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OECD Economic Surveys: United States 2024

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Note by all the European Union Member States of the OECD and the European Union

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Foreword

This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of the United States were reviewed by the Committee on 30 May 2024. The draft report was then revised in light of the discussions and given final approval as the agreed report of the whole Committee on 17 June 2024.

The Secretariat's draft report was prepared for the Committee by Ben WESTMORE and Jesse BRICKER, under the supervision of Sebastian BARNES.

Statistical research assistance was provided by Damien AZZOPARDI and editorial support was provided by Jean-Rémi BERTRAND.

The previous Survey of the United States was issued in October 2022.

Information about the latest as well as previous Surveys and more details about how Surveys are prepared is available at www.oecd.org/eco/surveys

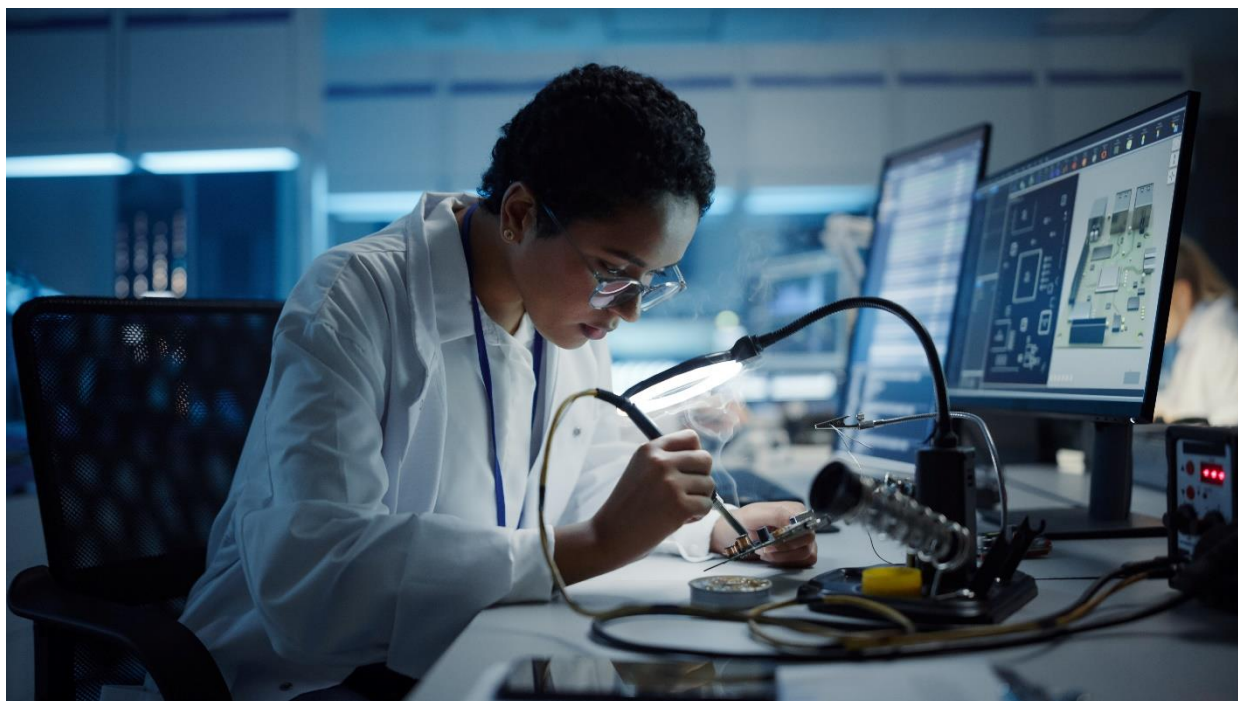


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BASIC STATISTICS OF UNITED STATES, 2023

(Numbers in parentheses refer to the OECD average)¹

| LAND, PEOPLE AND ELECTORAL CYCLE | | | | | |
|---|--------|---------|--|----------|---------|
| Population (million, 2022) | 333.3 | | Population density per km ² (2022) | 36.4 | (39.0) |
| Under 15 (% , 2022) | 18.0 | (17.2) | Life expectancy at birth (years, 2021) | 76.3 | (78.7) |
| Over 65 (% , 2022) | 17.1 | (18.0) | Men (2021) | 73.5 | (75.9) |
| International migrant stock (% of population, 2019) | 15.4 | (13.2) | Women (2021) | 79.3 | (81.7) |
| Latest 5-year average growth (%) | 0.5 | (0.4) | Latest general election | 2020-Nov | |
| ECONOMY | | | | | |
| Gross domestic product (GDP) | | | Value added shares (% , 2021, OECD: 2022) | | |
| In current prices (billion USD) | 27 357 | | Agriculture, forestry and fishing | 1.0 | (2.8) |
| Latest 5-year average real growth (%) | 2.1 | (1.6) | Industry including construction | 18.5 | (28.3) |
| Per capita (thousand USD PPP, 2022) | 77.2 | (60.2) | Services | 80.5 | (68.8) |
| GENERAL GOVERNMENT (Per cent of GDP) | | | | | |
| Expenditure (OECD: 2022) | 40.1 | (42.9) | Gross financial debt (OECD: 2022) | 122.5 | (113.4) |
| Revenue (2022) | 35.1 | (39.6) | Net financial debt (OECD: 2022) | 97.7 | (67.6) |
| EXTERNAL ACCOUNTS | | | | | |
| | | | Main exports (% of total merchandise exports, 2022) | | |
| | | | Machinery and transport equipment | 28.1 | |
| In per cent of GDP | | | Mineral fuels, lubricants and related materials | 18.3 | |
| Exports of goods and services | 11.1 | (31.3) | Chemicals and related products, n.e.s. | 14.9 | |
| Imports of goods and services | 14.0 | (31.5) | Main imports (% of total merchandise imports, 2022) | | |
| Current account balance | -3.0 | (0.0) | Machinery and transport equipment | 38.9 | |
| Net international investment position (2022) | -62.8 | | Miscellaneous manufactured articles | 16.4 | |
| | | | Chemicals and related products, n.e.s. | 11.6 | |
| LABOUR MARKET, SKILLS AND INNOVATION | | | | | |
| Employment rate (aged 15 and over, %, OECD: 2022) | 60.3 | (57.5) | Unemployment rate, Labour Force Survey (aged 15 and over, %, OECD: 2022) | 3.6 | (5.0) |
| Men (OECD: 2022) | 65.5 | (65.4) | Youth (aged 15-24, %, OECD: 2022) | 7.9 | (10.9) |
| Women (OECD: 2022) | 55.4 | (50.1) | Long-term unemployed (1 year and over, %, 2022) | 0.5 | (1.2) |
| Participation rate (aged 15 and over, %, 2022) | 62.2 | (60.9) | Tertiary educational attainment (aged 25-64, %, 2022) | 50.0 | (40.7) |
| Average hours worked per year (2022) | 1,811 | (1,752) | Gross domestic expenditure on R&D (% of GDP, 2020) | 3.4 | (2.9) |
| ENVIRONMENT | | | | | |
| Total primary energy supply per capita (toe, 2022) | 6.4 | (3.8) | CO ₂ emissions from fuel combustion per capita (tonnes, 2022) | 13.6 | (7.8) |
| Renewables (% , 2022) | 8.2 | (12.0) | Water abstractions per capita (1 000 m ³ , 2015) | 1.2 | |
| Exposure to air pollution (more than 10 µg/m ³ of PM 2.5, % of population, 2019) | 5.6 | (61.7) | Municipal waste per capita (tonnes, 2018, OECD: 2020) | 0.8 | (0.5) |
| SOCIETY | | | | | |
| Income inequality (Gini coefficient, 2022, OECD: latest available) | 0.395 | (0.316) | Education outcomes (PISA 2022 score) | | |
| Relative poverty rate (% , 2022, OECD: 2020) | 18.0 | (11.8) | Reading | 504 | (476) |
| Median disposable household income (thousand USD PPP, 2021, OECD: 2020) | 46.6 | (26.6) | Mathematics | 465 | (472) |
| Public and private spending (% of GDP) | | | Science | 499 | (485) |
| Health care (2022) | 16.6 | (9.2) | Share of women in parliament (% , 2022) | 28.7 | (32.5) |
| Pensions (2020, OECD: 2019) | 7.5 | (9.5) | Net official development assistance (% of GNI, 2017) | 0.2 | (0.4) |
| Education (% of GNI, 2021) | 4.4 | (4.4) | | | |

¹ The year is indicated in parenthesis if it deviates from the year in the main title of this table. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.

Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, United Nations, World Bank.



Executive summary

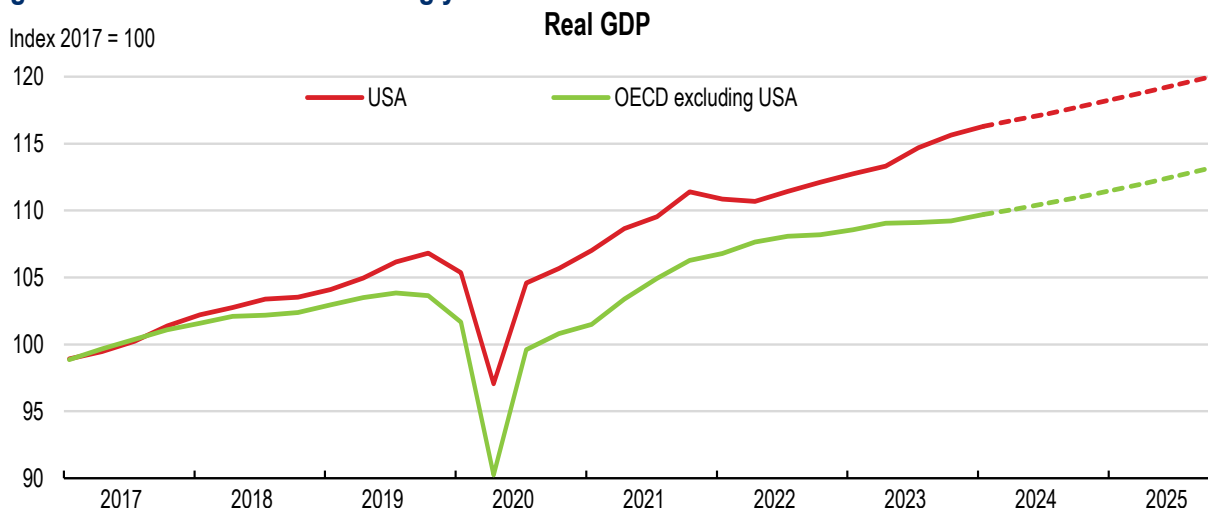
Inflation has declined without a sharp slowing in activity

The economy has continued to expand at a solid pace, pushing up wages and drawing people into the labour market. Price pressures have somewhat eased, but services inflation remains elevated.

Robust demand has been accommodated through an expansion in supply (Figure 1). Strong consumption growth has been underpinned by drawdowns of household savings accumulated during the pandemic and strong employment. At the same time, supply chain bottlenecks have eased, imports have risen and labour supply has

expanded. Nominal wage growth has been particularly strong for low-income individuals, helping reduce the high level of earnings inequality. Price pressures have moderated with disinflation of goods and energy prices. However, services inflation remains elevated, predominantly driven by housing.

Figure 1. GDP has recovered strongly



Source: OECD Economic Outlook 115 Database.

StatLink  <https://stat.link/fa5nme>

Table 1. Macroeconomic projections

| Annual average growth | 2022 | 2023 | 2024 | 2025 |
|------------------------------|-------|-------|-------|-------|
| Gross domestic product (GDP) | 1.9 | 2.5 | 2.6 | 1.8 |
| Unemployment rate | 3.6 | 3.6 | 3.9 | 4.0 |
| Core inflation index | 5.2 | 4.1 | 2.6 | 2.1 |
| Gen. gov. gross debt (% GDP) | 119.9 | 122.5 | 125.4 | 129.4 |

Source: OECD Economic Outlook 115 Database.

Monetary policy tightening is weighing on demand. The official policy rate increased by 5.25 percentage points between February 2022 and July 2023 to the highest level in 23 years. Monetary policy easing will be appropriate once there are clearer signs that inflation is durably moderating to meet the central bank's 2% target.

The general government fiscal deficit was 8% of GDP in 2023, around one percentage point higher than before the pandemic. Lower-than-expected tax receipts and higher-than-expected spending on mandatory social programs have recently added to the deficit. The authorities should begin steadily consolidating the public finances in the 2025 fiscal year, frontloading the adjustment in light of strong cyclical conditions.

The rise in interest rates has exposed some financial fragilities. There are significant unrealised losses on bank balance sheets from long-term fixed rate debt securities, the catalyst for the failure of a few mid-sized banks in 2023. Delinquencies on credit card debt, auto loans and commercial real estate have begun to rise. Nonetheless, aggregate bank profitability is high and non-performing loans remain contained.

OECD projections envisage continued stable economic growth (Table 1). However, some short-term slowdown is expected due to the ongoing impact of higher borrowing costs on demand and fading effects from accumulated excess savings. Activity could surprise on the upside, but monetary policy easing could be delayed if core inflation remains elevated.

Government debt is high and there are significant long-term fiscal pressures

The public debt ratio is high compared to most OECD countries and is expected to rise further. To put it on a more prudent path and avoid shorter-run risks of overheating, a sustained but steady multi-year fiscal adjustment should be undertaken.

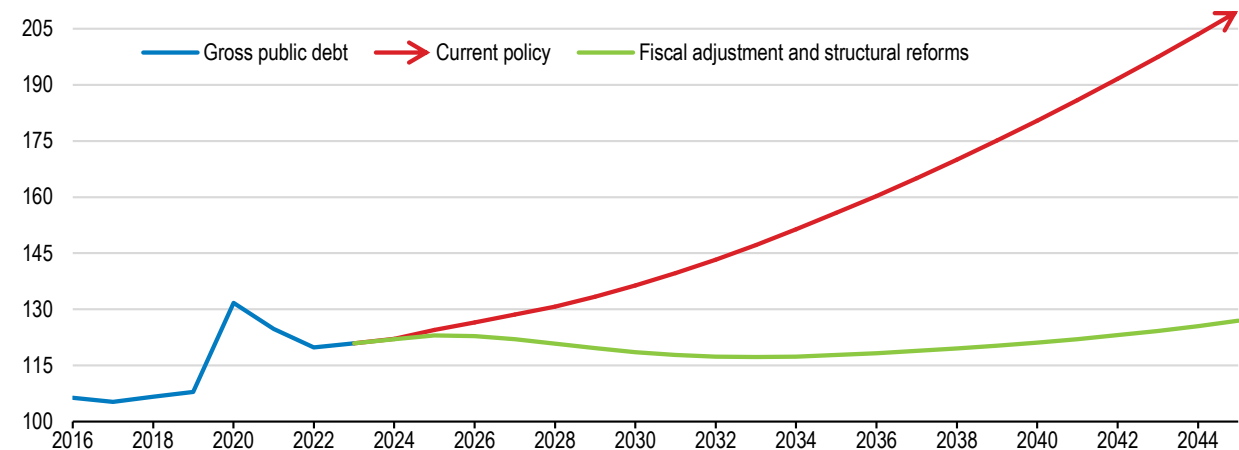
There is a divergence between revenue and expenditure trends and the debt ratio would rise significantly based on current tax and spending policies (Figure 2). Discretionary tax cuts have narrowed the tax base, while spending is rising due to ageing and rising health costs. Higher debt increases fiscal risks, reduces the margin to stabilise the economy and may crowd out private activity.

A steady multi-year fiscal adjustment would put the public finances on a more prudent path. A range of tax and spending policies should be used, aimed at maintaining key public services, limiting any negative impact on the economy and ensuring fairness.

Ageing is increasing pension costs and trust funds will run out in the coming years. Social Security trust funds are projected to fully cover benefits only until 2035, which would thereafter leave a gap of around 25% between existing funding and benefits. Limiting benefits for wealthy

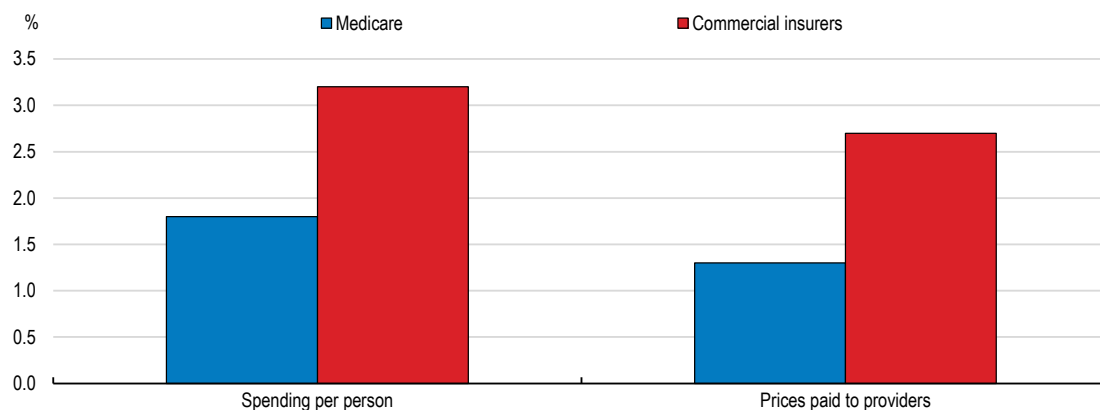
households, partially indexing the retirement age to life expectancy and indexing benefits to the chained CPI would help fund Social Security.

Health expenditures per capita are the highest in the OECD. Health expenditures could be reduced while maintaining outcomes, including by reducing tax subsidies for costly private health insurance. Fee for service practices remain widespread but create poor incentives to manage costs, while competition and price transparency are low across the system. While insurance coverage has increased, remaining gaps contribute to inequalities in health outcomes. Federal health spending could also be reduced by limiting spending, broadening the scope of pharmaceutical price negotiations and ensuring that privately-provided Medicare costs are aligned to standard Medicare reimbursement rates. Tax exemptions for high value employer-provided health plans should be capped or replaced with a tax credit and stricter conditions on eligible plans imposed.

Figure 2. The public debt ratio increases under current revenue and spending policies

Source: OECD Analytical database, OECD calculations.

StatLink  <https://stat.link/yedlbr>

Figure 3. Prices paid by private health insurance have grown faster than Medicare

Note: Annualised spending growth and prices paid to health providers in Medicare FFS and private market, 2013-2018.

Source: CBO (2022).

Tax changes over past decades have narrowed the tax base and made the tax system less progressive. Corporate tax revenue has fallen to low levels. The statutory corporate tax rate could be increased and changes made to taxation of overseas revenues in line with international developments. Retaining and expanding the standard deduction and the Child Tax Credit beyond the scheduled expiry at the end of 2025 can help alleviate pressures on the middle class. The tax treatment of capital incomes and gains, as well as the estate tax, have increasingly benefitted very wealthy households over recent decades and reduced revenues. Tax enforcement should be

improved by expanding investment in tax administration, which would raise revenues even under current tax policy.

The federal budgeting process is complex and fails to impose effective budget constraints. The legislative budget rules are less effective than intended. The debt ceiling is divorced from the budgetary process and has led to brinksmanship, creating unnecessary risks. It should be replaced with a simple debt ratio target focused on the medium term proposed by the President and approved by Congress to improve communication and accountability.

StatLink  <https://stat.link/1v4btf>

Stronger productivity growth would support higher living standards

A structural slowing in real GDP growth over recent decades has reflected weakening productivity growth coupled with population ageing, only partly offset by net immigration. New industrial policies need ongoing evaluation to monitor their efficacy and should be supported by measures that promote competition, open markets and the ability of individuals to enhance and apply their skills.

A favourable business environment supports productivity, but competition has weakened and infrastructure is ageing. The United States is at the global frontier of many new technologies, including Artificial Intelligence, and strong management capability and open markets promote their diffusion. Major policy initiatives are seeking to address the rapidly ageing stock of public infrastructure. However, competition should be strengthened in certain sectors, including telecommunications, through ongoing competition policy reforms and stronger antitrust enforcement. Strengthening rules on political finance would reduce the capacity for special interests to exercise undue influence on public policy.

The U.S. economy and many workers derive significant benefits from integration into global value chains. However, trade policies have become more restrictive in recent years, partly due to concerns about national security, and new industrial policies have sought to favour the development of domestic production in some sectors. These restrictions increase consumer and business costs, limit choice, reduce competition and dull the potential for knowledge spillovers from abroad. Open trade and investment policies should be maintained and promoted and an economic

assessment of the benefits, costs and international spillovers of any trade restrictions conducted.

Future productivity and the expansion of key industries requires high skilled workers with technical skills. However, standardised school test scores in mathematics have trended down and college enrolment rates of men are declining. Policies that re-engage higher education students who recently stopped studying are a priority, along with further measures at both the federal, state and local level to accelerate the learning of economically disadvantaged school students. To tackle immediate high-skilled labour shortages in priority areas, immigration visa policies should be adjusted.

The skills of women could be better used in the labour market. Although the labour participation of women has rebounded since the pandemic, overall gains have largely stalled since the mid-1990s and the gender wage gap is high by OECD standards. Relatively high net childcare costs should be addressed by ensuring that the families eligible for childcare subsidies receive them. Furthermore, the introduction of a national paid parental leave entitlement would support mothers staying in work and labour market re-entry after childbirth.

There has been a major acceleration in efforts to achieve the climate transition

The authorities are committed to achieving net zero emissions by 2050 and there has been a major acceleration in climate policy initiatives in recent years at the federal level and in some states. Nonetheless, further measures will likely be needed to meet climate goals.

Federal efforts to reduce greenhouse gas emissions have accelerated through infrastructure spending and supports in the 2022 Inflation Reduction Act. These initiatives include tax incentives for the energy sector, homes and electric vehicles. Vehicle fuel-efficiency standards and carbon pollution standards for fossil fuel-fired power plants have also been tightened.

Taken together, these measures will significantly accelerate emission reductions and should be implemented (Figure 4). However, this welcome progress comes at a significant fiscal cost, the outcome depends on the take-up of incentives and the approach does not ensure emission reductions are achieved in the most efficient way.

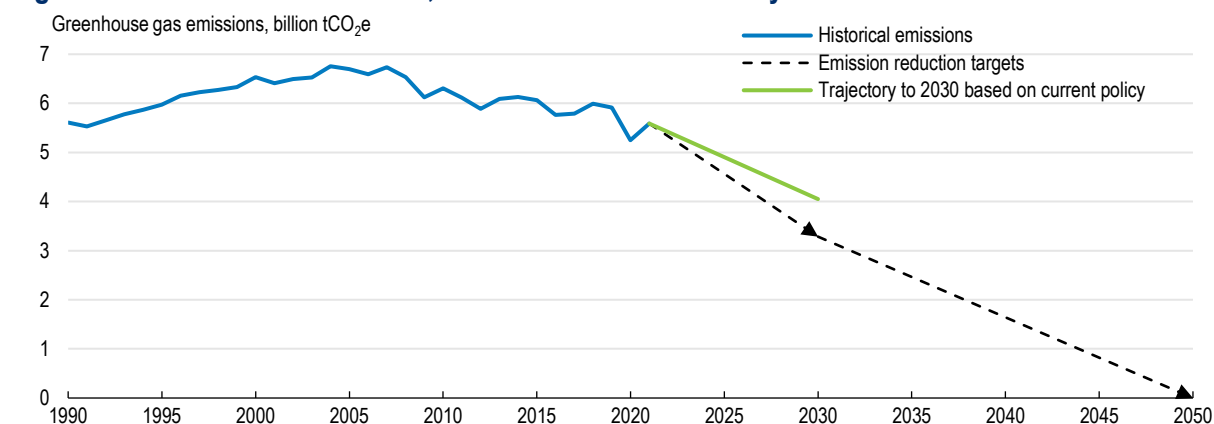
Additional measures will likely be needed to achieve emission reduction goals. A broadly based carbon fee would help achieve the 2030 emission target in an efficient way. Emissions abatement would also benefit from further sectoral initiatives, including increased investment in electric vehicle charging ports, increased R&D funding to decarbonise the industrial sector and further incentives for installing energy saving technologies in buildings. Permitting reforms are needed to facilitate the additional electricity capacity required for the climate transition;

As the economy decarbonises, workers will need to reallocate from high carbon to other industries. Spending on active labour market


policies should be increased for those workers who need to change jobs. This could be coupled with extended unemployment insurance duration for workers from fossil fuel industries who enrol in skill development programmes.

Initiatives that promote climate adaptation need to be stepped up. Exposure to many climate-related hazards is higher than in most other OECD countries and current adaptation policies are insufficient to address climate risks. Property insurance has become scarce in some areas because of physical climate risk. Adaptation should be facilitated by a combination of economic instruments, regulations, information provision and direct public provision

Figure 4. Emissions are set to fall, but further efforts are likely to be needed



Source: OECD; Ramseur (2023).

