supplementary unemployment benefits. | Continue to modernise and streamline unemployment insurance systems, strengthening integration with job search assistance and training schemes. |
| The ageing population, low interest rates, heightened uncertainty and fiscal policy playing a more active role in cyclical stabilisation have altered the environment in which fiscal policy is operating. The extent to which shocks to household income are offset by automatic stabilisers is relatively low. | Consider automatically linking expanded unemployment benefits and federa fiscal aid for state and local governments to pre-specified economic triggers. More closely index long-term fiscal commitments to their underlying drivers (e.g. indexation of retirement age to life expectancy). |
| To eventually stabilise the public debt to GDP ratio, additional revenue and improvements to public spending efficiency will be needed. Mortgage interest tax deductibility and the state and local tax deduction push up property prices, disproportionately benefit high-income families and have limited economic justification. | Phase out regressive distortions from the tax code, including the mortgage interest tax deduction and state and local tax deductions. Reduce tax evasion, by investing further in the Internal Revenue Service. |
| Improving public spending efficier | ncy and the anti-corruption framework |
| Estimates suggest that the United States spends almost twice as much on health per capita than comparable OECD countries. There has been substantial consolidation in the healthcare industry over recent years which has been accompanied by increased markups. | Remove reporting exemptions for smaller merger transactions in the healthcare sector. More closely monitor the anticompetitive effects of Certificate of Need laws. Ensure adequate resources for antitrust authorities to combat anti-competitive practices and fully implement the Executive Order on Promoting Competition in the American Economy. |
| Enabling greater data portability by consumers may promote competition in the health sector. However, there is a patchwork of sectoral and state-level data protection laws that contain data portability requirements. | Identify opportunities for introducing data portability policies at the national level and give regulators an active role in supervising interoperability standards. |
| Pharmaceutical prices are much higher than in most OECD countries, pushing up public spending. The passage of the <i>Inflation Reduction Act</i> | Consider further expanding the number of pharmaceutical drugs subject to negotiation by Medicare. |

| will mean Medicare will be able to directly negotiate pharmaceutical prices with manufacturers, but this will only be for a small subset of available drugs. | |
|---|---|
| Infrastructure gaps are being addressed through the legislated Infrastructure Investment and Jobs Act. Particular governance challenges relate to cross-sectoral planning at the national level and public procurement processes. Estimates of the social cost of greenhouse gas emissions are currently being updated and an interagency group is reviewing areas of public decision-making where these estimates should be applied. | As in other OECD countries, establish a dedicated federal institution tasked with ongoing cross-sectoral and cross-state advisory about infrastructure priorities and best practices. Review public procurement processes and explore the application of the OECD Support Tool for Effective Procurement Strategy to procurement decisions in the United States context. Mandate that federal grants to states for infrastructure projects require an adequate estimate of the social cost of greenhouse gases to be applied in the project selection phase. Encourage state governments to work together to identify good practices in the management and sustainability of procurement of construction and related services. |
| The United States performs better or at least equivalent to other G7 countries with respect to the effectiveness of anti-money laundering measures. However, the Financial Action Task Force judged the United States still non-compliant in four areas. | Make continued progress in achieving technical compliance in all anti-money laundering recommendations of the Financial Action Taskforce. |