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| MAIN FINDINGS | KEY RECOMMENDATIONS |
|---|--|
| Managing short-term macroeconomic imbalances | |
| Growth has been resilient but the general government deficit rose to 8% of GDP in 2023, while the debt ratio is at a historical high. | Steadily consolidate the public finances starting in fiscal year 2025, frontloading the adjustment to reflect cyclical conditions. |
| Inflationary pressures have eased, but services inflation remains higher than before the pandemic. | Reduce the Federal Funds Rate once there are clearer signs that inflation is durably moderating to meet the 2% target. |
| Supporting medium-term economic growth | |
| There has been an increase in the restrictiveness of trade and investment policy, partly due to national security concerns, and policies have sought to favour domestic production in some sectors. | Maintain and strengthen open trade and investment policies. Conduct economic assessments of the costs, benefits and international spillovers of any restrictive or distortionary trade and investment policy measures. |
| A structural decline in productivity growth from the early 1990s has been accompanied by indicators of declining competition. | Strengthen competition policies and antitrust enforcement in concentrated industries with high prices, such as telecommunications. |
| Regulations related to political finance are less restrictive than in other OECD countries. | Strengthen regulatory standards on political finance. |
| A decline in standardised school test scores has been most pronounced for economically disadvantaged students. | Expand tailored measures to further accelerate the learning of disadvantaged students. |
| Investments in specific industries, such as semiconductors, are anticipated to lead to significant shortages in engineers and computer scientists. | Redesign temporary and permanent employment-based immigration visas to better align them with demand for professionals in priority fields. |
| Gains in the female labour force participation rate of working age women have largely stagnated over recent decades. Net formal childcare costs are high and the United States is the only OECD country without paid maternity leave at the national level. | Ensure all those eligible for childcare subsidies can access them and introduce a national paid parental leave entitlement. |
| Responding to climate change | |
| More ambitious climate policies introduced in recent years will reduce carbon emissions, but they rely heavily on subsidies and are unlikely to be enough to meet the 2030 emissions target. | Implement existing carbon mitigation policies. Consider gradually introducing a broad-based carbon fee or pricing that increases over time, with revenues dedicated to clean investment projects and to compensating vulnerable groups. |
| While the climate transition can create jobs, workers in areas reliant on carbon-intensive jobs may be adversely affected. | Continue to develop focused active labour market policies for fossil fuel industry workers losing their jobs. |
| Exposure to some climate-related hazards is high compared to other OECD countries. However, current adaptation policies are insufficient to address current or future climate risks. | Expand the use of economic instruments, regulations, information provision and direct public provision to facilitate adaptation to climate risks. |
| Addressing long-term fiscal pressures | |
| The federal budgeting process is complex, while lacking effective budget constraints. The debt ceiling – a statutory limit set by Congress – has led to brinkmanship and creates unnecessary risk. | Adopt a simple medium-term debt ratio target proposed by the President and approved by Congress to increase accountability. |
| There is a large structural deficit and public debt is high compared to most OECD countries, driven by a growing misalignment between rising spending and tax revenues. | Undertake a package of tax measures and targeted spending restraint to put the debt ratio on a more prudent path, while protecting growth and lower income households. |
| Health expenditures per capita are the highest in the OECD, though public programs have done a better job than private programs at restraining health costs. | Reduce costs of federal health insurance, including by moving more strongly away from fee-for-service remuneration to value-based care, and reduce favourable tax treatment of employer-provided health plans. |
| Tax changes over the past decades have narrowed the tax base, made the tax system less progressive, and reduced taxation of capital. Corporate tax revenue has decreased as a share of GDP. | Introduce a broad package of tax reforms, including actions to reduce tax expenditures, broaden the tax base, increase rates and develop new revenue sources. Improve enforcement of the tax system by investing in tax administration. |
| The individual tax changes in the TCJA are scheduled to sunset at the end of 2025, resulting in the expiration of a broadly regressive tax policy change. | Retain the expanded standard deduction and expanded Child Tax Credit. |
| Social Security trust funds are projected to fully cover benefits only to 2035, then reverting to a pure pay-as-you-go system with possible benefit cuts for beneficiaries. | Reduce spending by limiting benefits for wealthy households, partially indexing retirement age to life expectancy and indexing benefits to chained CPI. |

1 Key policy insights

Ben Westmore

The economy has continued to expand at a solid pace, pushing up wages and drawing people into the labour market. Price pressures have now eased, but services inflation remains elevated. A substantial tightening of monetary policy has raised financial risks, but overall the banking sector appears to be well capitalised and profitable. A structural slowing in real GDP growth over recent decades has reflected weakening productivity growth coupled with population ageing. Measures that promote competition, open markets and the ability of individuals to enhance their skills will promote medium-term economic growth. Climate policy efforts have accelerated, but current policies are unlikely to be sufficient to achieve national mitigation targets. Implementing existing measures and developing a well-balanced policy mix that includes carbon pricing, sectoral regulations and subsidies will help achieve climate objectives.

1.1. Introduction

The economy continues the robust recovery seen since the COVID-19 pandemic, despite a significant tightening in monetary policy. The expansion has been coupled with improved economic opportunities for low wage workers, helping lean against the long-standing high level of income inequality. Inflationary pressures have eased as supply and demand have become better aligned, although services inflation remains elevated. The fiscal deficit has widened since before the pandemic.

A structural slowing in real GDP growth over recent decades has reflected weakening productivity growth, coupled with population ageing that has only been slightly offset by net immigration. While business conditions are generally favourable and innovation is high, competition appears to have weakened and skills need to be developed to keep pace with changing labour market needs. Despite women's labour force participation recovering strongly from the pandemic, the gender participation gap is high compared with peer countries. Trade policies have become restrictive and new industrial policies have focused more on increasing domestic production in some sectors. A significant policy effort is underway to boost infrastructure investment (Box 1.4).

There has been a major acceleration of efforts to meet climate targets. A wide range of measures has been deployed, focusing on incentives supported by regulation. These will speed up emission reductions, notably in the energy sector, but additional efforts are likely to be needed to reach targets.

General government debt as a share of GDP increased to around 120% of GDP in 2023, its highest level since World War II, and it is expected to continue rising markedly over the coming decades under current policies as the population ages (Chapter 2). Achieving fiscal sustainability would make the economy less vulnerable to future economic shocks and ensure that key roles of government that support social welfare, including healthcare and social security, are maintained.

Against this backdrop, the main messages of the Survey are:

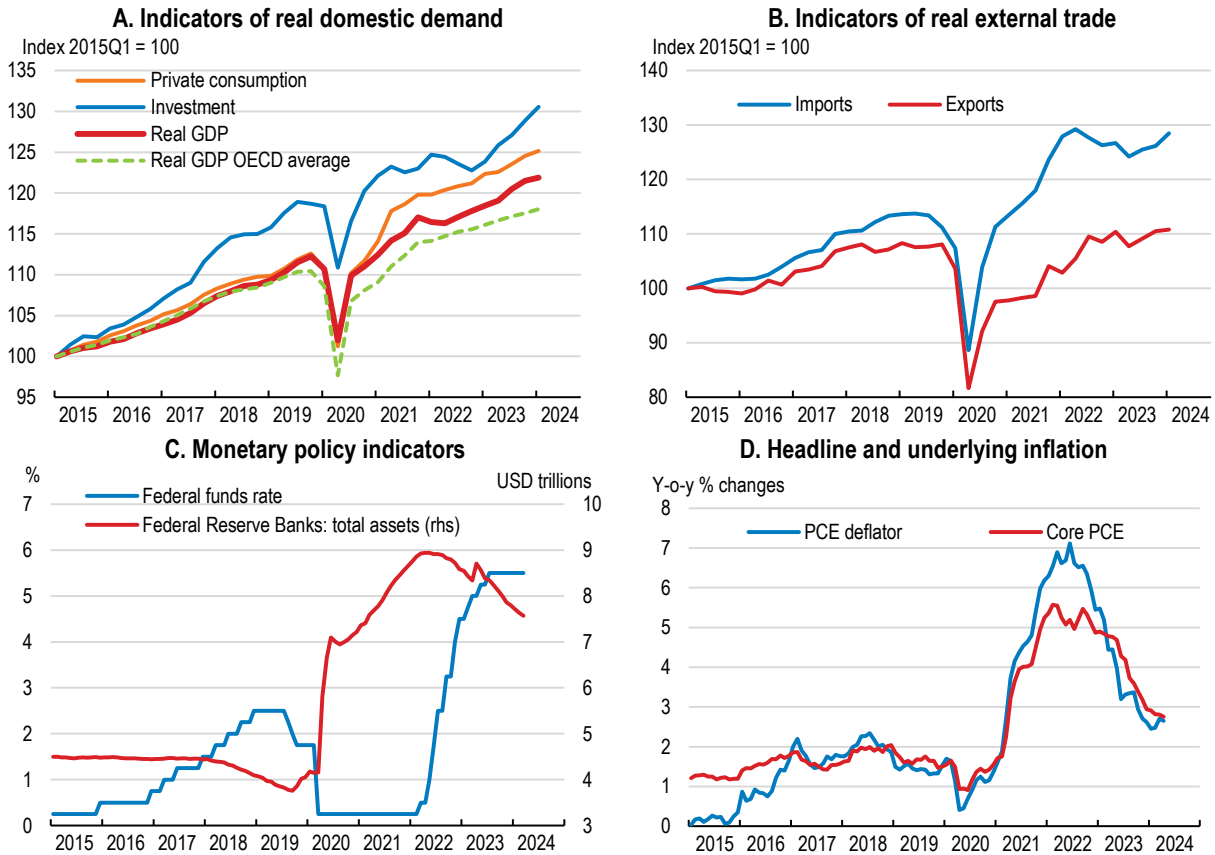
- The economy has continued to expand at a solid pace, pushing up wages and drawing people into the labour market and price pressures have weakened. Monetary policy should ease only when there are clearer signs that inflation will durably return to target. The public finances need to be put on a prudent path by closer alignment of spending and taxes. A multi-year fiscal adjustment should begin that includes spending changes, notably achieving savings on pensions and healthcare, and raises taxation, particularly on capital incomes, would narrow the deficit. A more medium-term oriented and less complicated federal budgeting process would support this.
- Productivity enhancing reforms that promote competition, including through maintaining international trade openness, should be complemented with measures that improve opportunities for accumulating necessary skills and the ability of women to participate fully in the labour market.
- Efforts to reduce greenhouse gas emissions have accelerated, but further policy measures are likely to be needed to achieve emission reduction targets. Policy options include broadly based carbon pricing, taxes and sectoral policies. Additional measures are needed to support displaced workers from fossil fuel industries and for climate adaptation.

1.2. The economy continues to expand at a solid pace

Economic growth has been surprisingly robust, continuing a sustained period of expansion only interrupted by the COVID-19 pandemic (Figure 1.1, Panel A). The post-pandemic recovery has been strong, although there are some signs that the pace is now slowing, partly due to tighter monetary policy (Figure 1.1, Panel C). Personal Consumption Expenditure (PCE) inflation peaked at around 7% in 2022, lower than in the euro area where the energy shock was larger. Core inflation has been relatively high in the United States

due to stronger domestic demand, though increased supply has helped bring inflation down (Figure 1.1, Panel D).

Figure 1.1. The economy is continuing to expand at a solid pace

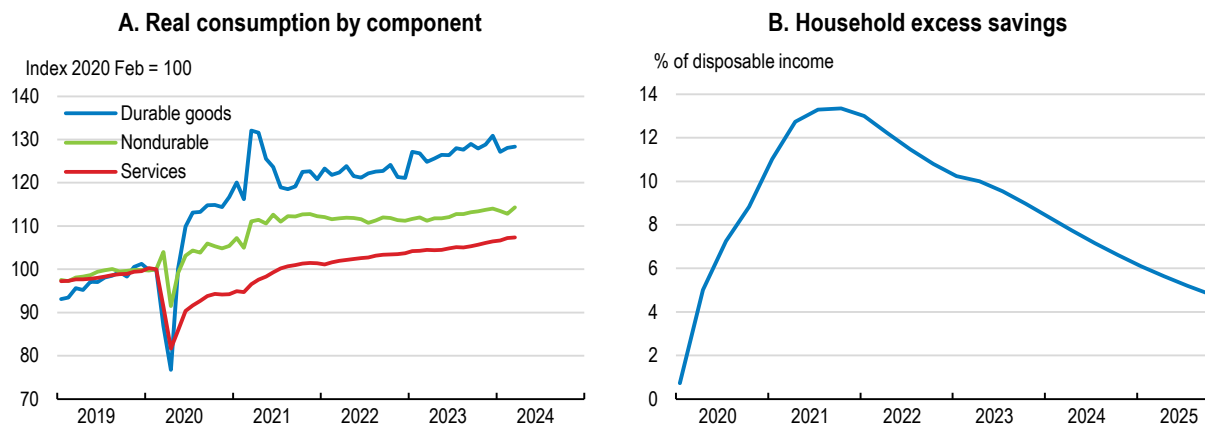


Source: OECD Analytical Database; Board of Governors of the Federal Reserve; BEA - Bureau of Economic Analysis, and U.S. Department of Commerce.

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1.2.1. Demand has been resilient

Growth has been driven by strong consumption growth, which has averaged 2½% in annualised real terms since the end of 2019. The shift during the pandemic from consumption of services to durable goods has shown limited signs of unwinding (Figure 1.2, Panel A). The persistence of working from home could be a factor, given such employees are less likely to consume services (Council of Economic Advisers, 2024a): around 30% of employees worked from home in 2023, compared with 7% prior to the pandemic (Barrero, et. al. 2023). Persistent strong growth in consumption has been aided by a robust labour market and wage growth. An estimate of household excess savings, which uses the 2015-19 average household saving rate as a benchmark, suggests households are also gradually drawing down the savings accrued during the pandemic (Figure 1.2, Panel B).

Figure 1.2. Private consumption has been supported by a drawdown in excess savings

Note: In Panel B, excess savings are estimated using the 2015-2019 average household saving rate as a benchmark.

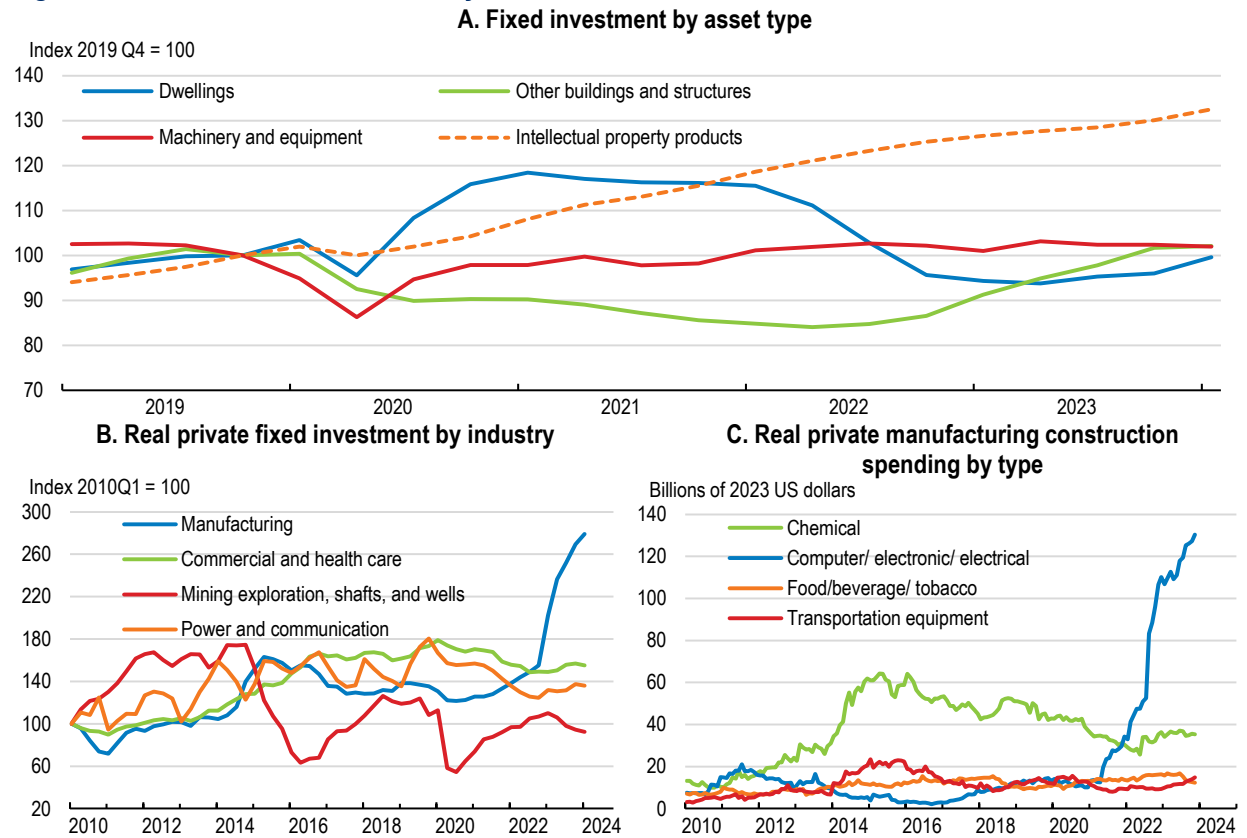
Source: BEA - Bureau of Economic Analysis, U.S. Department of Commerce; and OECD calculations.

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The growth of real private fixed investment has slowed since the pandemic, with weaker growth of business investment and a correction in housing investment following a post-pandemic surge. However, spending on intellectual property continues to rise strongly and is now 33% higher than immediately prior to the pandemic (Figure 1.3, Panel A). Private investment in buildings and structures accelerated through 2023. A key driving force has been a boom in manufacturing investment (Figure 1.3, Panel B). This entirely reflects an increase in construction activity in the computer/electronic/electrical industry, with capacity expansions in semiconductor manufacturing amid global shortages and firms reshoring supply chains (Figure 1.3, Panel C). Domestic policy incentives for semiconductor investment were introduced in 2022 with the *CHIPS and Science Act*, though the extent to which these are already inducing additional manufacturing investment is unclear. The expansion of manufacturing facilities may portend stronger investment in equipment and intangibles as these plants enter operation (Council of Economic Advisers, 2024a).

Higher domestic demand has been partly accommodated by strong growth in imports: by the first quarter of 2024, import volumes were 15.6% higher than prior to the pandemic and the current account deficit had widened by one percentage point to around 3% of GDP (Figure 1.4, Panel B). In part, this has been due to the shift in consumer demand towards goods, with strong contributions to import growth over this period from a range of items including passenger cars, pharmaceuticals and household appliances. Goods exports have also risen and are now back in line with the pre-pandemic trend, though around one third of the expansion since Q4 2019 has been attributable to energy products. A ramp up in investment in shale oil over the past decade, combined with strong energy demand from major trading partners in the wake of Russia's war of aggression on Ukraine, has meant the United States has shifted to being a net energy exporter since 2019. China now accounts for a smaller share of the goods trade balance than in 2018 when more restrictive bilateral trade policies were first enacted (Figure 1.4, Panel A). Imports have been sourced from elsewhere in response: goods imports from Mexico and Vietnam have increased by 44% and 171% respectively over the same period.

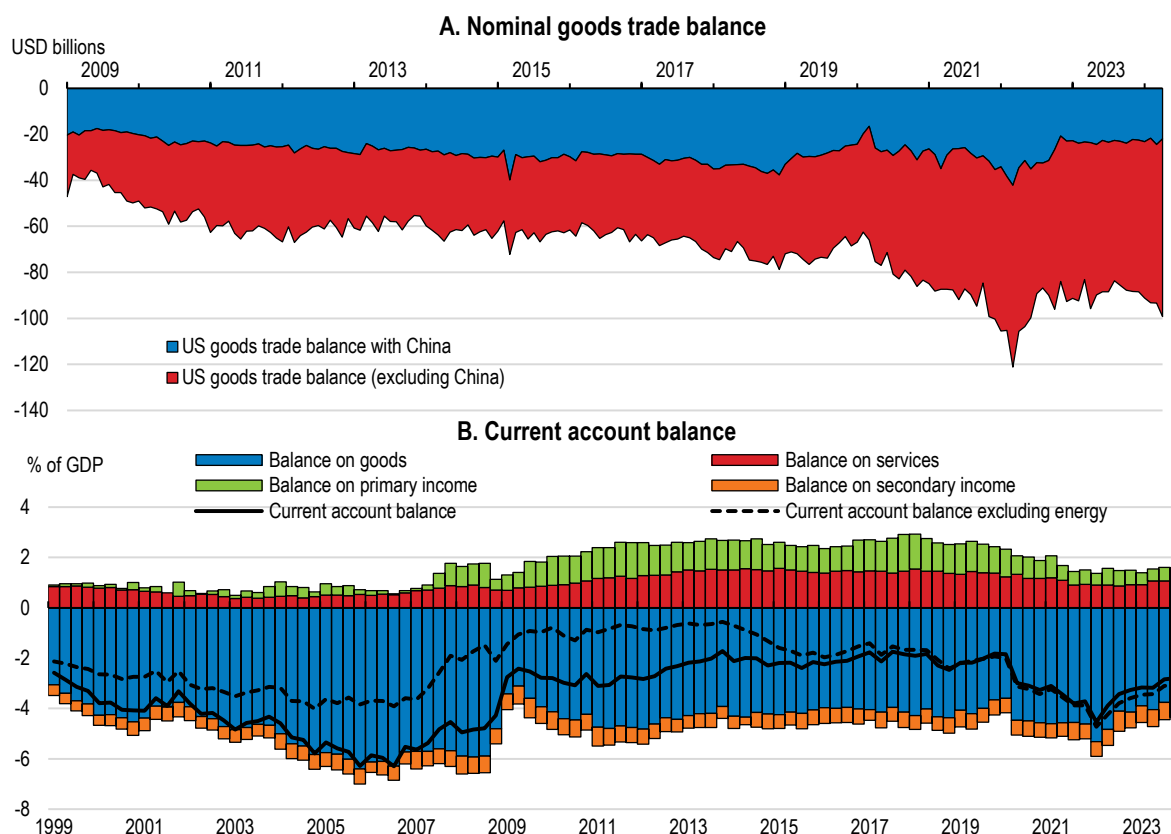
Figure 1.3. Private investment activity has been mixed



Notes: In Panel C, the figure is based on monthly data at a seasonally adjusted annualised rate and on the value of private construction put in place. Nominal spending is deflated by the Producer Price Index for Intermediate Demand Materials and Components for Construction. Source: US Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis; OECD calculations.

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Figure 1.4. The current account deficit remains high



Source: U.S. Census Bureau; Bureau of Economic Analysis, and OECD calculations.

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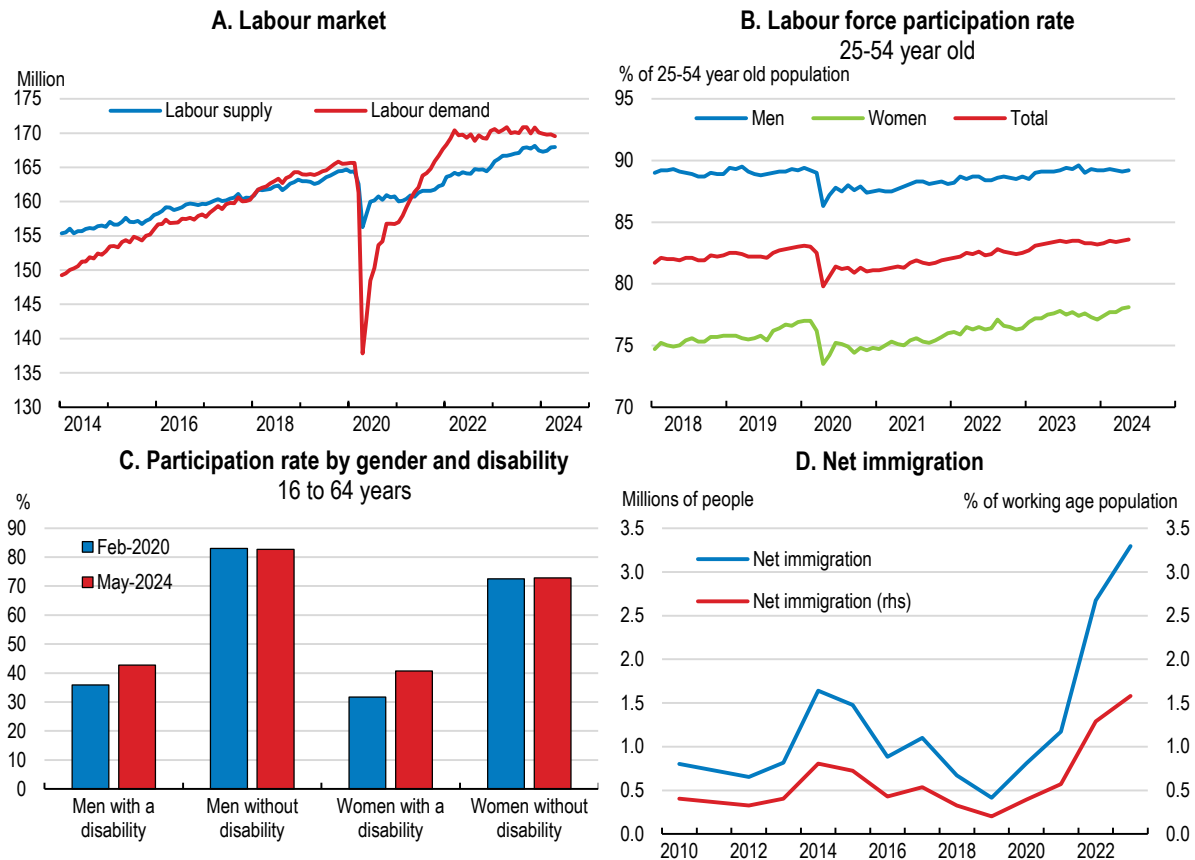
1.2.2. Supply chain pressures have eased and employment has expanded

The recovery from the pandemic was marked by strong supply chain pressures for certain goods, reflecting pent up demand, excess demand for computer chips and disruptions to global shipping. However, indicators of supply chain bottlenecks, such as delivery times reported by state-based manufacturing surveys, have since declined to around long-run average levels. This accords with the Global Supply Chain Pressure Index, published by the Federal Reserve Bank of New York, which fell from 4.35 standard deviations of its average value in December 2021 to return to around long-run average levels since early 2023.