References

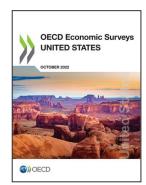
- Aaronson, S. R. et. al. (2019), "Okun revisited: who benefits most from a strong economy?", *Brookings Papers on Economic Activity*, Vol. 50.
- Anderson-Cook, A. et. al. (2019), "Prices for and spending on specialty drugs in Medicare Part D and Medicaid: an in-depth analysis", *Working Paper Series*, No. 2019-02, Congressional Budget Office, Washington D.C.
- Autor, D. et. al. (2022), "The \$800 billion Paycheck Protection Program: where did the money go and why did it go there?, *NBER Working Paper*, No. 29669.
- Aronovich, A., and A. Meldrum (2021), "High-frequency estimates of the Natural Real Rate and Inflation Expectations", *Finance and Economics Discussion Series*, 2021-034, Board of Governors of the Federal Reserve System, Washington D.C.
- Baer, B (2020), "Improving antitrust law in America", testimony before the U.S. House Judiciary Subcommittee on Antitrust, Commercial and Adminative Law. 1 October, 2020.
- Bandyopadhyay, S., and A. Bharadway (2019), "US-China trade war: shifting to importing from other nations", Federal Reserve Bank of St. Louis. 23 December, 2019.
- Bank for International Settlements (2021), "Stress-testing banks for climate change a comparison of practices", FSI Insights on policy implementation, No. 34.
- Banque de France (2021), "A first assessment of financial risks stemming from climate change: The main results of the 2020 climate pilot exercise", *Analyses et synthèses*, No. 122-2021.
- Bivens, J. (2017), "How to improve infrastructure project selection", *Economic Policy Institute*, 18 October 2017.
- Bivens, J. (2016), "Why is recovery taking so long-and who's to blame?", *Economic Policy Institute*, 11 August 2016.
- Blanchard, O. (2019),"Public debt and low interest rates", American Economic Review, Vol. 109, No. 4.
- Board of Governors of the Federal Reserve System (2022a), *Monetary Policy Report*, February 2022.
- Board of Governors of the Federal Reserve System (2022b), *Principles for Reducing the Size of the Federal Reserve's Balance Sheet*, 26 January 2022.
- Board of Governors of the Federal Reserve System (2022c), Financial Stability Report, May 2022.
- Board of Governors of the Federal Reserve System (2022d), *Shared National Credit Program: 1st and 3rd Quarter 2021 Reviews*, February 2022.
- Board of Governors of the Federal Reserve System (2021), Financial Stability Report, November 2021.
- Board of Trustees of the Federal Old-age and Survivors Insurance and Federal Disability Insurance Trust Funds (2021), The 2021 Annual Report of the Board of Trustees of the Federal Old-age and Survivors Insurance and Federal Disability Insurance Trust Funds, Washington D.C.
- Bown, C.P (2022), "China bought none of the extra \$200 billion of US exports in Trump's trade deal", Peterson Institute for International Economics, 8 February 2022.
- Brainard, L (2020), *Statement by Governor Brainard*, Board of Governors of the Federal Reserve System, 4 March 2020.
- Brooks, L., and Z. Liscow (2020), "Can America reduce highway spending? Evidence from the States", NBER Chapters, in: *Economic Analysis and Infrastructure Investment*, National Bureau of Economic Research.
- Buch, C.M. et. al. (2021), "Macroprudential policy in the wake of the COVID-19 crisis: international spillovers and coordination issues", *Financial Stability Review*, Banque de France, March 2021.
- Canuto, O (2021), "The metamophosis of finance and capital flows to emerging market economies", *Policy Center for the New South*, Policy Paper, November 2021.
- Castro, D (2021), "Improving consumer welfare through data portability", Center for Data Innovation.