Labour supply was slower to recover from the pandemic relative to labour demand, leading to an imbalance in the labour market. However, the gap has been narrowing since 2022 as labour supply has steadily risen, despite population ageing (Figure 1.5, Panel A). The labour market participation rate of prime age workers (25-54 years old) is now above the pre-pandemic level (Figure 1.5, Panel B), offsetting a rise in the old age dependency ratio (those aged 64+ as a proportion of those aged 15-64) from 24.1% in 2019 to 26.4% in 2022. Higher prime age labour force participation largely reflects increased participation of women, particularly those who report having a disability (Figure 1.5, Panel C). This may reflect very strong labour demand and the increase in the share of workers able to work from home. However, a general increase in the share of the working age population reporting disabilities since the pandemic suggests that some of the increase may reflect those already employed becoming disabled (Andara, et. al. 2024). Very strong immigration between 2020 and 2023 has boosted the labour force participation rate because a higher share of immigrants are of working age compared with the general population. One estimate highlights

that net immigration significantly reduced the aggregate vacancy-to-unemployment ratio in this period (Duzhak, 2023). The Congressional Budget Office (CBO) currently estimates that net immigration rose from 400 000 people in 2019 to 3.3 million people in 2023 (Figure 1.5, Panel D). Much of this estimated increase has been from the “other-foreign-national” category, which includes those who entered the country illegally, those who remained in the country after a temporary visa expired and those who entered the country lawfully but are awaiting proceedings in immigration court (CBO, 2024a). The unemployment rate has increased from a low of 3.4% in April 2023 to hover in the 3.7-4% range since August 2023, but indicators of labour market tightness remain elevated.

Figure 1.5. Rising labour supply has brought the labour market closer to balance



Note: In Panel A, labour supply is total number of employed and unemployed people; labour demand is total number of employed persons plus total number of job openings. In Panel D, the latest estimates from the CBO are shown for years 2021 to 2024.

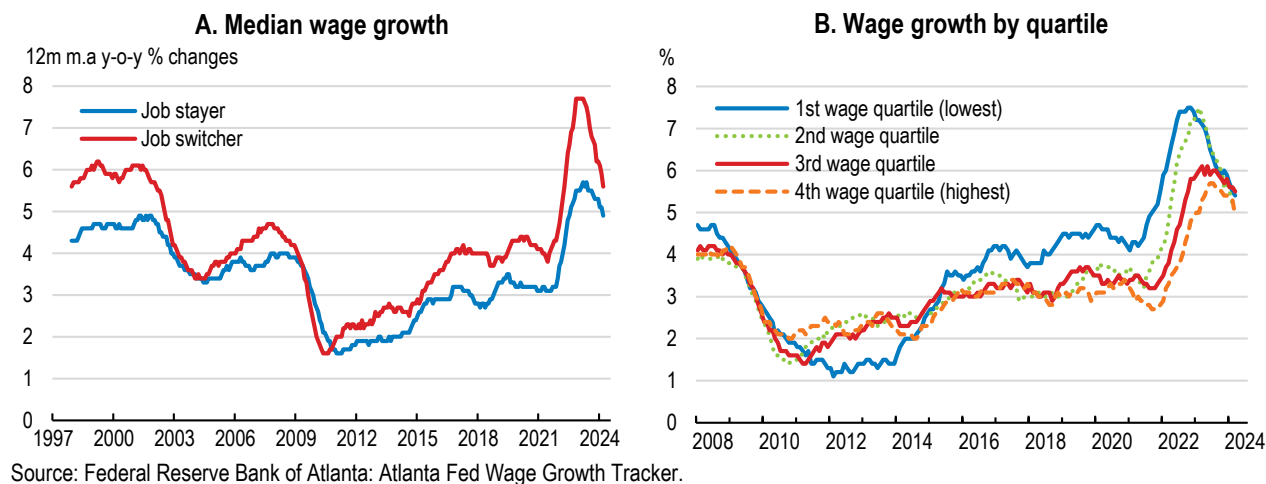
Source: BLS, CBO, OECD calculations.

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Wages have grown strongly since the pandemic, with a surge in the average hourly wage during the pandemic and sustained increases in the following years. However, pressure on wages has been abating as the labour market has come into better balance. This has accorded with a significant slowing in nominal wage growth of those switching jobs: from 7.7% in year-on-year terms in early 2023 to 5.6% in March 2024 (Figure 1.6, Panel A). A key development during the pandemic and earlier years was the relatively fast nominal wage growth for those in the lower half of the income distribution (Figure 1.6, Panel B). This may reflect the scarcity of labour relative to demand for these workers, with job vacancy rates relatively high in some lower wage sectors such as hospitality. Growth in the Employment Cost Index remains slightly elevated compared with the pace over the past few decades, but wage increases have been broadly in line with that expected based on historical relationships with employment growth. Strong measured labour

productivity growth in 2023, including compared to most other OECD countries, also helped reduce growth in unit labour costs.

Figure 1.6. Nominal wage growth has eased, but remains somewhat elevated

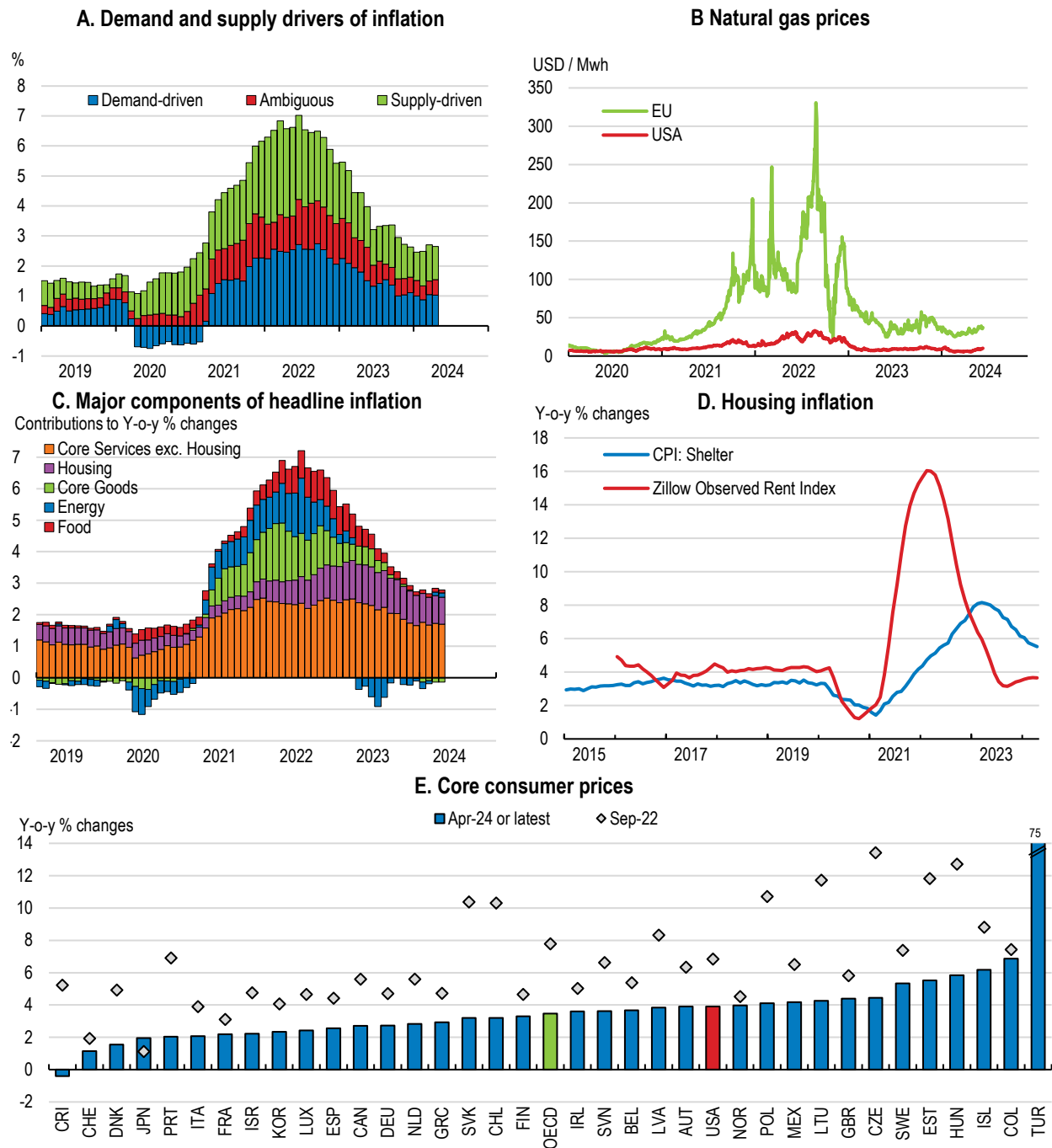


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1.2.3. Inflationary pressures have moderated

Personal Consumption Expenditure (PCE) inflation declined from a peak of 7.1% in June 2022 to 2.7% in April 2024. The initial rise in headline inflation was driven by the interaction of limited supply and strong demand following the pandemic, but these tensions have now eased. An estimate from the Federal Reserve Bank of San Francisco suggests that the contribution of supply factors to annual PCE inflation had fallen from around 3 percentage points in March 2022 to around 1.1 percentage point (Figure 1.7, Panel A). The energy price shock following Russia's war against Ukraine was much less significant in the United States than in European countries (Figure 1.7, Panel B) and an appreciation in the US dollar exchange rate has dampened import prices. Falling inflation and continued wage growth has resulted in real wage gains since mid-2022. Nonetheless, core services inflation (excluding housing) remains around 3½% in year-on-year terms, higher than prior to the pandemic (Figure 1.7, Panel C). Inflation in housing rents is contributing to elevated inflation (Figure 1.8, Panel D) and slower growth in rents on new leases has yet to fully flow through to housing inflation in the Consumer Price Index. Foreign travel prices and financial services rose rapidly in the first quarter of 2024, partially reflecting higher jet fuel prices and stronger equity prices. Core inflation is now slightly above the midpoint observed in OECD countries (Figure 1.7, Panel E).

Figure 1.7. Inflation has eased but is still not yet back to target



Note: Panel A shows contributions to year-over-year headline PCE inflation. Panel B shows the evolution of TTF Neutral Gas Price for Europe and Henry Hub for the United States.

Source: Federal Reserve Bank of San Francisco; Zillow; Refinitiv; OECD calculations.

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1.2.4. Economic growth will remain solid

Real GDP will continue to grow in 2024 and into 2025, though at a slower pace than in the second half of 2023 (Table 1.1). Growth will be supported by consumer spending and continued strength in the labour market, with the unemployment rate expected to remain at low levels by historical standards. Private

investment will continue to increase at a solid pace, supported by government policy incentives, strong net immigration and an assumed easing in monetary policy that begins in the second half of 2024: the Federal Funds Rate is assumed to fall to the 3¾-4% range by the end of 2025. Wage growth is anticipated to continue to ease as the labour market further rebalances. This, along with easing housing inflation, will support a further decline in core inflation in the second half of 2024.

Table 1.1. Economic projections

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|-------------------------------|---|-------|-------|-------|-------|
| | Current prices USD billion | Percentage changes, volume (2017 prices) | | | | |
| GDP at market prices | 21 322.9 | 5.8 | 1.9 | 2.5 | 2.6 | 1.8 |
| Private consumption | 14 206.2 | 8.4 | 2.5 | 2.2 | 2.5 | 1.8 |
| Government consumption | 3 178.3 | 0.3 | -0.9 | 2.7 | 1.2 | 0.5 |
| Gross fixed capital formation | 4 602.4 | 5.3 | 0.9 | 2.1 | 3.4 | 3.2 |
| Final domestic demand | 21 986.9 | 6.6 | 1.7 | 2.3 | 2.5 | 1.9 |
| Stockbuilding ¹ | - 37.6 | 0.3 | 0.6 | -0.3 | 0.1 | 0.0 |
| Total domestic demand | 21 949.3 | 6.9 | 2.3 | 1.9 | 2.5 | 1.9 |
| Exports of goods and services | 2 150.1 | 6.3 | 7.0 | 2.6 | 2.3 | 2.6 |
| Imports of goods and services | 2 776.5 | 14.5 | 8.6 | -1.7 | 2.2 | 3.2 |
| Net exports¹ | - 626.4 | -1.2 | -0.5 | 0.6 | -0.1 | -0.2 |
| Memorandum items | | | | | | |
| GDP deflator | – | 4.6 | 7.0 | 3.6 | 2.3 | 2.0 |
| Personal consumption expenditures deflator | – | 4.2 | 6.5 | 3.7 | 2.4 | 2.0 |
| Core personal consumption expenditures deflator² | – | 3.6 | 5.2 | 4.1 | 2.6 | 2.1 |
| Unemployment rate (% of labour force) | – | 5.4 | 3.6 | 3.6 | 3.9 | 4.0 |
| Household saving ratio, net (% of disposable income) | – | 11.7 | 3.4 | 4.7 | 4.0 | 4.5 |
| General government financial balance (% of GDP) | – | -11.5 | -4.0 | -8.0 | -7.6 | -7.7 |
| General government underlying primary balance (% of potential GDP) | – | -8.8 | -0.9 | -4.1 | -3.5 | -3.4 |
| General government gross debt (% of GDP) | – | 124.8 | 119.9 | 122.5 | 125.4 | 129.4 |
| Current account balance (% of GDP) | – | -3.5 | -3.8 | -3.0 | -3.0 | -3.1 |
| Output gap (% of potential GDP) | – | -0.2 | -0.2 | 0.3 | 0.7 | 0.5 |

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

2. Deflator for private consumption excluding food and energy.

Source: OECD Economic Outlook 115 database.

The growth outlook could surprise on the downside if core inflation remains elevated, delaying any potential monetary policy easing and raising financial risks. However, an upside risk is that productivity growth surprises on the upside, potentially fuelled by new advances in Artificial Intelligence. There are a range of lower probability vulnerabilities that could have a substantial impact on the economic outlook if they transpire (Table 1.2). These include an escalation of geopolitical tensions or a ratcheting up of trade tensions with major trading partners that would amplify uncertainty and disrupt supply chains. In addition, as in other countries and despite significant investments in cyber-security, a large-scale cyber-attack could disrupt business operations or shutdown domestic infrastructure vital for the functioning of the economy.

Table 1.2. Events that could lead to major changes in the outlook

| Shock | Likely impact | Policy response options |
|--|--|--|
| A further ramping up of trade restrictions. | Weaker growth in the near term and potential supply disruptions, as well as lower long-term growth. | Weigh any further bilateral trade restrictions carefully in terms of their economic and other impacts. |
| A further escalation of geopolitical tensions. | Beyond any direct impacts, this could disrupt trade and growth, as well as impact financial markets. | Consider well-designed measures to ensure the resilience of supply chains. |
| 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. |

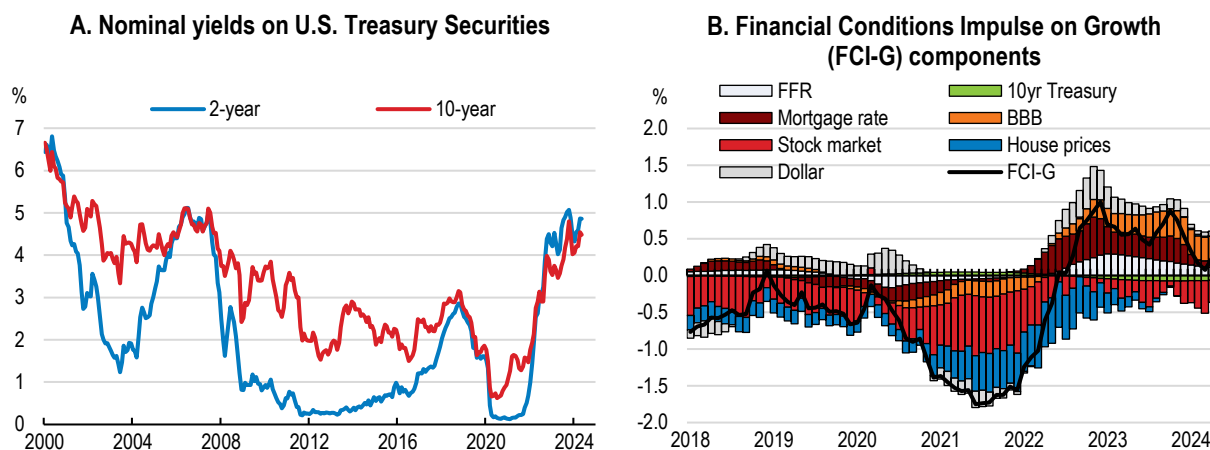
1.3. Monetary policy should continue to manage the return of inflation to target

The Federal Open Market Committee rapidly raised interest rates once inflation began to surge. The Federal Funds Rate was increased by 5.25 percentage points between February 2022 and July 2023 to reach the target range of 5.25-5.5%, the highest level in 23 years, and market interest rates rose sharply in response (Figure 1.8, Panel A). This marked the end of a period since the financial crisis mostly characterised by a zero policy rate and periods of central bank asset purchases. The tightening of monetary policy has credibly signalled the central bank's commitment to low inflation and has helped dampen demand.

Long-term interest rates as measured by 10-year Treasury yields have risen sharply since their trough in 2022 and now stand around 4½ percent, their highest level since 2008 (Figure 1.8, Panel A). These upward movements seem largely to reflect higher expectations for real interest rates, rather than inflation expectations or movements in term premia. While there is significant uncertainty about the neutral rate, a reference level to gauge the stance of monetary policy, current policy is clearly restrictive. The most recent average estimate of the long-run Federal Funds Rate by Federal Reserve Board members, thought to be a proxy for the neutral rate, was below 3%. That is, over 2½ percentage points below the current Federal Funds Rate. An index of Financial Conditions published by the Board of Governors of the Federal Reserve Board (Ajello, et. al. 2023) estimates that the level of the Federal Funds rate and an appreciation of the exchange rate have tightened financial conditions since May 2022 (Figure 1.8, Panel B).


It would be appropriate to ease monetary policy if core inflation continues to ease as anticipated and it is clear that inflation is durably moderating to meet the 2% target. Achieving both objectives of the Federal Reserve's mandate, annual inflation averaging 2% and a maximum level of employment, will require carefully weighing the risks in both directions. Easing monetary policy too quickly risks inflation remaining persistently above target, while an overly restrictive stance of monetary policy would damp economic activity and employment demand.

Figure 1.8. Higher interest rates have tightened financial conditions



Note: The Panel B shows the Financial Conditions Impulse on Growth computed with 3-year lookback window. Positive (negative) values of the index denote headwinds (tailwinds) to GDP growth over the next year. The FCI-G depends on the recent history of three-month changes in seven financial variables: the federal funds rate, the 10-year Treasury yield, the 30-year fixed mortgage rate, the triple-B corporate bond yield, the Dow Jones total stock market index, the Zillow house price index, and the nominal broad dollar index.

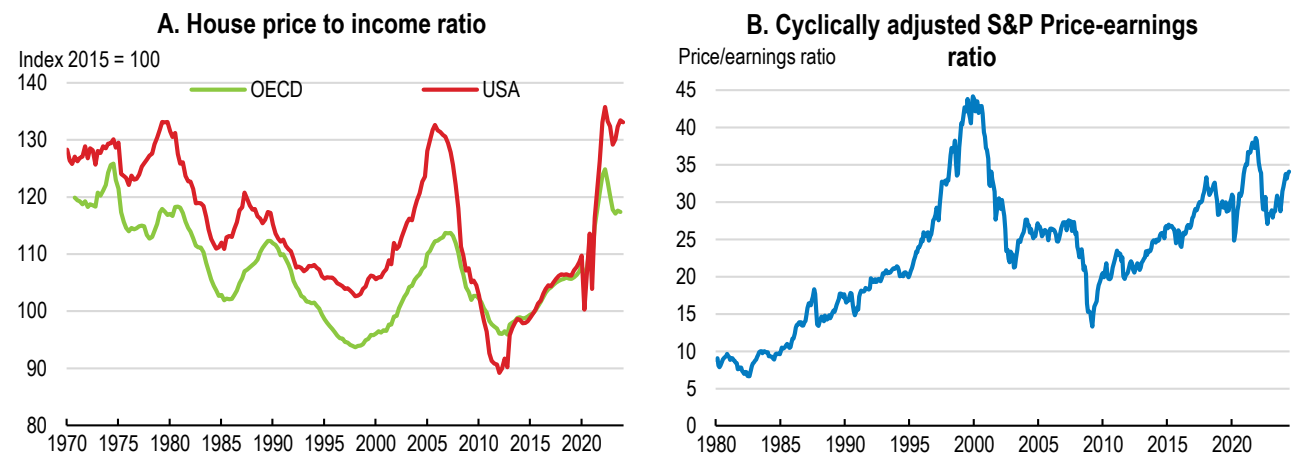
Source: Federal Reserve, United States; and Ajello, Andrea, Michele Cavallo, Giovanni Favara, William B. Peterman, John Schindler, and Nitish R. Sinha (2023). "A New Index to Measure U.S. Financial Conditions," FEDS Notes. Washington: Board of Governors of the Federal Reserve.

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The process of quantitative tightening has so far generally been smooth as the Federal Reserve shrinks the size of its balance sheet. Total assets of the Federal Reserve were reduced by 18.5% (or USD1.65 trillion) between May 2022 and June 2024 as bond holdings matured without being replaced. The process appears to have had a very modest positive impact on short-term government bond yields (Du, et. al. 2024) and the planned pace of further quantitative tightening appears appropriate. As the Federal Reserve has reduced its security holdings, purchases by domestic nonbanks in the “household” sector – which includes hedge funds – have increased.

Despite the rise in interest rates, residential real estate prices remain high compared with incomes. As in many other countries, prices surged following the pandemic, fuelled by strong pandemic savings, a structural shift in the demand for housing and low interest rates. While prices stabilised and then fell as interest rates started to rise, they have since regained this ground. Structural underbuilding (Weinstock, 2023), as well as a reluctance of homeowners to move, have added to price pressures. Existing home sales were 30.3% lower in April 2024 compared to the same month in 2021 as some households with fixed-rate mortgages taken out in the decade prior to the pandemic have little incentive to sell given that a new mortgage would come with a much higher interest rate. Fixed-rate mortgages comprise the vast majority of dwelling loans; over 90% in 2022. Some other OECD countries have recently experienced a larger house price correction, following a more modest run-up in prices (Figure 1.9, Panel A).

Equity market valuations are well above pre-pandemic levels, despite having fallen back somewhat as market interest rates began to rise. The cyclically-adjusted price-to-earnings ratio of the S&P500 has risen steadily since early 2023 and remains high by historical standards (Figure 1.9, Panel B). Much of the recent run-up has been due to rising valuations of large companies in the technology sector, as investors have focused on the potential growth opportunities associated with artificial intelligence. Based on a standard discount cash flow model, the rise in the S&P 500 has been largely due to increased risk appetite by investors (IMF, 2023). An ongoing risk is that a reassessment of the economic outlook could result in a sudden unwinding of positions.

Figure 1.9. Asset price valuations remain high

Note: In Panel A, the measure is the ratio of nominal house prices to disposable household income per capita.

Source: OECD Analytical house prices indicators; and Refinitiv.