- CBO (2021a), *The Budgetary Effects of the Raise the Wage Act of 2021*, Congressional Budget Office, February 2021.
- CBO (2021b), The Effects of Increased Funding for the IRS, 2 September 2021.
- CBO (2021c), Estimated Budgetary Effects of Title XIII, Committee on Ways and Means, H.R. 5376, the Build Back Better Act, 18 November 2021.
- CBO (2021d), A Comparison of Brand-Name Drug Prices Among Selected Federal Programs, February 2021.
- CBO (2021e), Effects of Physical Infrastructure Spending on the Economy and the Budget Under Two Illustrative Scenarios, August 2021.
- CBO (2020), Options for Reducing the Deficit: 2021 to 2030, December 2020.
- Center for American Progress (2021), "The Build Back Better Act's investments in the IRS will substantially reduce the tax gap", 17 November 2021.
- Center on Budget and Policy Priorities (2021), *The Case for Trust Fund Solutions*, Budgets and Projection, 22 March 2021.
- Choi, B., and T.L. Nguyen (2021), "Trade diversion effects of the US-China trade war on Vietnam", SSRN, August 2021.
- Committee for a Responsible Federal Budget (2021), CBO Estimates a Permanent Build Back Better, 10 December 2021.
- Congressional Budget Office (2022a), Estimated Budgetary Effects of H.R. 5736, the Inflation Reduction Act of 2022, 5 August 2022.
- Congressional Budget Office (2022b), *Re: Costs of Suspending Student Loan Payments and Canceling Debt*, Letter to Honorable Richard Burr and Honorable Virgina Fox, 26 September 2022.
- Conover, C.J. and J. Bailey (2020), "Certificate of need laws: a systematic review and cost-effectiveness analysis", *BMC Health Services Research*, Vol. 20, No. 748.
- Council of Economic Advisers (2022), Economic Report of the President, April 2022.
- Curran, M.A. (2021), "Research roundup of the Expanded Child Tax Credit: the first 6 months", *Poverty and Social Policy Report*, Vol. 5, No. 5.
- Dafny, L. et. al. (2019), "The price effects of cross-market mergers: theory and evidence from the hspital industry", *RAND Journal of Economics*, No. 50, No. 2.
- Demmou, L., and G. Franco (2020), "Do sound infrastructure governance and regulation affect productivity growth? New insights from firm level data", *Economics Department Working Papers*, No. 1609. OECD Publishing, Paris.
- Demsas, J (2021), "Why does it cost so much to build things in America", Vox, 28 June 2021.
- Department of Labor (2021), Unemployment Insurance Modernization, Fact Sheet, 11 August, 2021.
- Department of the Treasury (2021), Financial Stability Oversight Council Statement on Nonbank Financial Intermediation, Press Release, 4 February 2022.
- Department of the Treasury (2021), *Investing in the IRS and Improving Tax Compliance*, Press Release, 28 April 2021.
- Diez, F.J. et. al. (2018), "Global market power and its macroeconomic implications", *IMF Working Paper*, No. 18/137, International Monetary Fund, Washington D.C.
- Dube, A (2021), "A plan to reform the unemployment insurance system in the United States", Policy Proposal, *The Hamilton Project*, April 12 2021.
- Dubois, P. et. al. (2021), "Bargaining and international reference pricing in the pharmaceutical industry", *Stanford Graduate School of Business Working Paper*, No. 3889.
- Egert, B. and P. Gal (2017), "The quantification of structural reforms in OECD countries: A new framework", OECD Economics Department Working Papers, No. 1354.
- Federal Trade Commission (2017), "FTC staff seek empirical research and public comments regarding impact of Certificates of Public Advantage", *Press Release*, 1 November 2017.

- Federal Trade Commission and Department of Justice (2004), *Improving Health Care: a Dose of Competition*, July 2004, Washington D.C.
- Financial Action Task Force (2020), Anti money-laundering and counter-terrorist financing measures; United States", 3rd Enhanced Follow-up Report & Technical Compliance Re-Rating, March 2020.
- Financial Stability Board (2022), Assessment of Risks to Financial Stability from Crypto-assets, 16 February 2022.
- Financial Stability Oversight Council (2021), Report on Climate-Related Financial Risk, October 2021.
- Fulton, B.D. et. al. (2021), "States merger review authority is associated with states challenging hospital mergers, but prices continue to rise", *Health Affairs*, Vol. 40, No. 12.
- Gale, W.G. (2019), "Chipping away at the mortgage deduction", The Brookings Institution, 13 May, 2019.
- Gaynor, M., and W.B. Vogt (2000), "Competition among hospitals", RAND Journal of Economics, No. 34.
- Green, D. and E. Loualiche (2021), "State and local government employment in the COVID-19 crisis", Journal of Public Economics, Vol. 193.
- Gustaffson, L., and D. Blumenthal (2021), "The pandemic will fuel consolidation in US healthcare", *Harvard Business Review*, 9 March 2021.
- Hamel, L. et. al. (2021), KFF COVID-19 Vaccine Monitor: Media and Misinformation, *Kaiser Family Foundation*.
- Haas-Wilson, D., and C. Garmon (2011), "Hospital Mergers and Competitive Effects: Two Retrospective Analyses." *International Journal of the Economics of Business*, Vol. 18, No. 1.
- Infrastructure Australia (2019), *An Assessment of Australia's Future Infrastructure Needs: The Australian Infrastructure Audit 2019*, Australian Government, June 2019.
- Internal Revenue Service (2021), Congressional Budget Justification & Annual Performance Report and Plan, Publication 4450.
- ITF (2021), *Developing Strategic Approaches to Infrastructure Planning*, ITF Research Reports, OECD Publishing, Paris.
- Joint Committee on Taxation (2022), *Letter to the Honorable Ron Wyden*, 1 August 2022, Congress of the United States.
- Kaiser Family Foundation (2021), "KFF COVID-19 Vaccine Monitor: the increasing importance of partisanship in predicting COVID-19 vaccination status", 16 November, 2021.
- Keisler-Starkey, K. and L.N. Bunch (2021), *Health Insurance Coverage in the United States: 2020*, Current Population Reports, US Census Bureau. September 2020.
- Klein, S. and M. Hostetter (2021), "The room where it happens: the role of primary care in the next phase of the COVID-19 vaccination campaign", *The Commonwealth Fund*, 7 July 2021.
- Klick, J. and A. Stockburger (2021), "Experimental CPI for lower and higher income households", *BLS Working Papers*, No. 537, 8 March 2021.
- Koch, T. et al. (2018), "Physician market structure, patient outcomes and spending: an examination of Medicare beneficiaries", *Health Services Research*, Vol. 53, No. 5.
- Koch, T. and S.W. Ulrick (2017), "Price effects of a merger: evidence from a physicians' market", *Working Paper*, No. 333, Bureau of Economics, Federate Trade Commission, Washington, D.C.
- Kohn, D (2021a), *Building a more stable financial system: Unfinished business*, Hutchins Center on Fiscal and Monetary Policy, Brookings Institution, August 27, 2021.
- Kohn, D (2021b), "The US needs urgently to raise its macropru game", *Macroprudential Matters*, 15 October 2021.
- Kurani, N., and C. Cox (2020), "What drives health spending in the US compared to other countries", Peterson-KFF Health System Tracker, 25 September 2020.
- Landais, C. et. al. (2022), "Should we insure workers or jobs during recessions?", *Journal of Economic Perspectives*, forthcoming.
- Levy, A. (2021), "So you want to do an infrastructure package", Niskanen Center, March 2021.