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1.4. Fiscal consolidation is needed to help quell inflationary pressures

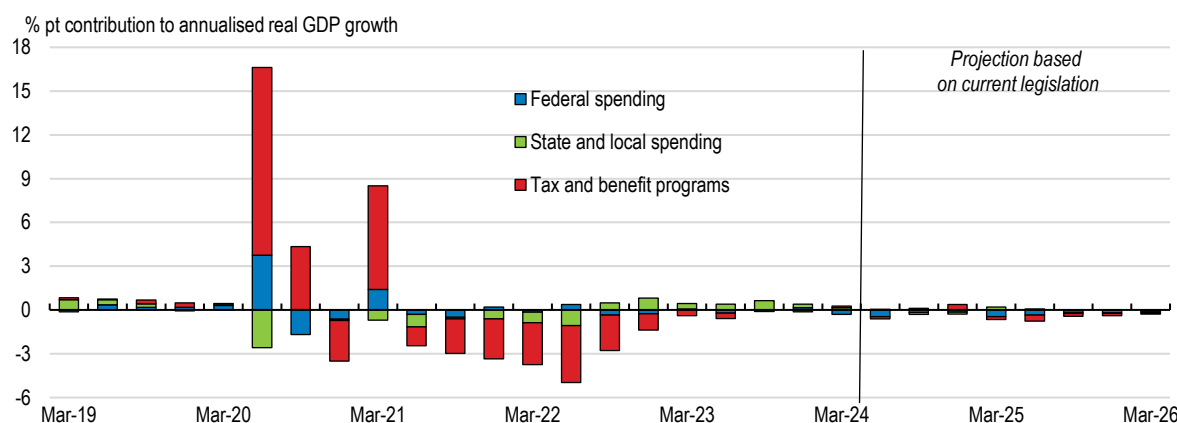
The general government deficit was around 8% of GDP in 2023. This was over one percentage point higher than before the pandemic, highlighting that current spending and investment by the government has continued to support the economy. Following an unwinding of pandemic support measures and unusually strong tax revenues in 2022, state and local government spending accelerated in 2023 as strong budget positions allowed them to increase employment (Figure 1.10). Policies announced as part of the Inflation Reduction Act have also increased spending, with current estimates putting the fiscal cost at around 0.4% of GDP each year (University of Pennsylvania, 2023).

The stance of fiscal policy is anticipated to modestly tighten in 2024, with the underlying structural primary budget deficit projected to fall by 0.8 percentage points. This mostly reflects a decline in public spending as a share of GDP, supported by some specific measures including the reassessment of the eligibility of Medicaid enrollees by states (CBO, 2024b). The expected near-term improvement of the fiscal balance is based on the assumption that measures under the Fiscal Responsibility Act of 2023, which established caps on discretionary funding (which accounted for 28% of total outlays in 2023) for 2024 and 2025, will be implemented. However, past instances of setting caps on discretionary funding have had mixed success: while discretionary funding caps were in place between 2012 and 2021 (following the Budget Control Act of 2011), they were regularly increased through acts of Congress in the latter part of this period (Committee for a Responsible Federal Budget, 2022).

A larger and more sustained fiscal consolidation is needed from the 2025 fiscal year to help rebalance demand and begin putting the public finances on a more prudent path. While the large required consolidation should be implemented steadily over a number of years to limit the impact on the economy, some front loading of consolidation is appropriate in light of the underlying strength of the economy and lingering inflationary pressures. Doing so would also modestly reduce overall future borrowing requirements. In terms of sequencing, increases in personal and corporate tax revenues could be a first step given that such measures have been found to slow economic growth in the short-term while narrowing income inequality (Cournede et. al. 2014). In any case, personal tax rates under the Tax Cuts and Jobs Act are set to expire at the end of the 2025 calendar year, as are elements of the corporate and estate tax schedules. On the expenditure side, spending restraint should be the immediate priority, while longer term reforms are put in place to lower health and social security spending on a permanent basis (Chapter 3).

Figure 1.10. Government pandemic supports have been unwound and there is now modest fiscal tightening

Fiscal impulse by source



Source: Hutchins Center calculations and projections using data from Bureau of Economic Analysis (historical) and the Congressional Budget Office (projections).

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1.5. Financial risks associated with higher interest rates remain

The rapid increase in short- and long-term interest rates, together with risks in some sectors of the economy, has presented challenges for the financial system, although overall it appears to have remained robust. Stress in the regional banking sector in March 2023 developed after large valuation losses on government debt holdings triggered a deposit run on several institutions (Box 1.1). Disruptions in the financial sector have been limited since then, but close regulatory monitoring of asset prices relative to fundamentals, financial system leverage and the funding risks faced by financial institutions remain a priority and several important reforms are underway.

Box 1.1. Bank failures in 2023 and the regulatory response

Three bank failures in March and April 2023 caused disruption in the US banking system and a swift regulatory response. First Republic Bank, Silicon Valley Bank and Signature Bank were the largest bank failures since the global financial crisis.

The three institutions had a high share of uninsured deposits (i.e. those above the USD250,000 threshold for deposit insurance) that were largely held by commercial customers with narrow industry concentration. Silicon Valley Bank and Signature Bank experienced large valuation losses on their unhedged holdings of long-term fixed-rate debt securities as interest rates rose, while valuation losses for First Republic Bank mostly related to its large issuance of low-interest mortgage loans. While many of the assets were classified as held-to-maturity and hence valued at amortised cost rather than fair value, depositors speculated that these securities would need to be sold to meet obligations.

To prevent contagion to other financial institutions, regulators applied a “systemic risk exception” that fully protected uninsured depositors. The fact that these institutions were not already considered systemically important for regulatory purposes reflects a reform as part of the 2018 Economic Growth, Regulatory Relief and Consumer Protection Act which lifted the assets threshold from USD50 billion in assets to USD250 billion.

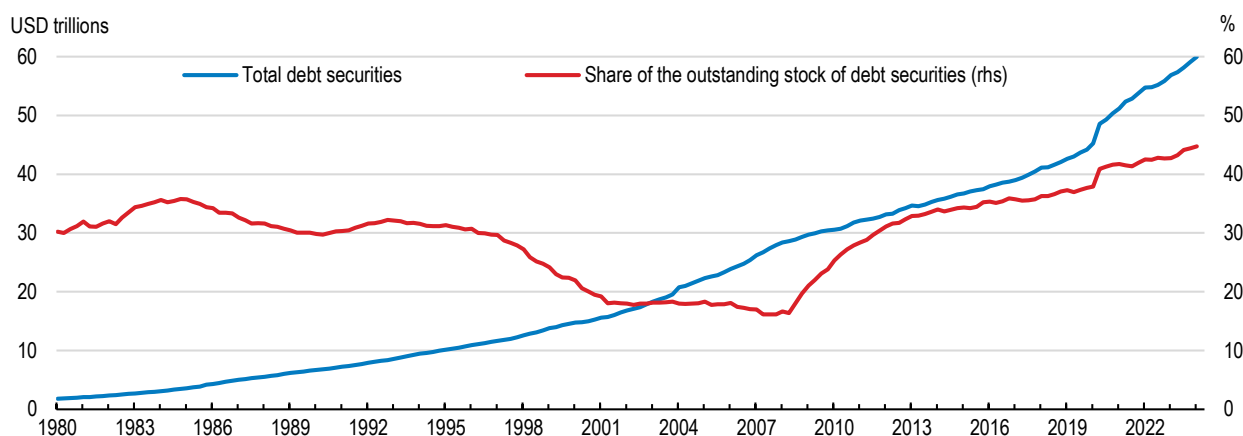
The banking stress also led the Federal Reserve to announce the creation of a temporary new facility, the Bank Term Funding Program (BTFP), to provide an additional source of liquidity to eligible depository institutions. The facility offered loans of up to one year in length to financial institutions pledging US Treasuries, agency debt and mortgage-backed securities and other qualifying assets as collateral (valued at par rather than marked to market). The BTFP ceased extending loans in March 2024.

A review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank pointed to risk management failures by its management, a lack of awareness of the risks by supervisors and an insufficient response by regulators, in part due to the less intrusive approach since 2018 (Board of Governors of the Federal Reserve System, 2023). The review also noted the role of social media and technology in allowing depositors to instantly spread concerns about a bank run, and immediately withdraw funding.

The market for United States Treasury securities plays a key role in the domestic and global financial system as a source of dollar funding, a safe haven for assets and to set a global risk-free benchmark for returns. However, it has become more volatile and bears close monitoring. It is the largest and most liquid market for government securities in the world and developments in the market can have significant international spillovers. In the US context, it plays a key role in financing the government and implementing monetary policy (Grothe et. al. 2023). Episodes of market dysfunction in 2019 and 2020 required emergency intervention from regulators. At the same time, the stock of Treasury securities has grown rapidly and will become a much larger share of all debt securities in the United States, rising from 16% in 2007 to 44% in 2023 (Figure 1.11). The authorities have proposed reforms to the operation of the Treasury market (Box 1.2). These include requirements for market participants who behave as dealers to be registered with the regulator and an expansion in the scope of transactions that need to pass through a central clearing house. By improving transparency and market integrity, these reforms could encourage further participation in the Treasury market, increasing liquidity. However, there will be additional costs for participants of the new arrangements.

Figure 1.11. The market for United States Treasury securities has increased markedly

Outstanding stock of United States Treasury securities



Source: Board of Governors of the Federal Reserve System.

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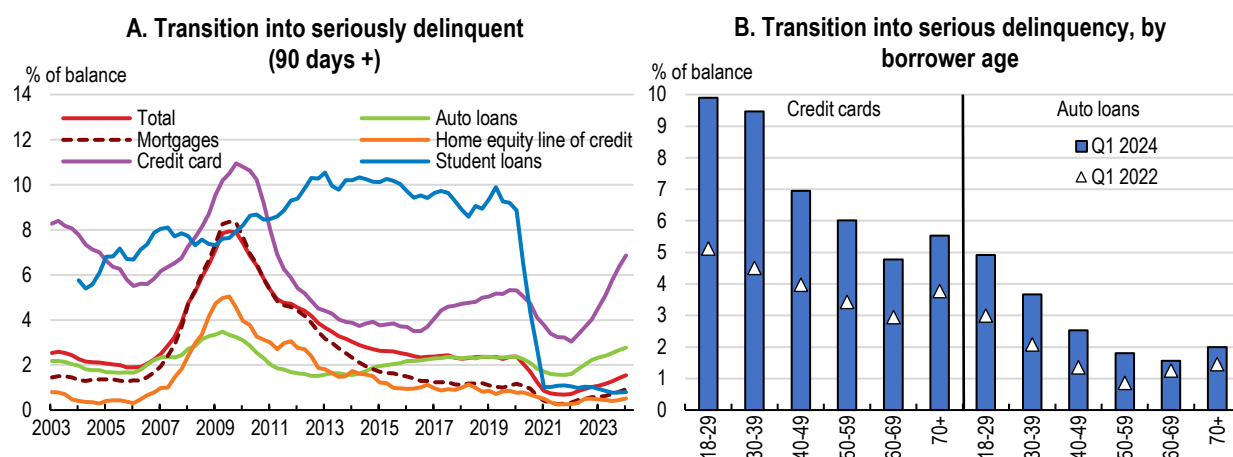
Box 1.2. Proposed rule changes in the United States Treasury securities market

The Securities and Exchange Commission (SEC) has outlined new rules relating to the operations of the market for Treasury securities. Changes include:

- Requiring market participants who engage in certain dealer roles to register with the SEC, become members of a self-regulatory organisation and comply with federal securities laws and regulatory obligations (Securities and Exchange Commission, 2024). The rule will bring some high-speed traders and potentially some hedge funds within the regulatory perimeter. It will mean such entities have capital requirements, books and records requirements and data sharing requirements.
- Increasing the scope of trades that need to be executed through a clearing house. Prior to the rule, 70-80% of Treasury market transactions did not pass through a clearing house (Securities and Exchange Commission, 2023). The new rule requires that all purchase or sale trades of Treasuries with broker-dealers or interdealers are settled through a clearing house from December 2025. Traders will need to post cash as collateral and pay fees to the clearing house.

Rising interest rates have slowed credit to households and businesses. Nonfinancial sector debt fell from 165% of GDP in 2021 to 152% in 2023. Overall, both business and household balance sheets remain strong, but pockets of stress have emerged. In the household sector, a rising share of credit card and auto loans have transitioned into serious delinquency (over 90 days past due) since the first quarter of 2022 (Figure 1.12, Panel A), reaching the highest level since 2012. Younger borrowers have accounted for much of the rise in delinquencies in both types of credit (Figure 1.12, Panel B). This age group of borrowers benefitted from a pause in student debt repayments enacted by the federal government through the pandemic, though repayments recommenced in October 2023. Nonfinancial businesses have been able to buffer the tightening in monetary policy due to a high share of long-term fixed-rate debt. Nonetheless, fixed rate debt is much less common for smaller listed companies than larger ones.

Figure 1.12. Delinquency rates have risen for credit cards and auto loans



Source: New York Fed Consumer Credit Panel/Equifax.

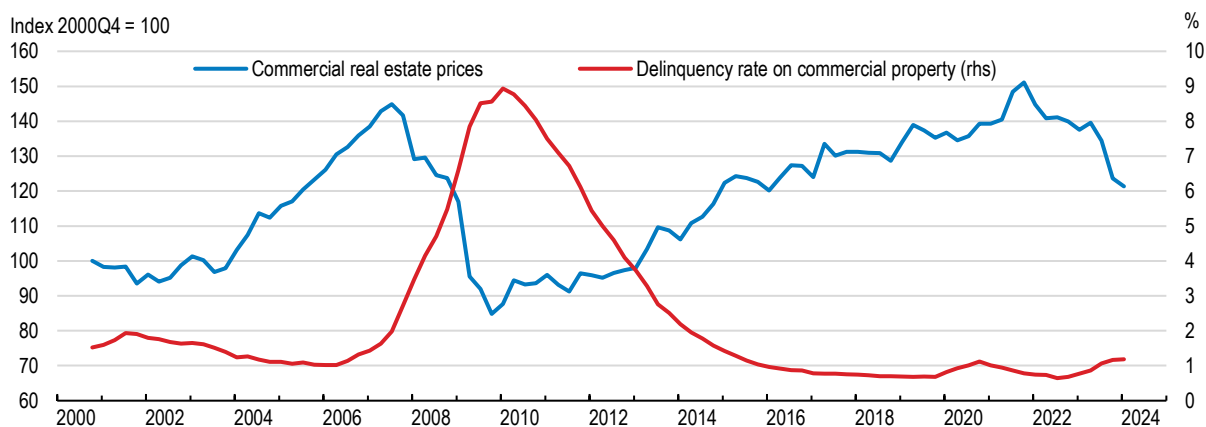
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There has been a slight pick-up in delinquency rates for commercial real estate, especially in the office sector, though the aggregate sectoral delinquency rate for loans over 90 days past due remains low: around 1% compared to around 8% following the global financial crisis (Figure 1.13). Real commercial real

estate values fell 16.2% from the first quarter of 2022 to the first quarter of 2024 (Figure 1.13), a sharper decline than observed in past monetary policy tightening cycles (IMF, 2024a). As well as higher interest rates, structural trends that accelerated during the pandemic, such as working from home and online shopping, have affected returns. Office vacancy rates rose to around 20% by early 2024, the highest on record, and the low levels of transactions in the office market suggest that prices may not yet fully reflect the sector's weak fundamentals (Board of Governors of the Federal Reserve System, 2024a). This may be a reason why delinquency rates in the sector have not increased further. Any additional deterioration in the value of commercial real estate could have a particularly significant negative impact on smaller and regional banks, as they are almost five times more exposed to the sector than larger banks (IMF, 2024a).

Figure 1.13. Commercial real estate delinquencies remain low despite the fall in valuations

Real commercial real estate prices and delinquencies

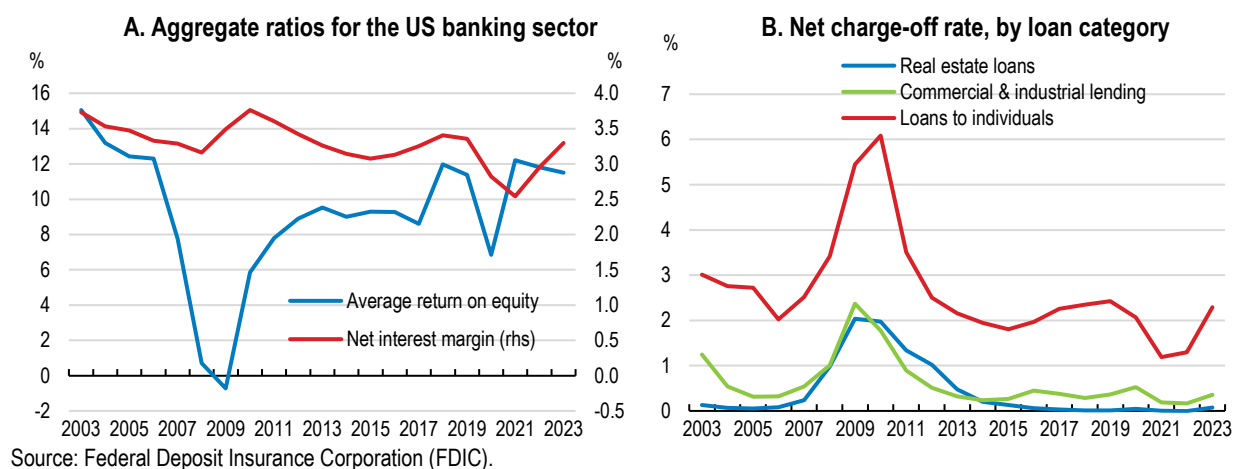



Source: Federal Reserve, United States.

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The banking system overall 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. Return on equity in the banking sector is high relative to the period since the financial crisis (Figure 1.14, Panel A). Rising interest rates resulted in the sectoral net interest margin increasing by 0.8 percentage points between 2021 and 2023 (Figure 1.14, Panel A). The overall Common Equity Tier 1 capital ratio (CET1) has been trending higher. The aggregate CET1 ratio for global systemically important US banks reached a decade high in the fourth quarter of 2023 and is above the ratio for other US banks (Board of Governors of the Federal Reserve System, 2024b). The rise in delinquencies has resulted in an increase in the net charge-off rate on bank balance sheets, though it is now only back to the pre-pandemic level after a period of being at historic lows. The rise in the net charge off rate has so far been contained to personal loans, with no discernible increase in 2023 in charge-offs in the real estate and commercial and industrial loan categories (Figure 1.14, Panel B).

Figure 1.14. The banking system remains profitable

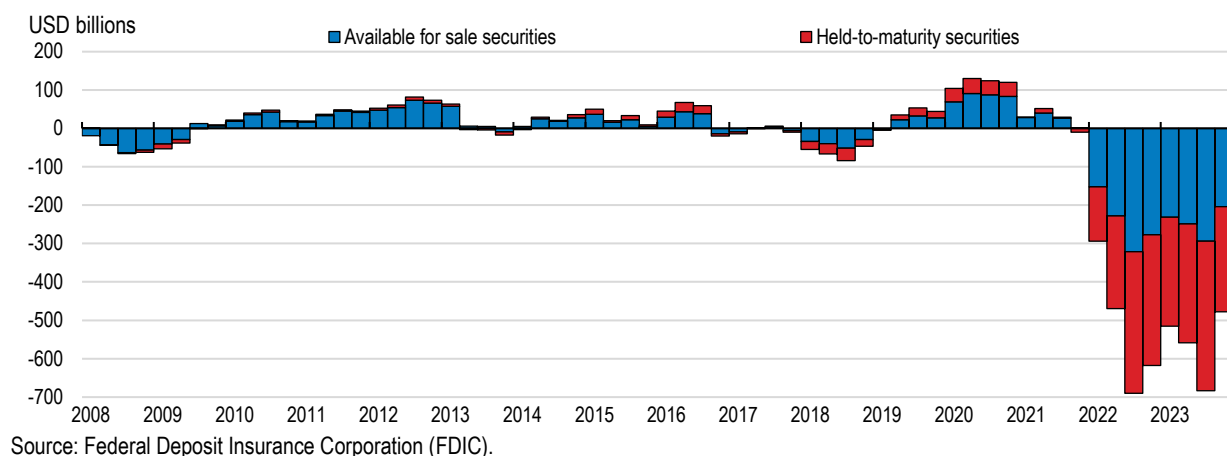


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There are still significant notional securities losses on bank balance sheets from long-term fixed rate debt securities due to higher interest rates (Figure 1.15). These were the catalyst for the bank failures observed in early 2023 (Box 1.1). As of the final quarter of 2023, banks' balance sheets showed declines in fair value of USD204 billion in available-for-sale securities and USD274 billion in held-to-maturity securities (Figure 1.15). These numbers are large compared to bank capital and will affect future bank profitability, as well as creating a vulnerability if banks needed to sell these assets. A new regulatory proposal would require unrealised capital gains and losses on "available-for-sale" securities to be included in calculations of regulatory capital for institutions with over USD100 billion in assets (Barr, 2023). This partly responds to the recent bank collapses and would better ensure that capital requirements reflect the risks on bank balance sheets, thereby encouraging more prudent risk management. Unrealised gains and losses for securities classified as "held-to-maturity" would continue to be excluded for regulatory purposes. The authorities should ensure the new regulations do not result in more securities being classified as held-to-maturity as institutions seek to avoid holding more capital.

Figure 1.15. Unrealised losses on securities on bank balance sheets have risen

Unrealised gains and losses on securities held by FDIC-insured depository institutions



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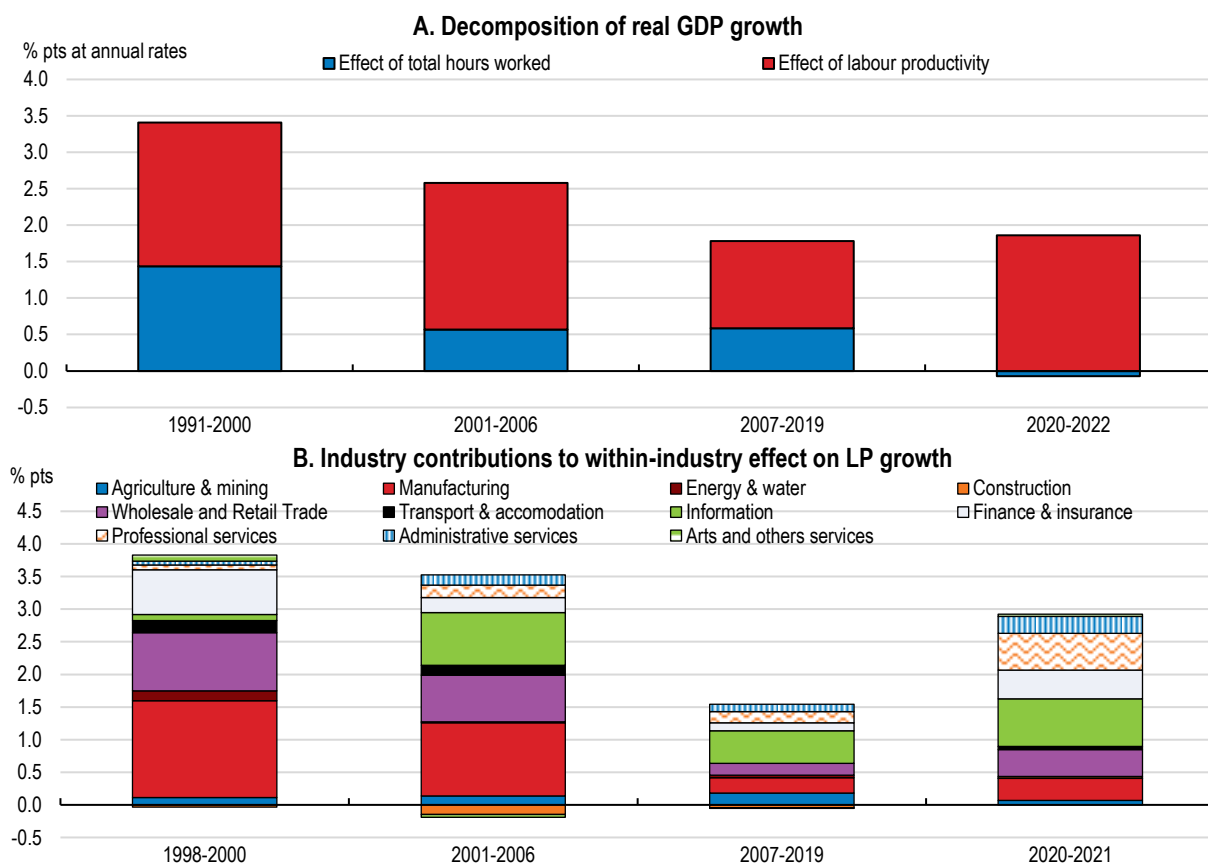
Proposed regulatory changes also include implementation of some aspects of the Basel III requirements. This includes reducing the ability for banks to use internal models to calculate capital requirements. Certain aspects of the proposal go beyond Basel III requirements, such as the risk-weighting of residential mortgages (Labonte and Scott, 2023). The proposal is estimated to result in a relatively large increase in Tier 1 capital requirements of 16% on average, compared with estimated impacts on capital requirements from Basel III implementation of 3% in the UK and 10% in the EU (Prudential Regulation Authority, 2023).

Direct lending by nonbanks to businesses, so-called private credit, has grown rapidly. Private credit in the United States has increased at an average annual rate of 20% over the past five years, equivalent to over 9% of the stock of bank credit in 2023 (IMF, 2024b). Such credit is mostly extended to firms that are too large or risky to borrow from banks and too small for public markets (IMF, 2024b). The attractiveness for investors is the relatively high floating rates associated with private credit loans, which are also generally senior in the capital structure, while borrowers benefit from faster execution, greater flexibility and limited disclosure requirements relative to bank borrowing and public markets (FSOC, 2023). Redemption risks are somewhat mitigated by long-term financing arrangements and the use of leverage appears to be modest. However, private credit loans are typically at floating rates, meaning heightened exposure to increases in interest rates. Furthermore, light regulatory oversight and limited disclosure contributes to the opacity of these lending activities. Further efforts to collect data on private credit, as advocated by the Financial Stability Oversight Council (FSOC, 2023), would provide insights into linkages with other parts of the financial system and help identify potential financial risks.

1.6. Medium-term economic growth could be boosted

US labour productivity per hour is among the highest in the OECD which, together with high aggregate employment, sustains the highest per capita living standards in GDP terms among major economies. However, average real GDP growth has slowed in subsequent growth cycles from the start of the 1990's: stepping down from 3.4% in the 1990's to 2.6% in the years leading up to the financial crisis to 1.8% from then until the pandemic (Figure 1.16, Panel A). This slowdown in GDP growth primarily reflects slowing trend labour productivity growth, together with a weaker contribution from labour as the population has aged and more of the available workers are already integrated in the labour force. Weaker productivity growth reflects a declining aggregate investment rate, as well as slower growth of multifactor productivity. At the industry level, most of the productivity slowdown since 2001 came from more modest contributions from the ICT, manufacturing and wholesale and retail trade industries (Figure 1.16, Panel B). While measured aggregate productivity growth has been highly volatile in recent years around the pandemic, both productivity and employment are now back to around the pre-pandemic trend and there may be upside risks to productivity in the years ahead as adoption of new technologies advances.

Figure 1.16. Productivity growth had slowed



Source: OECD Productivity database; and OECD calculations.

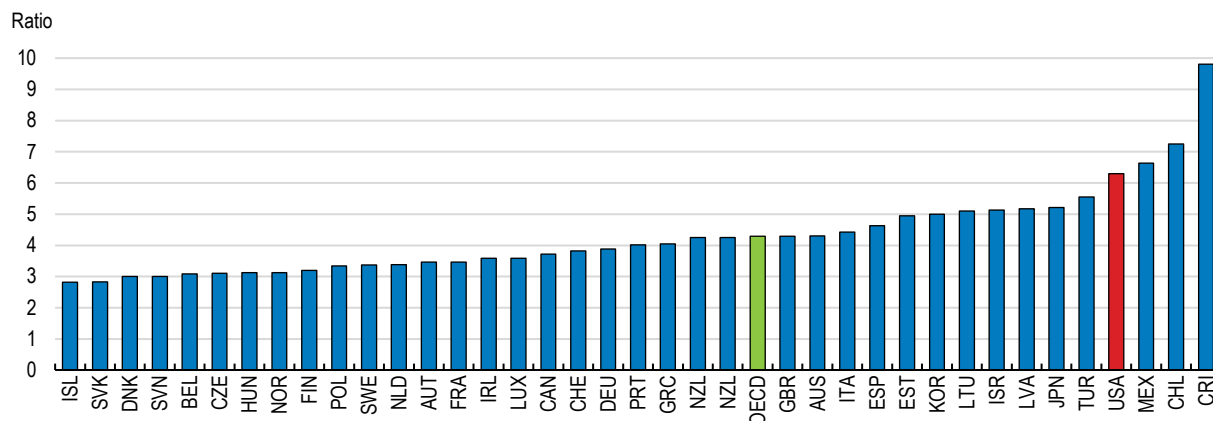
Source: <https://stat.link/era9ow>

Productivity prospects for the United States benefit from framework conditions that favour a dynamic and productive economy. Administrative requirements on start-ups are low and employment protection legislation is less stringent than in any other OECD country, encouraging the formation of new businesses and resource reallocation (OECD, 2020a). Managerial capital is strong (Bloom et. al. 2012), supported by some of the world’s top universities, and the US is a global leader in domestic research and development intensity. The domestic economy benefits from deep integration with global markets: it was the recipient for over one third of all FDI inflows into OECD countries in 2022 and was the largest source of outward FDI. These factors interact to encourage technological innovations as well as their domestic application in ways that enhance productivity.

Revitalising productivity growth can help the economy adjust to the ongoing headwinds from the ageing population and contribute to further overall raising living standards. However, this needs to be achieved in a way that does not exacerbate the already high level of income inequality. The ratio of disposable income of the richest 10% of the population to that of the poorest 10% of the population is one of the highest in the OECD (Figure 1.17). Similarly, the relative poverty rate is close to the highest of the OECD, with 18% of the population in 2022 living below a poverty line of half the median household income. There is evidence that tax and transfer policies introduced during the pandemic substantially reduced income inequality (CBO, 2024c) and the relatively fast pace of nominal wage growth of the lowest income workers since the pandemic should have also helped (Figure 1.16, further above). However, despite these favourable developments, recent inflationary pressures are likely to have had a large impact on lower income households who spend a larger share of their income on energy and food and who are less able to absorb higher living costs (Stockburger, et. al. 2023).

Figure 1.17. Income inequality is high

Ratio of disposable income of those at the top (richest) decile to those at the bottom (poorest) decile, 2022 or latest available year



Source: OECD Income Distribution Database.

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Box 1.3. Estimated GDP impact of selected structural reforms

The following estimates quantify the cumulative GDP impact of selected reforms recommended in this Survey at a 10-year horizon informed by the impacts estimated in cross-country analysis by Egert and Gal (2017). These estimates are illustrative and there is significant uncertainty about the GDP impact of these reforms, including due to the way they are assumed to be implemented. The overall GDP effect of the Surveys recommendations may be underestimated given that important reforms are not included in the quantification due to a lack of suitable modelling.

Table 1.3. Illustrative GDP impact of selected recommendations

| Policy | Scenario | GDP impact |
|---|---|------------|
| Reducing the cost of childcare | An increase in family benefits corresponding to a typical policy change in OECD countries. | +0.5% |
| Paid parental leave | Introduce two weeks of paid parental leave at the national level. | +0.1% |
| Trade openness | An increase in trade openness corresponding to a typical policy change in OECD countries. | +1.8% |
| Increased competition in the communications sector | Reduced stringency of regulations in the energy, transport and communications sector that corresponds to a typical policy change in OECD countries. | +0.9% |

Source: Egert and Gal (2017)

1.6.1. New industrial policies must be accompanied by strong evaluation frameworks

The government has introduced a series of new industrial policies designed to raise economic performance, but also targeting environmental, social and other objectives (Box 1.4). Major legislative pieces have been the *Infrastructure Investment and Jobs Act* (2021), the *Inflation Reduction Act* (2022)

and the *Chips and Science Act (2022)*. The purpose of each package has differed, but common objectives have been creating resilient supply chains, enhancing national security and promoting the convergence of disadvantaged communities. This has often been through measures that promote domestic production of certain goods.

Well-designed industrial policies can have large benefits, especially when used to tackle challenges markets cannot address on their own. However, along with significant fiscal costs, such policies can create market distortions that negatively impact innovation and the availability and prices of goods and services. Costs can be particularly high when measures effectively limit competition and increase protectionism (OECD, 2024c). In this context, strong evaluation frameworks are needed to distinguish the efficacy of the industrial policy measures being implemented and to adjust them as needed. In determining if industrial policies are the most effective and efficient policy intervention, these evaluation frameworks should clearly identify the trade-offs that exist between economic objectives and other priorities such as national security. In cases where industrial policy interventions are deemed appropriate, other government policy reforms will be needed to ensure they achieve their greatest effect. These include providing supportive physical infrastructure, keeping markets open and competitive, enabling the accumulation and application of relevant skills and making better use of the skills of women.

Box 1.4. Recent industrial policies in the United States

The objectives of the recent US industrial policies are multifaceted. Primarily, they seek to increase public support in areas where there are market failures that result in funding gaps or other shortfalls in supply. These areas include the climate transition, physical infrastructure, healthcare and research and development. They are also conceived around higher-level objectives that include improving supply chain resilience through rebuilding a domestic manufacturing base and protecting national security. At the same time, the design of the policies aims to reduce social inequalities through targeting provisions towards lower socioeconomic and more disadvantaged cohorts, supporting unionisation and including place-based elements (e.g. spending provisions specifically for “energy communities”). Some of the measures are designed to crowd-in private investment, for example by raising public spending on research and development. The three main pieces of legislation so far have been:

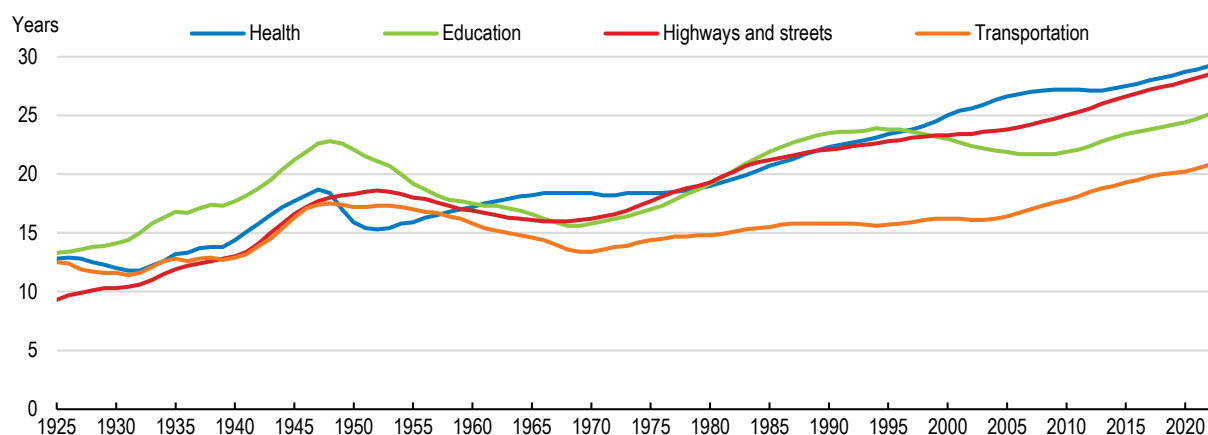
- In November 2021, the United States Congress passed the ***Infrastructure Investment and Jobs Act***, which provided around USD550 billion of additional infrastructure spending over a ten-year horizon (amounting to around 2% of annual GDP). The legislation included new spending on road, rail, port and broadband infrastructure. It also emphasised environmental objectives, through funding for environmental remediation (e.g. cleaning up brownfield sites), modernising the electricity grid and for zero- and low emission public transport infrastructure.
- In August 2022, Congress passed the ***Inflation Reduction Act (IRA)***, predominantly a climate and tax bill that included spending initiatives and tax changes to finance them (for details of the climate measures, see Appendix). Along with the climate provisions, there were measures to improve the affordability of healthcare. These included the extension of Affordable Care Act subsidies for an additional three years and regulatory reform that allowed Medicare to begin negotiating directly for the price of a small number of prescription drugs in 2023.
- In August 2022, Congress also passed the ***CHIPS and Science Act*** which invested federal funding to boost domestic semiconductor capacity. The main measures involve tax credits for investment in manufacturing, sectoral research and development (R&D) funding, and funding for education and skills. With limited exceptions, funding may not be provided to a foreign entity of concern, such as an entity that is owned by, controlled by, or subject to the jurisdiction or direction of a country listed as such.

1.6.2. Investing in public infrastructure

America's infrastructure lags behind in many areas, even if it has world leading infrastructure in some domains, such as commercial freight. There is rapid ageing of the public infrastructure stock, including highways, streets and transport (Figure 1.18). Public infrastructure investment has trended down over time and has been far lower as a share of GDP than in most OECD countries. The need to increase public spending on transport infrastructure has been emphasised repeatedly in past *OECD United States Economic Surveys*. Improving the stock of public physical infrastructure would raise productivity, both through higher value-added of infrastructure sectors such as utilities, telecommunications and transport and indirectly through the positive productivity impact on downstream sectors that use these services as intermediate input. To begin addressing infrastructure challenges, the authorities enacted the *Infrastructure Investment and Jobs Act* in November 2021 (Box 1.4). Even so, the productivity payoff from infrastructure spending is highly uncertain and depends critically on the frameworks determining the selection and implementation of projects (Demmou and Franco, 2020).

Figure 1.18. The infrastructure stock has aged

Current cost average age of government fixed assets



Source: Bureau of Economic Analysis.

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There are longstanding infrastructure governance challenges in the United States which risk reducing the efficiency of public infrastructure spending. In particular, the OECD *Infrastructure Governance Indicators* identify shortcomings related to long-term strategic vision for infrastructure (OECD, 2023a). This partly reflects the absence of a national long-term cross-sectoral infrastructure plan. High level plans such as these can ensure new infrastructure spending decisions are aligned with strategic objectives and account for spillovers between sectors and jurisdictions. They can also establish mechanisms for coordination between levels of government, which has been an ongoing challenge for infrastructure planning in the United States (Demsas, 2021).

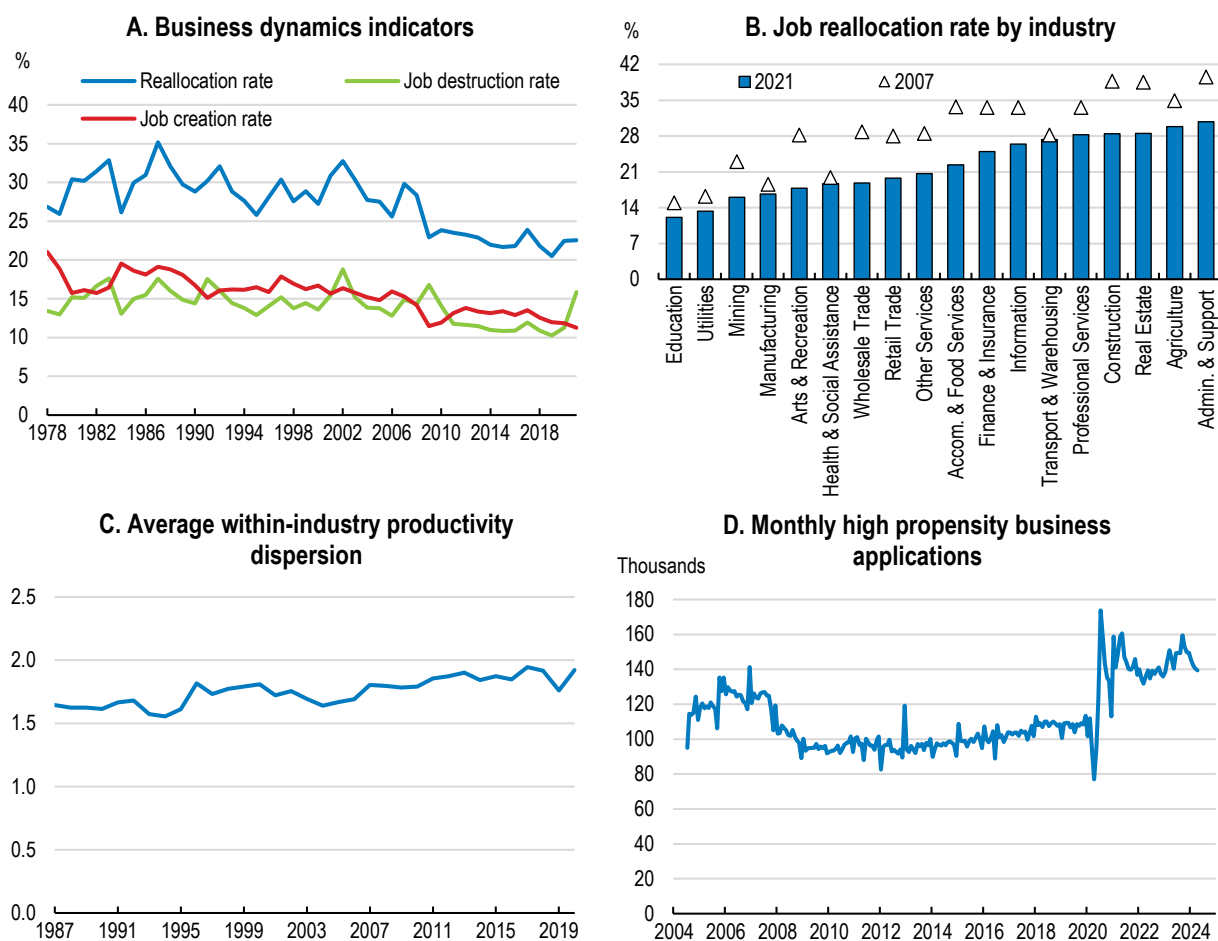
1.6.3. Strengthening competition would boost productivity and benefit consumers

A key element for sustainably reviving productivity growth is maintaining a competitive and open business environment. Doing so encourages the adoption of superior managerial practices and the diffusion of existing technologies to laggard firms, underpinning their catch-up to the national frontier (OECD, 2015).

It also promotes the transmission of productivity gains to real wages by compressing product market rents that tend to accrue to capital (OECD, 2018).

The structural decline in productivity growth from the early 1990s has been accompanied by indications that competition is weakening. These include a slowdown in firm entry rates (Akcigit and Ates, 2019), a rise in the prices firms charge above their marginal costs (De Loecker and Eeckhout, 2017) and a fall in the pace of resource reallocation that has been broadly based across industries (Figure 1.19, Panel A and B). This has coincided with signs of a slowdown in the diffusion of existing technologies and practices to laggard firms: the dispersion of productivity growth between firms within sectors rose steadily between 1987 and 2020, a trend observed for 74% of the 86 industry sectors captured by Bureau of Labor Statistics data. More recently, there are signs that the pandemic may have been the catalyst for a revival in business dynamism. High propensity business applications, those with attributes consistent with a high propensity of turning into a business with payroll, jumped at the onset of the pandemic and remain elevated (Figure 1.19, Panel D; Decker and Haltiwanger, 2023). This has been accompanied by an increase in the number of business establishments (Council of Economic Advisers, 2024b).

Figure 1.19. Indicators of business dynamism slowed in the decades before the pandemic



Note: In Panel A and B, the reallocation rate is calculated as (job creation rate + job destruction rate – absolute net job creation rate).

Source: Census Bureau; Bureau of Labor Statistics.

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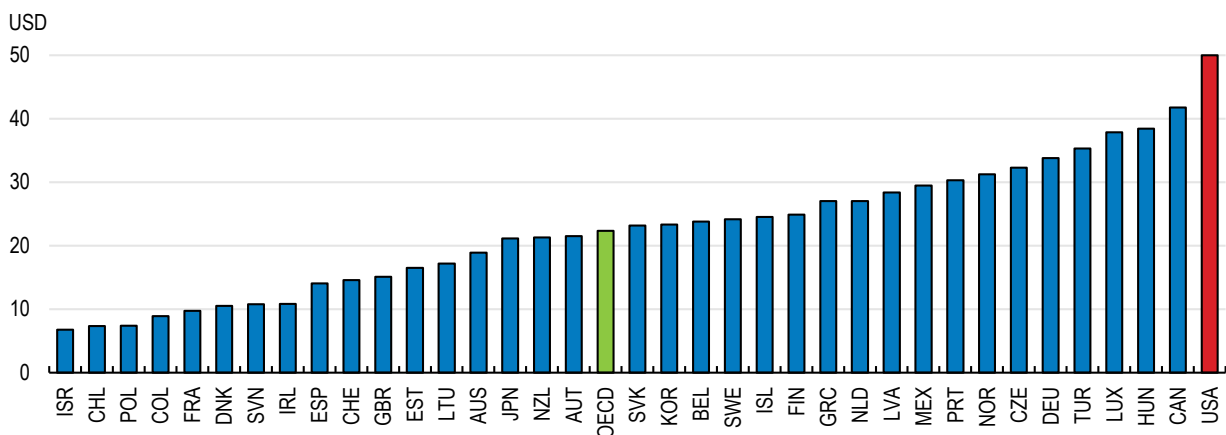
The authorities have prioritised improving the policy framework to foster competition in the business sector. In 2021, the President issued the Executive Order on Promoting Competition in the American Economy, marking a whole of government effort to promote competition, directing executive agencies and

encouraging independent agencies to intensify their efforts (The White House, 2021a). Some areas of focus include promoting competition in digital markets, given network effects mean these markets can be prone to incumbents creating dominant positions, and reducing barriers to labour mobility. The use of occupational licensing restrictions (as discussed in depth in the *2020 OECD Economic Survey of the United States*) and non-compete and “no-poach” agreements is a concern. In April 2024, the Federal Trade Commission issued a rule prohibiting companies from enforcing existing noncompete contracts on employees other than senior executives (which account for 0.75% of all employees) or imposing any new non-competes (Federal Trade Commission, 2024). The rule is estimated to cover 80% of the private workforce. This reduction in these restrictions is welcome and should support job mobility.

New guidelines for evaluating mergers were published in December 2023 in response to a direction in the Executive Order. These introduced more stringent thresholds for rendering a transaction presumptively illegal. Concerning vertical mergers, the guidelines specify that there will be basis to challenge a merger where one of the parties has a market share greater than 50%. Other novel aspects of the guidelines include the consideration of a merger’s impact on the market power of firm employees and the sequence of merger activity leading up to a proposed deal, given such a pattern could entrench market concentration. Close scrutiny of merger behaviour in certain sectors characterised by increasing market concentration and relatively high prices is needed, including the communications sector (Corrado and Ukhaneva, 2016; OECD, 2021a). Indeed, the communications sector has become more concentrated in recent years, following merger activity that was approved by regulators (OECD, 2021a). At the same time, minimum monthly retail prices for communications packages in the United States are very high by OECD standards (Figure 1.20). Federal regulators have noted the need to enhance antitrust enforcement compared to the approach of recent decades (Khan, 2023). In addition, the recommendation from past Economic Surveys for the authorities to continue to adapt antitrust policy settings to new trends in digitalisation, financial innovation and globalisation (OECD, 2020b) remains relevant.

Figure 1.20. Telecommunications prices are comparatively high

Minimum monthly retail price among 4G/5G plans with at least 1000 mins, 100 gigabytes and 10 Mbits/s speed, 2024Q1



Source: Rewheel Research; and OECD Analytical Database.

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While rising digitalisation can create challenges for maintaining open and competitive markets, it also brings opportunities for new competitors. Allowing consumers more control of their data is a promising area for promoting the growth of young high potential firms. Greater data portability by consumers can reduce switching costs and better enable comparison services in markets with complex pricing structures. There may be large consumer benefits to greater data portability in certain sectors such as health care,

energy and financial services. Slow progress has been made in implementing “open banking”. However, the Consumer Financial Protection Bureau expects to finalise a proposed Personal Financial Data Rights rule by Autumn 2024. The proposed rule accords with a recommendation from the previous *OECD Economic Survey* (Table 1.4) and would require companies to share customers data (at the customers direction) with other companies offering better products. Promoting competition in the banking sector may be especially worthwhile given significant consolidation over recent decades and evidence that larger lenders in certain products, such as credit cards, charge significantly higher interest rates (Consumer Financial Protection Bureau, 2024).

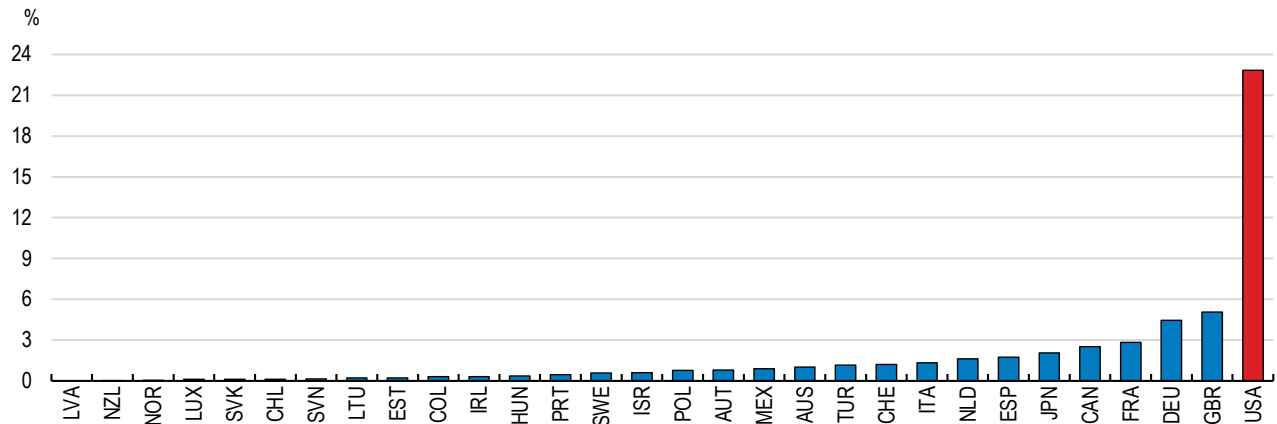
Table 1.4. Past OECD recommendations for achieving medium-term economic growth

| Recommended in previous Survey | Action taken since October 2022 |
|--|---|
| Identify opportunities for introducing data portability policies at the national level and give regulators an active role in supervising interoperability standards | The Consumer Financial Protection Bureau expects to finalise a proposed Personal Financial Data Rights rule by Autumn 2024. |
| 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. | |
| Significantly increase public funding for childcare and expand the levels of income eligibility for public programmes. | |
| Establish minimum federal standards for childcare and implement a tiered quality rating system that is consistent across states and that accounts for differences across types of providers. | |

Recent advances in Artificial Intelligence (AI), and generative AI systems specifically, should be accompanied by regulatory oversight to ensure these technologies do not restrict openness and competitive markets. Some of the attributes of current AI ecosystems pose risks for competition. For instance, there may be large economies of scale and network effects as the predictive performance of AI models improves as the volume of data inputs expands (OECD, 2024b). In addition, the significant computing power required to train advanced AI systems, including foundation models, creates high fixed costs which advantages incumbent and well-capitalised firms. There is also the potential for AI-driven recommender systems to be designed in a way that increases market concentration, for example through retail platforms developing their own AI-driven recommender systems that self-preference. A tenet of the OECD AI Principles is developing regulatory frameworks that encourage competition in AI development (OECD, 2024a). Given that the United States is at the global forefront of AI development (Figure 1.21), it will be key in establishing appropriate guardrails and regulatory frameworks promoting the trustworthy use of the technology. Doing so expeditiously is important given the speed with which the technology is advancing and diffusing throughout economies. Recent regulatory developments (Box 1.5) are initial steps that will have international spillovers for other OECD jurisdictions and are expected to continue.