- Lewis, C. et. al. (2021), "Engaging and supporting primary care providers in the fight against COVID-19", The Commonwealth Fund, 5 August 2021.
- Maravelle, A., and Ł. Rawdanowicz (2020), "Automatic fiscal stabilisers: recent evolution and policy options to boost their effectiveness", *Economics Department Working Papers*, No. 1636.
- Martin, K (2021), "Allowing Medicare to negotiate drug prices", *Essential Facts About Drug Pricing Reform*, The Commonwealth Fund, 5 May 2021.
- Mulcahy, A.W. et. al. (2021), *International Prescription Drug Price Comparisons: current empirical estimates and comparisons with previous studies*, Research Report, RAND Corporation.
- National Infrastructure Commission (2020), *Anticipate, React, Recover: Resilient infrastructure systems*, May 2020. United Kingdom.
- Nie, J., and S.X. Yang (2021), "What has driven the recent increase in retirements?", *Economic Bulletin*, Federal Reserve Bank of Kansas City.
- OECD (2022), *Economic and Social Impacts and Policy Implications of the War in Ukraine*, OECD Economic Outlook Interim Report, OECD Publishing, Paris.
- OECD (2021a), OECD Economic Surveys: France 2021, OECD Publishing, Paris.
- OECD (2021b), *Improving the Provision of Active Labour Market Policies in Estonia*, Connecting People with Jobs, OECD Publishing, Paris.
- OECD (2021c), *Tax Administration 2021: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris.
- OECD (2021d), Government at a Glance 2021, OECD Publishing, Paris.
- OECD (2021e), "Building resilience: New strategies for strengthening infrastructure resilience and maintenance", OECD Public Governance Policy Papers, No. 5, OECD Publishing, Paris,
- OECD (2021f), "Procurement strategy in major infrastructure projects: piloting a new approach in Norway", *OECD Public Governance Policy Papers*, No. 06, OECD Publishing, Paris.
- OECD (2020a), "Job retention schemes during the COVID-19 lockdown and beyond", *Tackling Coronavirus (COVID-19): Contributing to a global effort*, OECD Publishing, Paris.
- OECD (2020b), OECD Economic Surveys: United States 2020, OECD Publishing, Paris.
- OECD (2020c), *Preparing the Basque Country, Spain for the Future of Work*, OECD Reviews on Local Job Creation, OECD Publishing, Paris.
- OECD (2020d), OECD Recommendation on the Governance of Infrastructure, OECD Legal Instrument.
- OECD (2018), "Designing publicly funded healthcare markets", *Working Party No. 2 on Competition and Regulation*, Background Note by the Secretariat, Paris.
- Parker, K., and. J.M. Horowitz (2022), "Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected", PEW Research Center, 9 March 2022.
- Penn Wharton Budget Model (2022), "The Biden student loan forgiveness plan: budgetary costs and distributional impact", University of Pennsylvania.
- Peters, I.L., and A.A. Testa (2021), "21st Century Cares Act Information Blocking Rule: Innovative and In Effect", *The National Law Review*, 10 August, 2021.
- President's Working Group on Financial Markets (2021), *Report on Stablecoins*, President's Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, November 2021.
- Ratzan, S et. al. (2021), "Missing the point how primary care can overcome COVID-19 vaccine "hesitancy", *The New England Journal of Medicine*, 24 June 2021.
- Rawdanowicz, Ł., et al. (2021), "Constraints and demands on public finances: Considerations of resilient fiscal policy", *OECD Economics Department Working Papers*, No. 1694, OECD Publishing, Paris.
- Rosewicz, B. et. al. (2021), "States' total rainy day funds fall for first time since great recession", *State Fiscal Health*, PEW Charitable Trusts.
- Short, M.N., and V. Ho (2019), "Weighing the effects of vertical integration versus market concentration on hospital quality." *Medical Care Research and Review*.

- Shiller, R (2000), Irrational Exuberance, Princeton University Press, Princeton, New Jersey. Data taken from http://www.econ.yale.edu/~shiller/data.htm
- Sinaiko, A.D. et. al. (2021), "Consumer Choice in U.S. Health Care: Using Insights from the Past to Inform the Way Forward", *The Commonwealth Fund*, 30 November 2021.
- Slemrod, J (2022), "Group equity and implicit discrimination in tax systems", *National Tax Journal*, The National Tax Association.
- Stettner, A. and A. Novello (2020), "Unemployment payouts accelerated during April and May-but are still too slow", *The Century Foundation*, 2 June, 2020.
- Taylor, J.B. (1993), "Discretion versus policy rules in practice", *Carnegie-Rochester Conference Series on Public Policy*, No. 39.
- Weidinger, M. (2022), *Answering ten key questions on pandemic unemployment benefits and fraud*, Senate Committee on Homeland Security and Government Affairs, American Enterprise Institute.
- Wheaton, L. et. al. (2021), 2021 Poverty Projections: Assessing the Impact of Benefits and Stimulus Measures, Research Report, Urban Institute, Washington D.C.



From:

OECD Economic Surveys: United States 2022

Access the complete publication at:

https://doi.org/10.1787/eeb7cbe9-en

Please cite this chapter as:

OECD (2023), "Key Policy Insights", in *OECD Economic Surveys: United States 2022*, OECD Publishing, Paris

DOI: https://doi.org/10.1787/591a66ca-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at http://www.oecd.org/termsandconditions.