Figure 1.21. The United States is at the forefront of global AI development

Contributions to high impact public AI projects by country, 2023



Note: High impact is defined as those projects that had 6-100 managed copies produced. The number of AI projects corresponds to AI-related public GitHub “repositories”.

Source: OECD.AI using data from GitHub, accessed on 9/4/2024, www.oecd.ai.

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Box 1.5. Regulatory developments related to Artificial Intelligence in the United States

In 2022, the administration published a Blueprint for an AI Bill of Rights, outlining a set of principles to guide the use and development of AI (The White House, 2022a), according closely with the OECD AI Principles. In 2023, an Executive Order on the “Safe, Secure and Trustworthy Development and Use of AI” was published (The White House, 2023a). This outlined the main policy objectives related to AI and the key issues of regulatory concern, including the safe and secure development of AI, privacy and civil liberties protection, equity and civil rights and supporting workers in an AI rich environment.

Promoting competition and open markets in AI is a key aspect of these policies, highlighting the need for competition regulators to exercise their authority to ensure a competitive AI ecosystem. To reduce barriers to firm entry and expansion, the administration is planning to provide small developers access to technical assistance and resources in creating AI innovations, for example through the National AI Research Resource (NAIRR).

The Executive Order also highlighted a need to attract and retain people with expertise in AI to work in the United States, partly through reforms to the immigration system.

International cooperation in developing AI regulations will be essential. Working to promote broader adoption of interoperable AI regulatory and standards frameworks will ease complexity for United States businesses and enhance transparency and safety for consumers (Tabassi, et. al. 2023). Exchange through multilateral fora like the OECD will also be essential for the authorities, recognising nascent regulatory challenges and novel approaches to dealing with them.

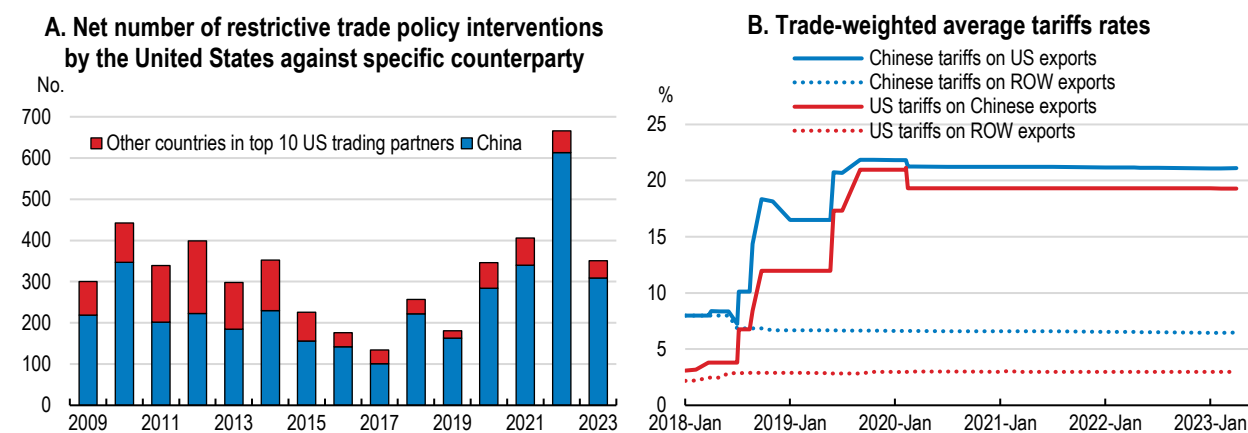
1.6.4. Maintaining open market markets in the context of trade policy

Maintaining open markets and a rules-based international trading system is a key channel to promote a competitive and dynamic domestic business environment and allow firms to benefit from the development of global value chains. As well as encouraging innovation, both through sharpening business incentives and facilitating knowledge spillovers from abroad, openness reduces the prices paid by consumers and

provides greater choice. However, geopolitical fragmentation, concerns about harmful non-market practices in other countries, a desire to support domestic industry and concerns about the distributional consequences of globalisation have resulted in trade policies becoming more restrictive in the United States and in other OECD countries in recent years. While such measures may be justified in the presence of clear market failures or other objectives such as national security or increasing supply-chain resilience, they risk imposing significant economic costs.

The net number of restrictive trade policy interventions implemented by the United States has risen since 2018. This largely reflects an increase in the number of trade policy interventions related to China (Figure 1.22, Panel A). National security has been cited by the US authorities as the key concern for imposing these restrictions. The average bilateral tariff rate on imports from China increased from 3.1% in January 2018 to 21% in January 2019, before edging down to 19.3% after the signing of the Phase One agreement with China in January 2020 (Figure 1.22, Panel B). In May 2024, the administration announced future increases to import tariffs on a short list of items from China, comprising steel and aluminium, semiconductors, electric vehicles, batteries, critical minerals, solar cells, ship-to-shore cranes and medical products. The proportion of United States imports from China subject to tariffs rose from 0.8% in July 2018 to 66% by September 2019 (Bown, 2023). While trade with China has fallen since these policies were implemented, a major impact of this policy was to cause trade diversion, with Chinese imports replaced with imports from other countries, lengthening global supply chains and adding to costs (Bown, 2022). Some of these imports may rely on significant inputs from China. With respect to other markets, import tariffs were imposed on a narrower range of products: steel, aluminium, solar panels and washing machines. However, agreements have been made in recent years that have reduced the stringency of some of these measures. These include the replacement of certain steel and aluminium tariffs with tariff rate quotas for EU countries, exemptions from solar panel tariffs for four South East Asian nations and the expiration of washing machine tariffs in February 2023. Average bilateral tariff rates on imports from countries outside of China have overall remained low (Figure 1.22, Panel B). Nonetheless, those tariff increases that have occurred have raised prices for American consumers and input costs for businesses (Amiti et. al. 2019; Fajgelbaum et. al. 2019). Recent estimates suggest that undoing the tariffs put in place in 2018 and 2019 could raise the level of output by 4% over three years (Boer and Rieth, 2024).

Figure 1.22. Trade restrictions have increased, notably on imports from China



Note: In Panel A, the net number of trade policy restrictions is defined as the number of harmful trade policy interventions net of the number of liberalising trade policy interventions, as classified by Global Trade Alert. In Panel B, trade-weighted average tariffs are computed from product-level tariff and trade data, weighted by exporting country's exports to the world in 2017.

Source: Global Trade Alert; Peterson Institute for International Economics.

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The United States has also imposed some export controls and toughened the foreign investment review processes, also on national security grounds. Recent export restrictions have primarily focused on

equipment and technology for advanced semiconductor manufacturing destined for countries of concern, which includes China. Such restrictions were updated in October 2022 and further tightened in October 2023. With respect to the long-standing foreign investment review processes, the administration issued an Executive Order in August 2023 that adds several national security factors for the Committee on Foreign Investment in the United States (CFIUS) to consider during its review process (The White House, 2023b). In April 2024, the U.S. Department of Treasury issued a regulatory proposal that would strengthen certain CFIUS procedures and sharpen its penalty and enforcement authorities (Department of the Treasury, 2024). While reinforced foreign investment review provisions are aimed at addressing threats to national security from countries of concern, investments from all foreign sources are being more closely scrutinised in sectors of the economy considered to have strategic importance, such as steel. The concentration of critical minerals in countries of concern is also being addressed through a combination of trade agreements (for example, the U.S.-Japan Critical Minerals Agreement) and enhanced domestic capability for production, stockpiling and recycling of critical minerals (The White House, 2022b),

Aspects of new industrial policies aimed at bolstering U.S. industries may have anti-competitive effects, both in providing subsidies to US-based production and due to specific conditions imposed to qualify for support. Local content requirements have become more common for eligibility for government incentives in the United States. For example, full eligibility of the consumer Clean Vehicle Tax Credit introduced as part of the IRA requires: i) a minimum proportion of battery components to be manufactured or assembled in North America (rising from 40% in 2023 to 80% after 2026), ii) a minimum proportion of critical mineral inputs to be extracted or processed in the United States or in a country with which the United States has a free trade agreement (rising from 50% in 2023 to 100% after 2028) and iii) final assembly of the vehicle in North America. “Buy American” requirements, which require certain goods purchased with federal funds be manufactured primarily in the United States, were also expanded to a broader range of goods as part of the 2021 Infrastructure Investment and Jobs Act. These local content requirements may impose significant economic costs by reducing competition in the domestic market and leading to a switch to domestic goods of inferior quality and higher price than the imports they substitute (OECD, 2019). They could ultimately complicate the sourcing of key inputs for the climate transition. OECD modelling has highlighted that countries imposing local content requirements suffer a broad loss in international competitiveness, illustrated by a reduction in exports in sectors not directly targeted by the provision (Stone, et. al. 2015).

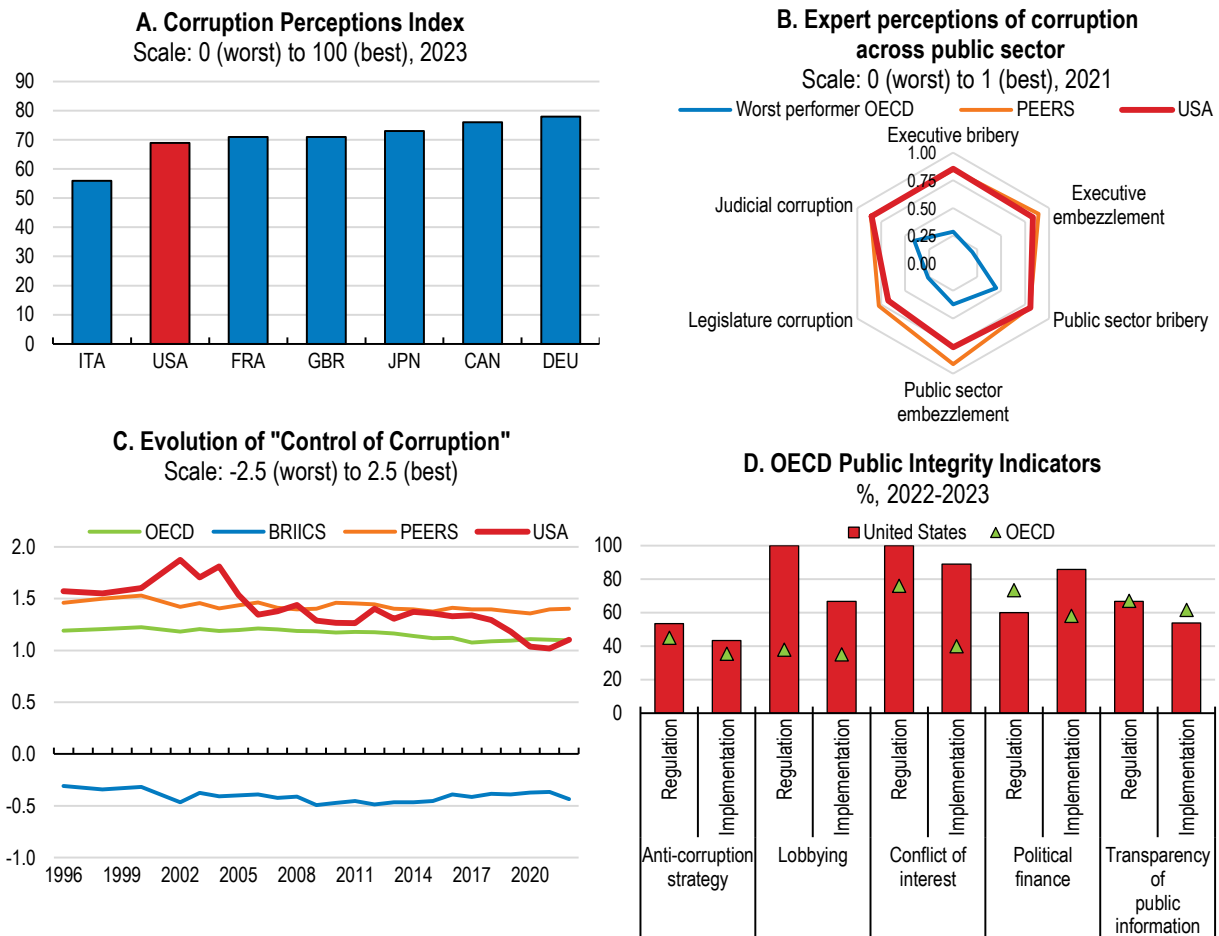
Taken together, these changes amount to a significant shift in US trade and investment policies, although overall the US economy remains relatively open to trade and foreign investment. National security motivations can be invoked across a broad range of areas, and restrictions to date have been applied in some cases to other OECD members. The shift in approach creates a more uncertain and complicated operating environment for businesses. There is a risk of invoking retaliatory policy responses by trade partners, as has already been seen, as well as encouraging other countries to develop their own policies to favour domestic production and undermining the rules-based multilateral trading system, leading to an amplification of the fragmentation of global supply chains. Since 2019, the United States has declined to appoint members to the WTO’s highest dispute resolution body. National security or other concerns need to be carefully assessed and weighed against the potential negative economic impact on the economy.

1.6.5. Ensuring strict controls of corruption

An effective anti-corruption framework supports a strong business environment. Corruption – the abuse of public office for private gain – discourages business dynamism, reducing investment and innovation, and weighs on growth prospects (Jin, 2021). It also undermines equality of opportunity and erodes trust in government. The perception of corruption is low in the United States, but remains somewhat higher than in most other G7 countries (Figure 1.23, Panel A). 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 1.23, Panel B).


The United States is a top performer in several areas of the OECD Public Integrity Indicators, including measures to promote transparency and integrity in lobbying (Figure 1.23, Panel D). The disclosure requirements in the Lobbying Disclosure Act are some of the most comprehensive in the OECD, and the Foreign Agents Registration Act remains a pioneering piece of legislation for combatting foreign interference. In practice, investigations into violations of these regulations occur regularly. Similarly, the US has strong regulations to prevent conflicts of interest, submission rates of interest declarations are high, content verification of interest declarations occurs frequently, and investigations into non-compliance are commonplace. However, there is scope for improvement in other areas. In 2021, the US adopted its first anti-corruption strategy and a corresponding action plan was published in 2023. However, it primarily focuses on combatting corruption abroad rather than domestically. It also does not contain outcome level indicators to assess the impact of the envisioned measures. Furthermore, while the US has strong legislation for requesting access to public information, many key datasets are not proactively published. For example, there is no database containing consolidated versions of all primary laws or aggregated data on lobbying and agendas of cabinet meetings and cabinet secretaries are not published. Compared to other OECD countries, regulations related to political finance are relatively weak. This reflects the fact that there is currently no complete ban on anonymous donations and no maximum threshold for personal contributions to candidates' personal campaigns (OECD, 2024d). Since 2010, campaigns have increasingly relied on support from independent expenditure-only committees (also commonly referred to as "super political action committees" or "Super PACs"), entities that are permitted to raise and spend unlimited funds on election campaigns, as long as their activities are independent of candidates. In an OECD context, Super PACs are unique and novel instruments, and a review of their impact on the political finance system and evaluation of relevant regulations would be useful to help mitigate potential risks of undue influence by special interests on public policy making.

Figure 1.23. There is scope for improvement in the anti-corruption framework



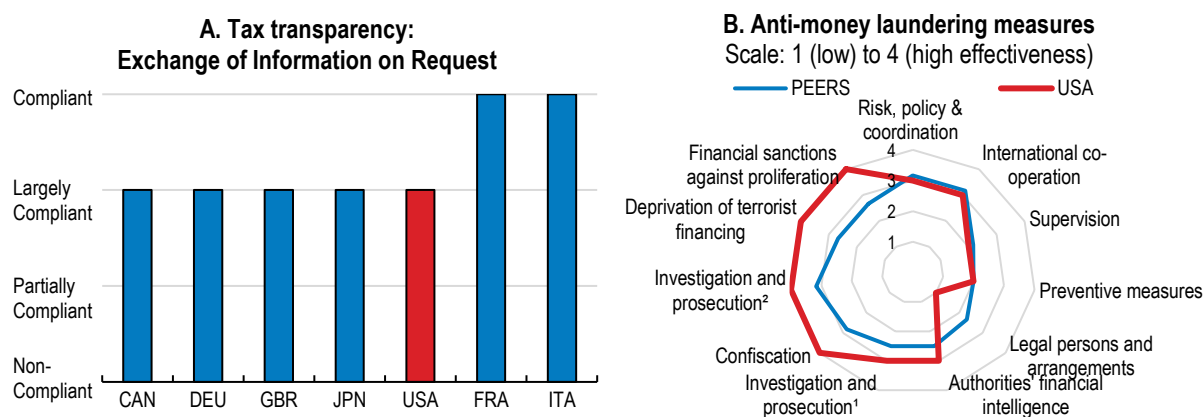
Note: Panel B shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.

Source: Transparency International (Panel A); Varieties of Democracy Project (Panel B); World Bank (Panel C) and OECD Public Integrity Indicators (Panel D).

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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 1.24, 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 1.24, 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. The *Corporate Transparency Act*, which requires certain U.S. and foreign companies to report beneficial ownership information to the Financial Crimes Enforcement Network, became effective at the start of 2024 and has been recognised as an improvement by the Financial Action Task Force (Financial Action Task Force, 2024). The legislation was declared unconstitutional by one District Court in March 2024, though reliefs only apply to the named plaintiffs (the members of the National Small Business Association).

Figure 1.24. Tax transparency and anti-money laundering measures are mostly effective



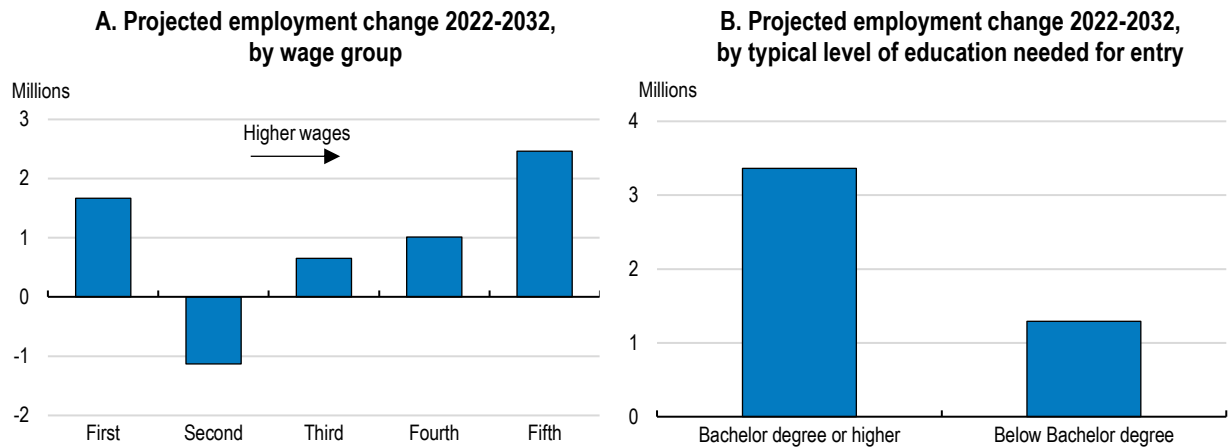
Note: Panel A summarises the overall assessment on the exchange of information in practice from peer reviews by the Global Forum on Transparency and Exchange of Information for Tax Purposes. Peer reviews assess member jurisdictions' ability to ensure the transparency of their legal entities and arrangements 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).

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1.6.6. Better aligning education and skills policies with labour market needs

Policies that equip individuals with the skills needed in a fast-changing work environment will help boost future productivity. The influence of an ageing society, digitalisation and the climate transition will shape the pattern of labour demand. Employment projections by the Bureau of Labor Statistics suggest that the biggest employment gains over the coming decade will be in the health and professional services industries (Figure 1.25, Panel A). Rising demand for health workers reflects in part the influence of an ageing society. Strong demand from professional services is mostly due to an anticipated increase in need for software developers in the computer system design industry (Figure 1.25, Panel B). Labour demand is projected to be especially strong for workers in occupations in the highest wage quintile (Figure 1.25, Panel A). Consistent with this, most of the new employment needs will be for workers with educational attainment corresponding to a Bachelor degree or higher (Figure 1.25, Panel B). If there were to be inadequate supply of workers with the skills needed to fill these jobs, wages at the upper end of the income distribution would adjust higher, exacerbating income inequality. Consequently, along with programmes that specifically respond to identified skill needs, broader education policies that support skill accumulation and pathways into higher level degrees are a priority.

Figure 1.25. Labour demand is expected to increase most for highly educated workers

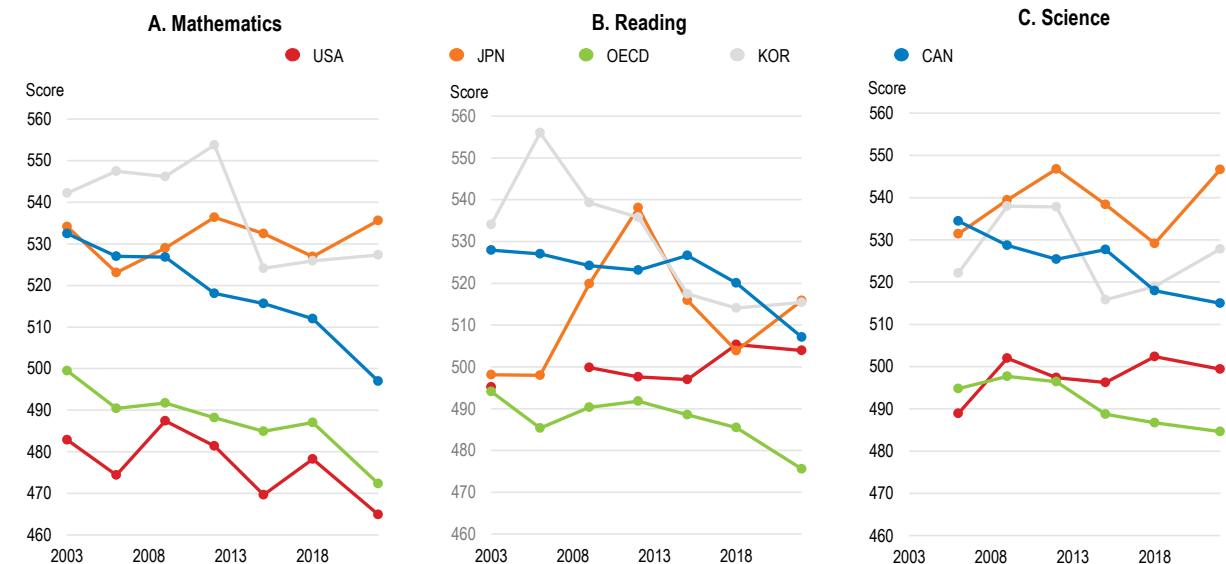


Note: Panel A is calculated at the broad industry level. For example, the “First” group shows employment demand for those industries with the lowest average wage levels as at 2022.
 Source: Bureau of Labor Statistics.

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Student test scores in the Programme for International Student Assessment in 2022 were broadly in line with the OECD average across the disciplines of mathematics, reading and science, but weaker than in the best performers or neighbouring Canada (Figure 1.26). Test scores have been trending down since the early 2000s in mathematics but have been stable in reading and trending higher in science. Performance gaps between socio-economic groups are relatively large in the United States, with advantaged students outperforming disadvantaged students by 102 points in mathematics compared with a gap of 93 points in the average OECD country. To put this in perspective, the average 15-year old student in a PISA-participating country is estimated to gain around 20 points in one school year (OECD, 2023b).

Figure 1.26. PISA scores have been trending down in mathematics



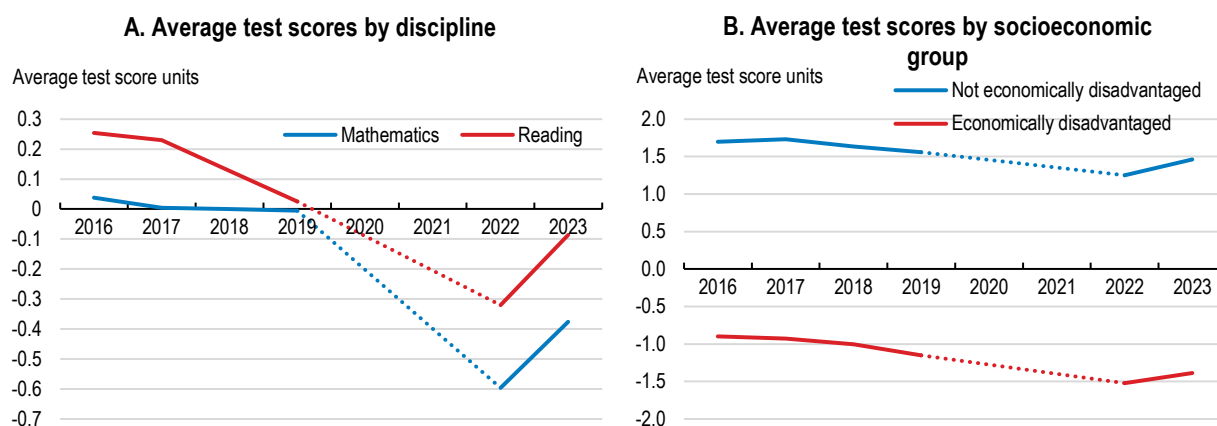
Source: OECD PISA database.

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Learning losses for school students were significant through the pandemic, with significant school closures (UNESCO). This was reflected in a decline in student test scores in the National Assessment of Educational Progress (NAEP): between 2019 and 2022, the simple average learning loss across the 51 states was equivalent to 0.6 grade levels in mathematics and 0.3 grade levels in reading (Figure 1.27, Panel A). For the 13 states that report NAEP scores by socioeconomic status, the decline in average test scores were most pronounced for economically disadvantaged students (Figure 1.27, Panel B). Test scores from 2023 recovered somewhat, with the average score rising by 0.2 grade levels in both mathematics and reading. However, the recovery was weaker for economically-disadvantaged students.

To address pandemic learning losses and facilitate the safe operation of in-person schooling, supplementary federal funding of around USD190 billion (0.8% of GDP) has been provided through the Elementary and Secondary School Emergency Relief Fund. The funds are disbursed to districts based on their incidence of poverty (Fahle et. Al., 2024). However, this funding will fully expire by September 2024, which is likely to create financial pressure on some schools with a high proportion of lower socio-economic students. There is a need to minimise the adverse impact of the expiry of these funds on students from lower socioeconomic backgrounds through further measures at both the federal, state and local level to accelerate their learning.

Figure 1.27. Student learning losses in the pandemic were substantial



Note: In Panel A, the calculations are done based on the simple average across 51 states. In Panel B, the measures are calculated as a simple average from the 13 states that have test scores decomposed by socioeconomic status for each of the years between 2016 and 2023. Note that data for 2020 and 2021 are interpolated as the National Assessment of Educational Progress was not undertaken in these years. For further details, see Reardon et. Al. (2024).

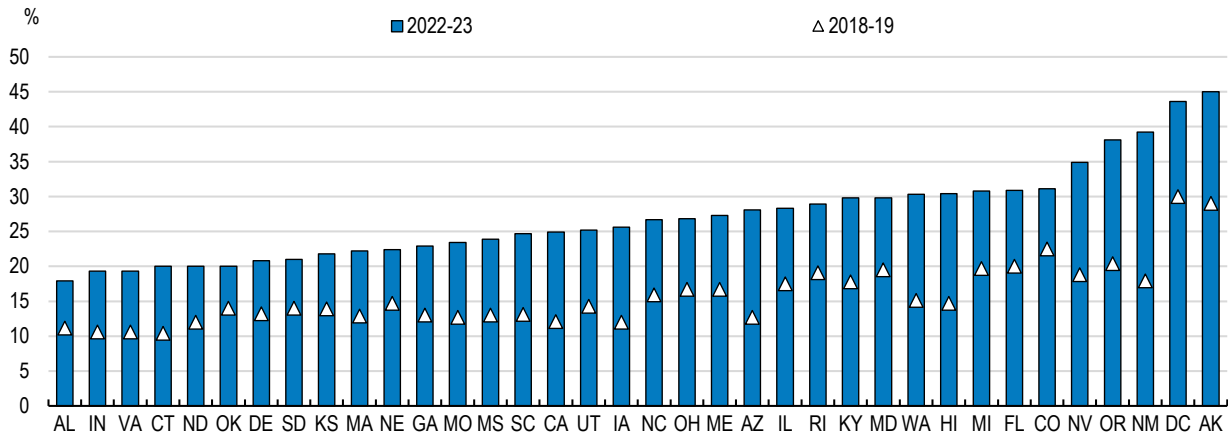
Source: Stanford Education Data Archive.

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Chronic school absenteeism has also become more common across all states compared with prior to the pandemic (Figure 1.28). Analysis by the Council of Economic Advisers suggests that increased absenteeism is associated with a 16-27% decline in NAEP test scores in mathematics and a 36-45% decline in reading (Council of Economic Advisers, 2023). This accords with OECD studies that highlight a significant association between truancy and a decline in PISA scores, when controlling for student and school socioeconomic profile (OECD, 2018). Beyond test scores, heightened school absenteeism has been associated with weaker future labour market prospects and poorer outcomes along other dimensions of wellbeing such as health (Council of Economic Advisers, 2023). The administration is appropriately urging states to strengthen accountability for addressing chronic absenteeism at the district level and work to support specifically tailored strategies to improve family engagement with schools (Biden-Harris Administration, 2024).

Figure 1.28. School absenteeism has risen in all states

Rate of chronic absenteeism from school, by state

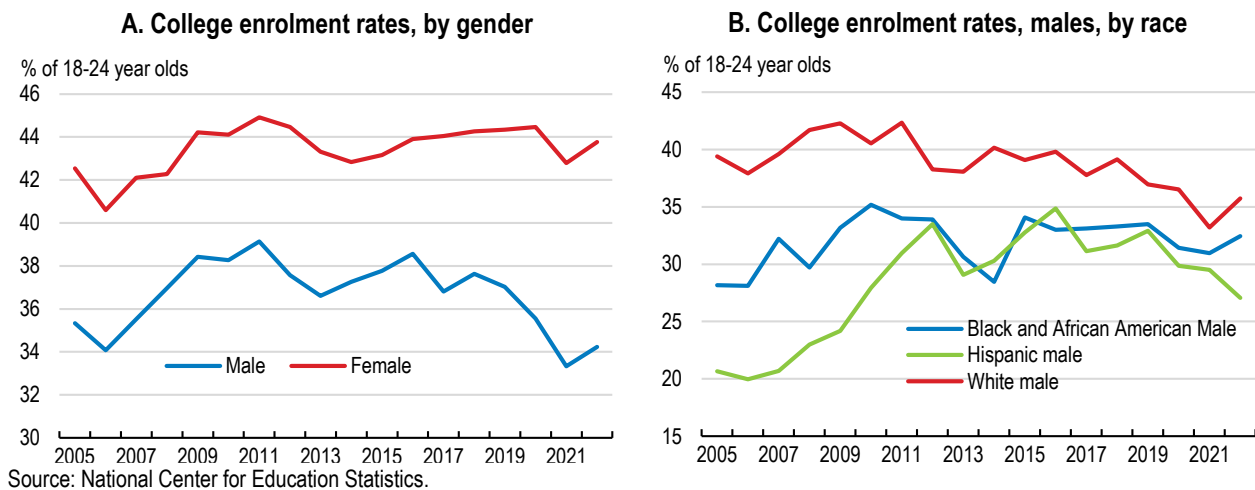


Note: Chronic absenteeism is defined as students missing 10% or more of the school year.
Source: FutureEd.

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Enrolment rates in higher education have fallen, despite the projected increase in demand for graduates in the coming years. Between 2010 and 2019, enrolments in degree-granting post-secondary institutions fell by 6.6% and then by a further 5.3% between 2019 and 2022. This has largely reflected declining enrolments in 2-year college degree programs. The fall in enrolment rates has been most visible for males (Figure 1.29, Panel A), particularly those that are White or Hispanic (Figure 1.29, Panel B). Nearly all states currently have a post-secondary attainment goal to improve the average education levels of their residents and develop a highly-educated workforce (Lumina Foundation, 2024). Given that cost of higher education is the major barrier to participation (Gallup and Lumina Foundation, 2023), policy measures that relieve higher education costs could benefit higher education enrolment, though measures such as student debt relief can be fiscally costly (CBO, 2022a) and regressive (Looney, 2022).

Figure 1.29. College enrolment of men has been declining



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A priority should be continuing to engage with former students who stopped higher education without earning a credential (so called “stopped out” students). As of July 2021, there were 40.4 million such people in the United States (National Student Clearinghouse, 2023). About 2.9 million of these were “potential

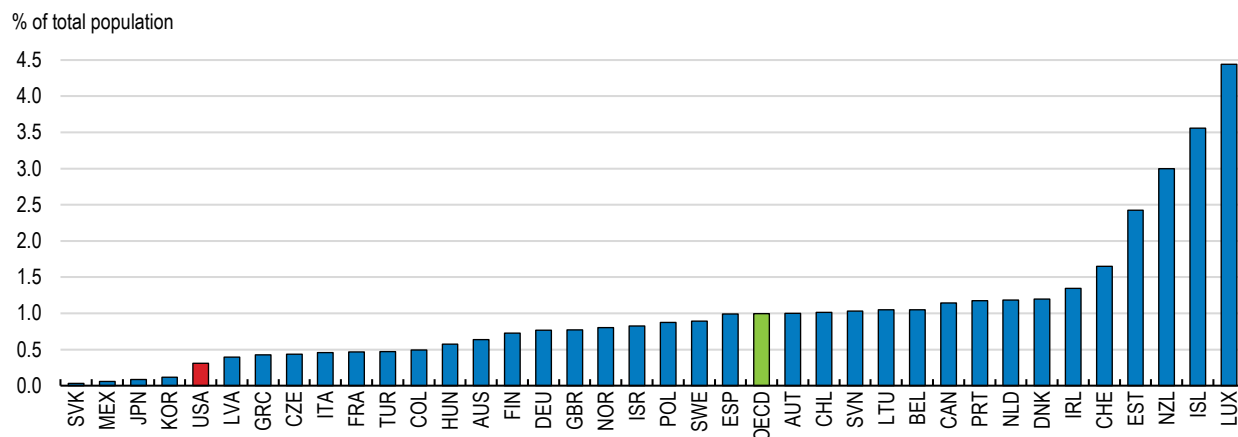
completers”, who had already made at least two years of academic progress, with the majority of these aged in their early 20s (National Student Clearinghouse, 2023). Given a significant wage premium for post-secondary attainment (Bengali, et. al. 2023), the marginal benefits to these students of completing their remaining credits could be high. There is scope to increase the re-enrolment rates of these students, with only around 6% re-enrolling in the 2021/22 academic year. In addition, many of the students who drop-out of higher education are close to finishing. One study using administrative data from Florida and Ohio showed that one-third of all dropouts completed at least three-quarters of the credits typically required (Mabel and Britton, 2018).

The major efforts to develop industrial policies need to be flanked by measures that ensure the skilled workforce is available to accommodate expanded investment in the selected areas. For example, estimates suggest significant shortages in the semiconductor industry of technicians (-26,400 by 2030), engineers (-27,300) and computer scientists (-13,400) (Semiconductor Industry Association and Oxford Economics, 2023). Education needs for each of these jobs differ. Most technicians require a certificate or associate degree, and they can obtain these credentials within six months to two years. In contrast, engineers and computer scientists typically require at least a four-year postsecondary degree. Provisions in the CHIPS and Science Act should help address shortages of technicians in the semiconductor industry, such as the introduction of several Workforce Hubs attached to semiconductor manufacturers (The White House, 2023c). It will be more challenging to fill skill gaps for engineers and computer scientists.

Foreign-born individuals are a potential source of engineering and computer science graduates. Permanent migration flows to the United States relative to population are low compared to the OECD average (0.31% in 2022, compared with 1% for the OECD and 1.1% for Canada; Figure 1.30) and a comparatively high proportion of permanent immigrants are non-work-related (OECD, 2023c). The United States is almost alone among OECD countries in imposing numerical limits on both temporary and permanent migration options for graduates with STEM masters and PhD's and migration for employment in general. Furthermore, the numerical caps and preference categories date back to 1990, meaning that economic admissions are disconnected from the reality of the labour market. Employment visa categories such as the H-1B visa and the temporary O-1 visa do not currently give any priority to STEM graduates. Looking forward, regulatory and legislative change should aim to better align the temporary and permanent economic categories with the needs of the labour market and introduce flexibility to adapt to changing economic conditions.

Figure 1.30. Permanent migration flows are comparatively low

Permanent-type immigration as a percentage of total population, 2022



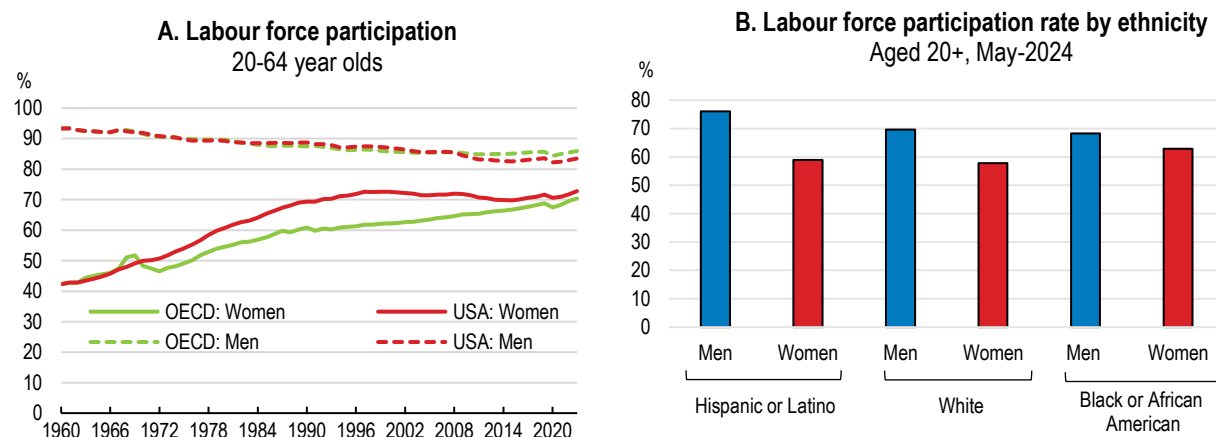
Source: OECD International Migration Database.

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1.6.7. Making better use of the skills of women

There is scope to better engage women in the labour market by further reducing the barriers to their full participation. This could increase the number of workers, but also productivity growth by making the best use of their skills. Previous evidence suggests that up to 40% of aggregate productivity growth in the United States between 1960 and 2010 was explained by reducing occupational barriers to women and black men (Hsieh et. al. 2019). As discussed earlier, the labour force participation rate of women has recovered markedly in recent years and is now above the pre-pandemic level (Figure 1.5, Panel B). However, viewed in a longer-term context, gains in female labour force participation have largely stalled since the mid-1990s (Figure 1.31, Panel A). The working age female participation rate remains well below that in peer countries such as Canada (83% as at 2022) or top performers such as Sweden (90.4%). The gender participation gap for those aged over 20 is apparent across ethnic groups, but is most pronounced for the Hispanic and Latino population (Figure 1.31, Panel B). The participation gender gap prevails despite women in the United States having higher levels of educational attainment than men (proxied by the combined proportion having attained upper secondary and tertiary education). This is particularly the case for tertiary education, with 54% of women compared with 45.9% of men aged 25-64 holding a degree as of 2022.

Figure 1.31. A substantial gender gap in labour force participation remains



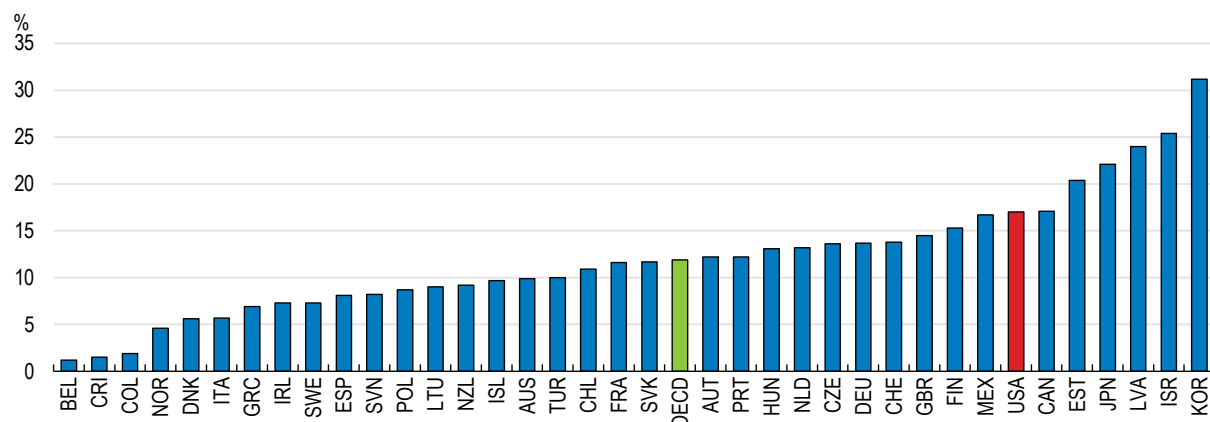
Source: OECD Labour Force statistics; Bureau of Labor Statistics.

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The gender wage gap for a full-time employee at median earnings has declined over time. Nonetheless, the gap remains high compared with other OECD countries (Figure 1.32) and it has narrowed only slightly over the past decade. A variety of factors explain the persistence of the gender wage gap: differences in occupations and industries between men and women are salient, as well as career interruptions and shorter hours for women in high skilled occupations (Blau and Kahn, 2016). Underpinning these factors are gender norms and unequal distribution of caring duties between genders.

Figure 1.32. The gender wage gap is relatively high

Gender wage gap at median earnings, 2022 or latest available year



Source: OECD Earnings database.

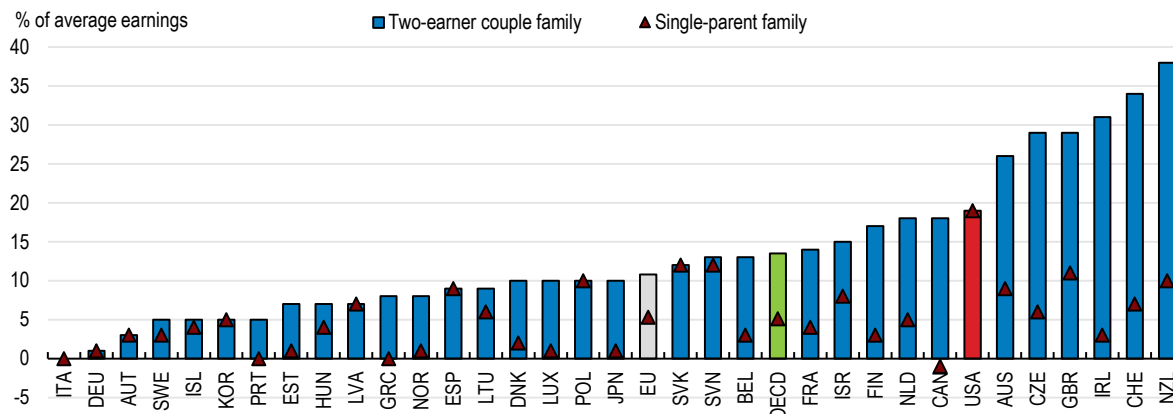
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The cost and availability of childcare is a reason for relatively low labour market integration of women in the United States. Estimates suggest that women's earnings decline by 31% after having a child, while the earnings of men are largely unaffected (Kleven, et. al. 2019). This compares to earnings penalties for women of 21% in Denmark and 26% in Sweden. The net fee for most parents for the use of formal childcare centres is high by international comparison (Figure 1.33), resulting in very high participation tax wedges for second earners when using childcare services: a job earning 67% of the average wage has a participation tax rate of 81% compared with 48% on average in the OECD. High childcare costs reflect low public investment, rather than stringent regulations that impose costs on providers, though single parents with low earnings are eligible for substantial public childcare support (Figure 1.33; OECD, 2022b). Availability of childcare can be limited. Analysis at the census tract level has found that 51% of Americans live in a "childcare desert", meaning areas with little or no licensed childcare centres (Center for American Progress, 2018). Consequently, enrolment rates of 3-5 year olds is low by OECD standards and has not improved since 2005 (OECD, 2022b).

A long-standing issue has been a large gap between the proportion of families eligible for Child Care and Development Fund subsidies and those receiving them. This payment is the primary source of federal funding to states for subsidies that help low-income families afford childcare. Department of Health and Human Services estimates found that just 16% of federally-eligible children received childcare subsidies in 2019 (GAO, 2023). This reflects both insufficient funding to cover the eligible population and some eligible families not applying. Low take-up could be because families are not aware of the programme, find it too difficult to apply, are unable to use the subsidy at their chosen provider or are unable to afford the co-payment (GAO, 2023).

Figure 1.33. Out-of-pocket childcare costs are high by OECD standards

Net childcare costs, 2021



Note: Net childcare costs are equal to gross fees less childcare benefits/rebates and tax deductions, plus any resulting changes in other taxes and benefits following the use of childcare. Calculations are for full-time care in a typical childcare centre and for a family with two children aged 2 and 3. It is assumed that the two-earner couple family has full-time earnings of 100% of average earnings for the first earner and 67% for the second earner. For the single-parent family, earnings are assumed to be 67% of average earnings. US data are for the state of Michigan. As at 2021, average childcare costs in Michigan were slightly below the national average, and the subsidy rate was slightly above the national average (Workmen, 2021). As such, the estimates for the United States may underestimate net childcare costs for the average family.

Source: OECD Family Database.

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The United States is the only country in the OECD without paid maternity leave at the national level, and one of just nine OECD countries that does not have paid leave for fathers (OECD, 2023d). Parental leave systems support mothers staying in work and labour market re-entry after childbirth. Currently, families rely on a patchwork of supports. Eleven states have passed paid family and medical leave laws and there is a federal entitlement for unpaid leave for 12 work weeks around childbirth, though less than 60% of employees are eligible. Most private American employers do not provide paid parental and businesses that do so tend not to provide it to low-wage workers: around 24% of private employees have access to paid family leave but only 6% of those in the lowest income decile (Center for American Progress, 2023). To support the labour market participation of women, many OECD countries have been expanding parental leave policies in recent years, including by introducing provisions that support more equal sharing of caring duties between partners. For example, in Canada, a new employment insurance parental sharing benefit was introduced in 2019, which grants parents additional five weeks of benefits when parental leave is shared in such a way that one parent does not receive more than 35 weeks of parental benefits (OECD, 2023d).

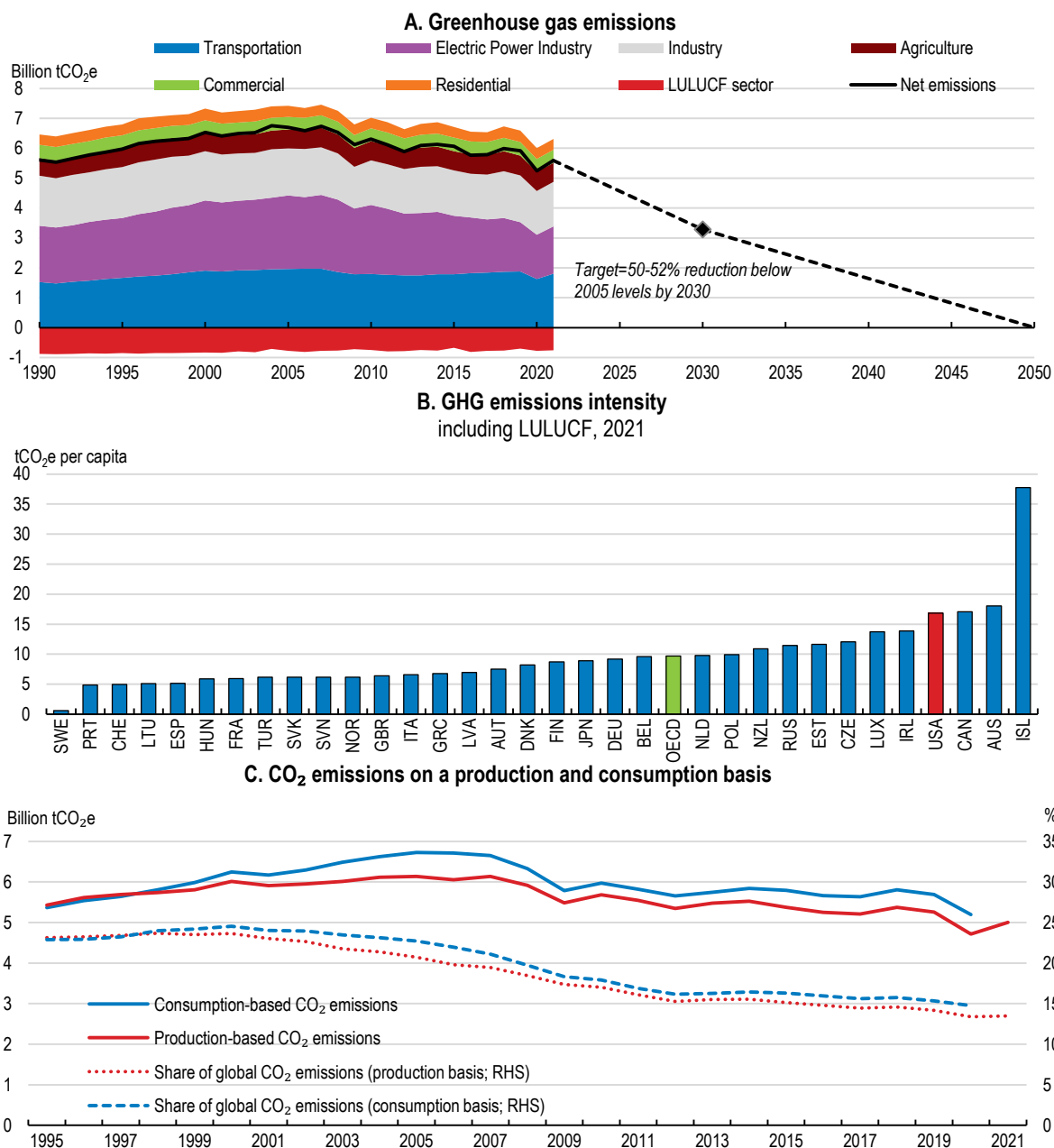
1.7. Progress to achieve the climate transition has accelerated

The administration has announced ambitious policy targets for decarbonising the economy as part of international efforts defined in the 2015 Paris Agreement. The Nationally Determined Contribution target is to reduce greenhouse gas emissions by 50-52% below 2005 levels by 2030 (Figure 1.34, Panel A). In addition, a goal of net zero greenhouse gas emissions by 2050 has been set. This is underpinned by specific sectoral targets, including 100% clean electricity by 2035 and half of all new light-duty cars sold in 2030 being zero emission vehicles. Nearly half the states also have their own emission reduction targets, but this is not the case in many emissions-intensive states (Box 1.6).

Progress has been made to reduce greenhouse gas emissions in recent decades, but they remain high. Total emissions declined by 15% between 2005 and 2022 (Figure 1.34, Panel A). Over three quarters of

this decline was attributable to a fall in emissions from the electric power sector as coal has gradually been replaced as an energy source (Environmental Protection Agency, 2024). Nonetheless, emissions per capita are the fourth highest in the OECD on a production basis (Figure 1.34, Panel B) and declines in emissions in sectors outside of energy have so far been limited. Achieving carbon reduction goals is critical for the global climate transition given that the United States currently accounts for 13% of global emissions on a production basis and closer to 15% on a consumption basis (Figure 1.34, Panel C).

Figure 1.34. An acceleration of the reduction in emissions will be needed to reach net zero by 2050



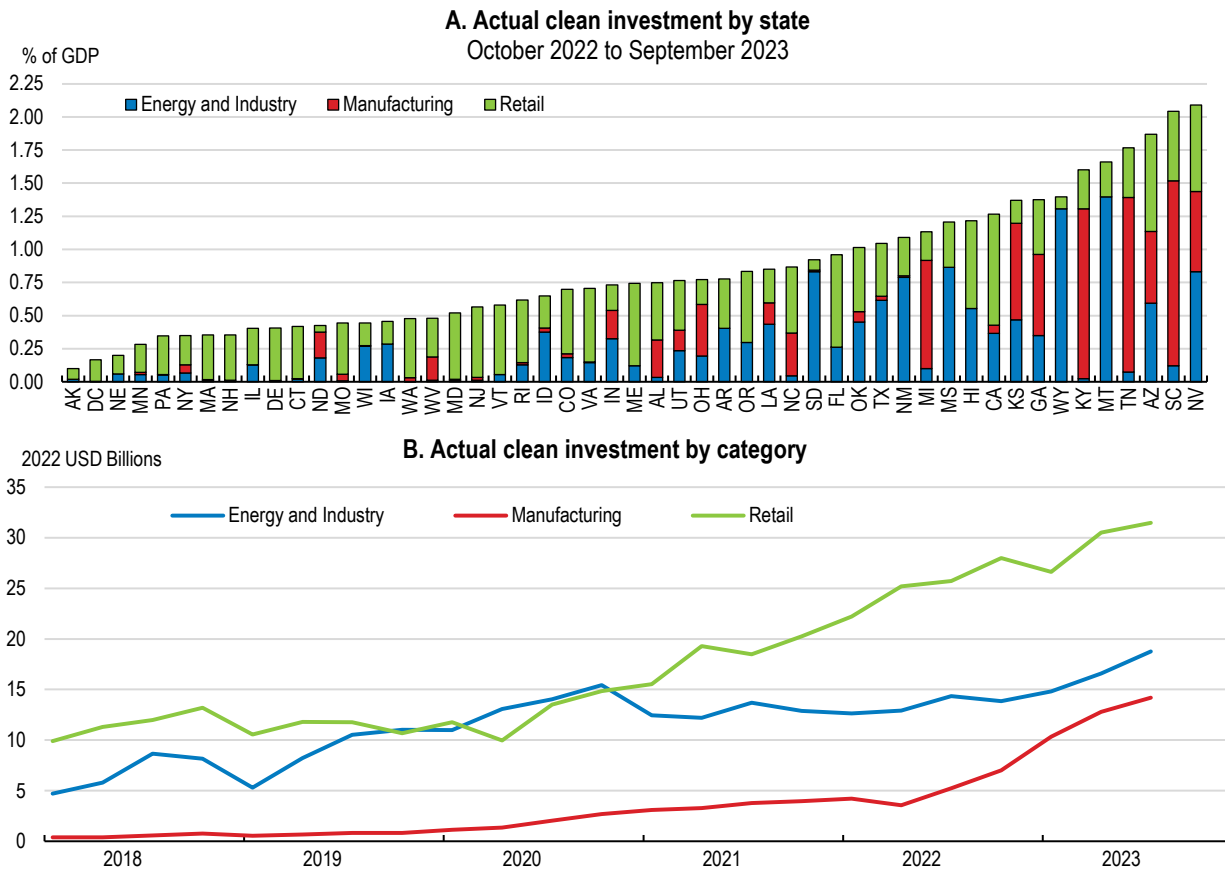
Notes: In Panel C, the share of CO₂ emissions is calculated on a production basis.

Source: OECD, Environment Statistics (Air and Climate) – GHG emissions database; Global Carbon Budget Database; OECD calculations.

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Clean energy investment has picked up sharply in recent years, but from a low level. Projects have been quite widely dispersed across states, but most noticeable in the South (e.g. South Carolina, Tennessee, Kentucky) and the West (e.g. Montana, Wyoming; Figure 1.35, Panel A). Installation of clean energy technologies by households and businesses (“retail” in Figure 1.35, Panel B) has been especially strong, driven by a fourfold increase in investment in zero-emission vehicles between 2019 and 2023. Clean manufacturing investment has also grown rapidly, due to investment in battery manufacturing rising from around USD2 billion per quarter in the first half of 2022 to over USD10 billion per quarter by the end of 2023. Clean energy and industry investment has also been rising, but at a slower pace (Figure 1.35, Panel B).

Figure 1.35. Clean investment has risen across states



Note: Data cover both private and public investment and those technologies eligible for tax incentives under the IRA. “Manufacturing” refers to investment in the manufacture of greenhouse gas reducing technology, “energy and industry” refers to the deployment of greenhouse gas reducing technology to produce clean energy or decarbonise industrial production and “retail” refers to the purchase and installation of that technology by individual households and businesses. All investment figures are deflated using the GDP deflator.

Source: Rhodium Group and Center for Energy and Environmental Policy Research at MIT.

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Box 1.6. State-level climate targets and greenhouse gas emissions

At the state level, climate targets are in place for 22 states and the District of Columbia (Table 1.5). Intermediate objectives by these states tend to be in keeping with the national level target and most of these states have an explicit policy to achieve net zero emissions by 2050. State level emission reduction policies have been established in these jurisdictions to achieve their objectives. Targets are established either through legislation or legally-binding action by state governors.

Table 1.5. State-level climate objectives

| | Target | Net zero emissions by 2050 or earlier objective? |
|-----------------------------|---|--|
| California | Reduce GHG emissions by 40% by 2030 compared with 1990 levels (Statutory target) and by 85% by 2045 compared to 1990 levels (Executive target). The state also has a target of reaching net zero carbon dioxide emissions by 2045 (Statutory target). | Yes |
| Colorado | Reduce GHG emissions 26% by 2025, 50% by 2030, 65% by 2035, 75% by 2040, 90% by 2045, and 100% by 2050, all compared to 2005 levels (Statutory target). | Yes |
| Connecticut | Reduce GHG emissions 45% below 2001 levels by 2030 and a zero-carbon electricity grid by 2040 (Statutory target). | No |
| Delaware | Reduce GHG emissions 50% below 2005 levels by 2030 (Statutory target). | Yes |
| District of Columbia | Reduce GHG emissions 60% below 2006 levels by 2030 (Statutory target). | Yes |
| Louisiana | Reduce net GHG emissions 26–28% by 2025 and 40–50% by 2030, compared to 2005 levels (Executive target). | Yes |
| Maine | Reduce GHG emissions 45% below 1990 levels by 2030 and 80% below 1990 levels by 2050. | Yes |
| Maryland | Reduce GHG emissions 60% below 2006 levels by 2031 (Statutory target). | Yes |
| Massachusetts | Reduce GHG emissions by at least 50% below 1990 levels by 2030, 50% below 1990 levels by 2030, 75% below 1990 levels by 2040 and 85% below 1990 levels by 2050 (Statutory target). | Yes |
| Michigan | Reduce GHG emissions by 28% below 2005 levels by 2025 and 52% by 2030 (Executive target). | Yes |
| Minnesota | Reduce GHG emissions 50% below 2005 levels by 2030 (Statutory target). | Yes |
| Nevada | Reduce GHG emissions 28% by 2025 and 45% by 2030, compared to 2005 levels (Statutory target). | Yes |
| New Jersey | Reduce GHG emissions by 50% below 2006 levels by 2030 and by 80% below 2006 levels by 2050 (Statutory target). | No |
| New Mexico | Reduce GHG emissions 45% below 2005 levels by 2030 (Executive target). | No |
| New York | Reduce GHG emissions 40% below 1990 levels by 2030 and no less than 85% below 1990 levels by 2050 (Statutory target). | Yes |
| North Carolina | Reduce GHG emissions 50% below 2005 levels by 2030 (Executive target). | Yes |
| Oregon | Reduce GHG emissions by 45% by 2035 and 80% by 2050, both compared to 1990 levels (Executive target). | Yes |
| Pennsylvania | Reduce GHG emissions 26% below 2005 levels by 2025 and 80% below 2005 levels by 2050 (Statutory target). | No |
| Rhode Island | Reduce GHG emissions 10% by 2020, 45% by 2030, 80% by 2040, all compared to 1990 levels. | Yes |
| Vermont | Reduce GHG emissions 26% below 2005 emissions by 2025, 40% below 1990 levels by 2030, and 80% below 1990 levels by 2050 (Statutory target). | Yes |
| Virginia | Achieve net zero GHG emissions across all sectors by 2045 (Statutory target). | Yes |
| Washington | Reduce GHG emissions by 45% by 2030, 70% by 2040 and 95% by 2050, all compared to 1990 levels (Statutory target). | Yes |

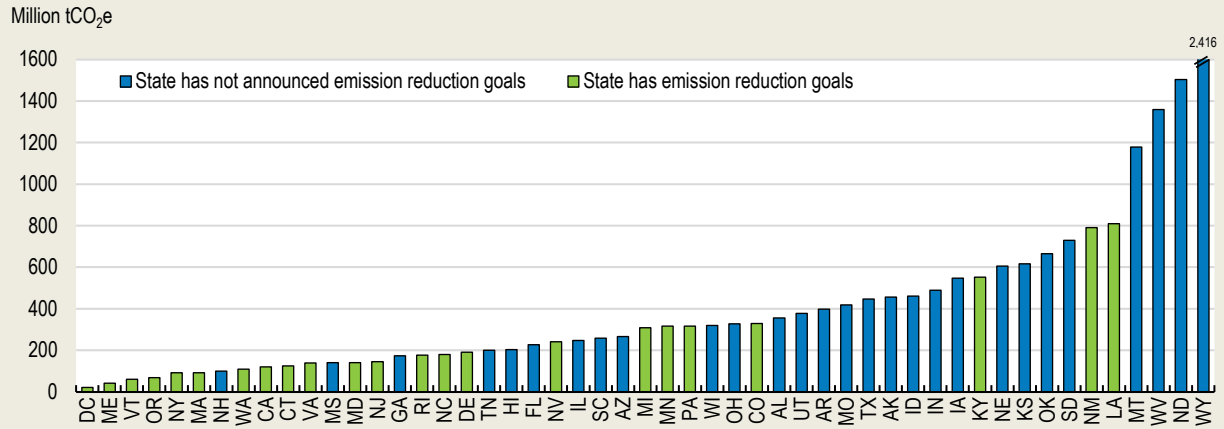
Source: Center for Climate and Energy Solutions.

There are substantial differences between states in emissions intensity. For example, emissions per

unit of state GDP in Wyoming are six times the average, owing to the state’s extraction and use of fossil fuels (Figure 1.36). Emissions intensity remains particularly high in those states that do not have carbon reduction targets. Differences in state-level emission reduction policies raise the potential for carbon leakage between jurisdictions, with economic activity moving to those with less stringent climate policies.

Figure 1.36. Many states with high emissions intensity do not have carbon reduction targets

Total greenhouse gas emissions per trillion of real state GDP



Source: United States Environmental Protection Agency; Bureau of Economic Analysis; Census Bureau; OECD calculations.

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1.7.1. Climate policy measures have accelerated and a substantial reduction in emissions is expected

Following many years of modest policy measures to address climate change, there has been a major acceleration in policy efforts in the United States. The IRA and Infrastructure Investment and Jobs Act contained substantial climate measures focused on decarbonising the energy and transport sectors (Table 1.6; OECD, 2023e). In addition, there are other sector-based decarbonisation policies.

Table 1.6. Major policies for reducing emissions

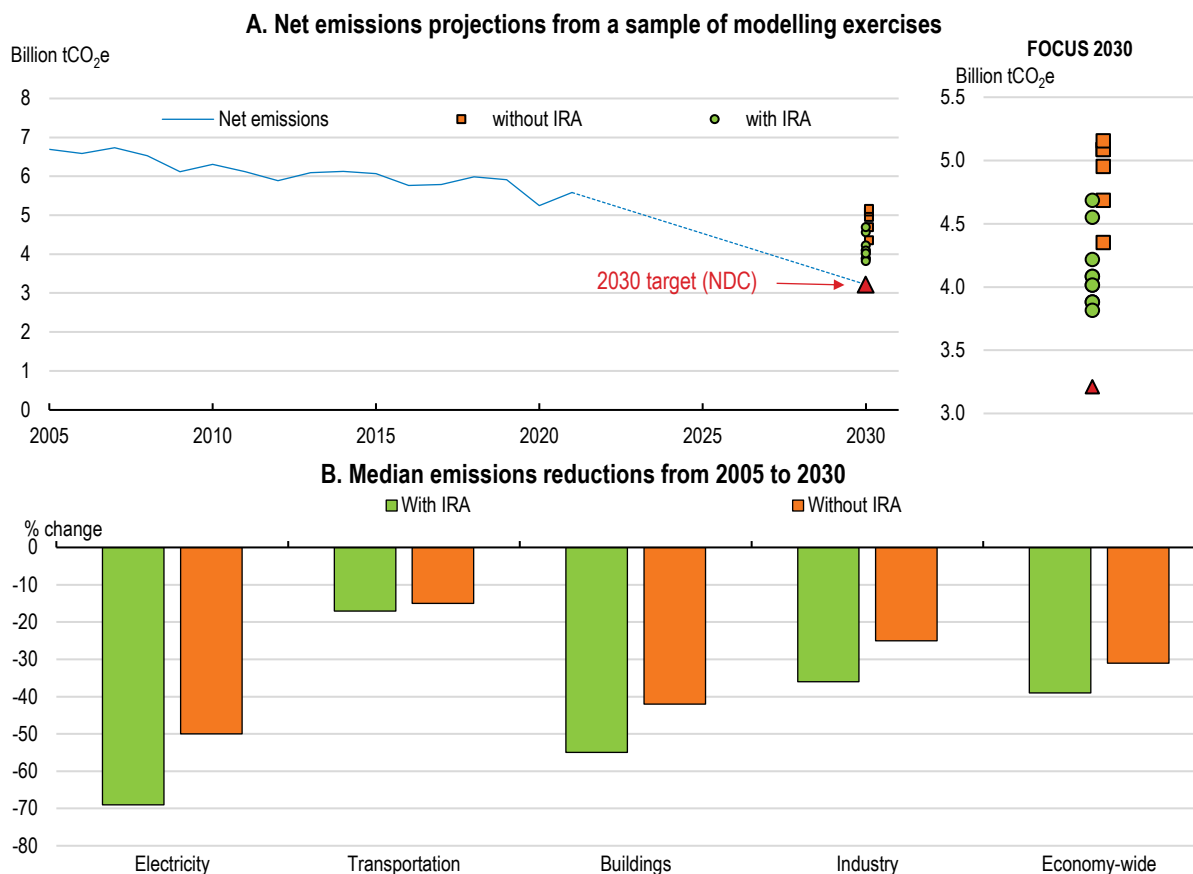
| | Sector share of total emissions (%) | Major policy initiative |
|--------------------------------------|--|---|
| Energy | 24.8 | Renewable Production and Clean Energy Production Tax Credit (IRA) |
| | | Renewable Investment and Clean Energy Investment Tax Credit (IRA) |
| | | Nuclear Production Tax Credit (IRA) |
| | | Public loans (IRA) |
| | | Electricity transmission and grid upgrades (Infrastructure Investment and Jobs Act) |
| | | Carbon pollution standards for coal and gas-fired power plants. |
| | | State-based carbon pricing systems* |
| | | Renewable energy standard or clean energy standard* |
| Transport | 28.9 | Clean Vehicle Credit, Used Clean Vehicle Credits, Commercial Clean Vehicle Credit (IRA) |
| | | Alternative Fuel Vehicle Refueling Property Tax Credit (IRA). |
| | | Transport infrastructure investment (Infrastructure Investment and Jobs Act) |
| | | Vehicle emission standards |
| | | Fuel economy standards |
| | | Emissions standards for airplanes |
| | | Renewable fuel standard |
| | | Low Carbon Fuel Standards* |
| Zero Emission Vehicle Programs* | | |
| Industry | 22.7 | Tax credit for carbon capture and storage |
| | | Research and Development |
| | | Methane Emissions Reduction Program (IRA) |
| Residential & commercial | 12.7 | Energy efficiency standards for household appliances |
| | | Energy Efficiency Home Improvement Credit (IRA) |
| | | Residential Clean Energy Credit (IRA) |
| | | New Energy Efficient Home Credit (IRA) |
| | | Energy Efficient Commercial Buildings Deduction (IRA) |
| | | Weatherization Assistance Programme** |
| | | Updating building energy codes (IRA)** |
| Energy Efficiency Resource Standards | | |
| Agriculture | 10 | Environmental Quality Incentives Program |
| | | Regional Conservation Partnership Program |
| | | USDA's Rural Energy for America Program |

Note: * denotes state-based policies and ** is for policies that are across both the federal and state governments. For details of each policy measure, see Appendix.

The policies currently in place will help markedly reduce greenhouse gas emissions in the period to 2030. Simulations suggest emissions will fall by 30-43% by 2030 under current policy settings (EPA, 2023b; Ramseur, 2023), depending on model design and assumptions regarding deployment constraints and technology costs. Given the reliance on tax credits in the IRA and that these are uncapped, the impact on emissions, as well as the cost, will depend on the take up of the credits. Modelling of emissions trajectories with and without IRA measures highlight the significant contribution of this legislation to planned mitigation (Figure 1.37, Panel A), notably in the electricity sector (Figure 1.37, Panel B). Recent regulations for vehicle emissions will contribute further to meeting the climate goals. Nonetheless, current policies are unlikely to be enough to meet the 2030 target or achieve net zero emissions by 2050. Scenario analysis suggests that this will be especially the case in an environment of lower-than-expected natural gas prices (EPA, 2023b). In addition to fully implementing current policies, further mitigation policies are thus likely to


be needed. Policy measures at the federal level will be key to meeting national targets and minimising carbon leakage across states with diverse climate policies (Box 1.6).

Figure 1.37. The IRA will lower emissions substantially, but additional measures will be needed to meet the 2030 target



Note: In Panel A, estimates are taken from a range of models by Princeton University, Department of Energy, Energy Innovation and Rhodium Group. In Panel B, the estimates are the median from scenarios from 10 multi-sector models and four electricity sector models. For the transportation, buildings and industry sector they show both direct and indirect (from electricity) emission reductions.

Source: Environmental Protection Agency (2023); Ramseur (2023).

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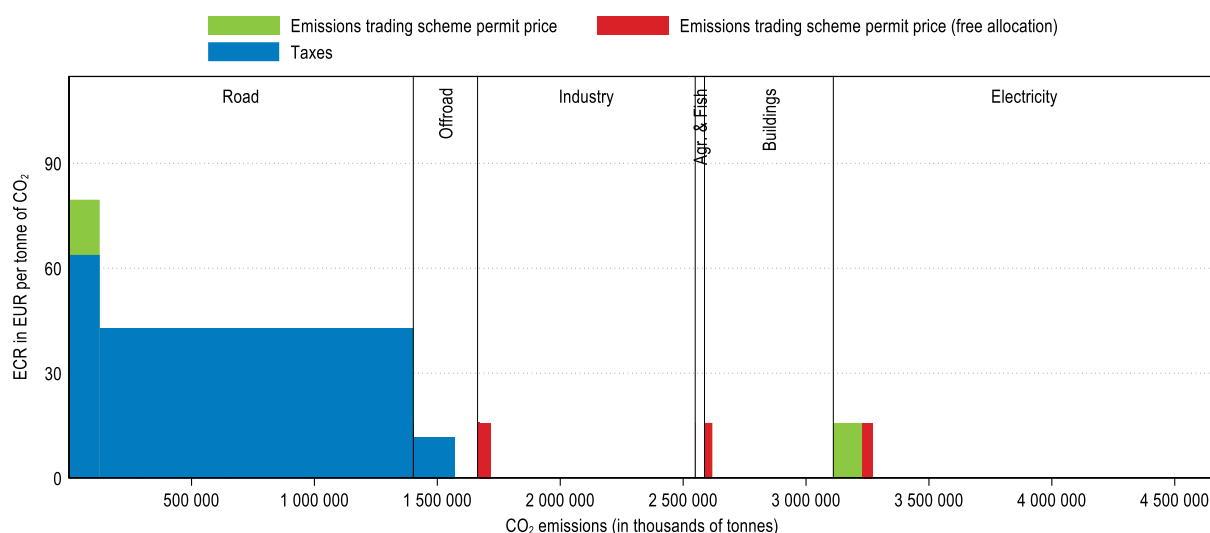
1.7.2. Greater use of carbon pricing would be an efficient approach to meeting emission reduction goals

The climate policy approach taken to date has focused heavily on subsidies combined with regulation at a sectoral level rather than carbon pricing (Table 1.6). A focus on subsidies has largely reflected political economy concerns and may make policy efforts more durable to changing political realities by creating constituencies that directly benefit through receiving subsidies. However, compared with capping emissions and allowing trading, the existing policy approach has a more uncertain impact on emission reductions, reflected in the wide range of estimates of the impact of current policies. Subsidies can boost overall demand for energy, in an environment where energy consumption per capita is high compared with other countries. It also does not incentivise marginal abatement costs to be equalised across different uses and may lead to high fiscal costs at a time when the US government budget deficit and debt are high (Chapter 2).

A greater reliance on carbon pricing could help achieve climate objectives in a less costly and more efficient way. There are already cap and trade systems in thirteen states, though the price per tonne of CO₂ is relatively low. The clearing price at a Regional Greenhouse Gas Initiative auction on 6 December 2023 was USD13.85 per tonne for CO₂ emissions allowances, compared to a carbon price of 60 euro per tonne in the EU ETS or the estimated social cost of carbon for the United States of USD120-340 per tonne (depending on the discount rate applied, Box 1.7). Only a small share of total emissions are priced overall (Figure 1.38).

Figure 1.38. Emissions pricing is limited outside the transport sector

Pricing of CO₂ emissions from energy use, by sector



Note: Pricing under subnational government emission trading schemes in the United States (e.g. the California cap and trade system) are included in the figure.

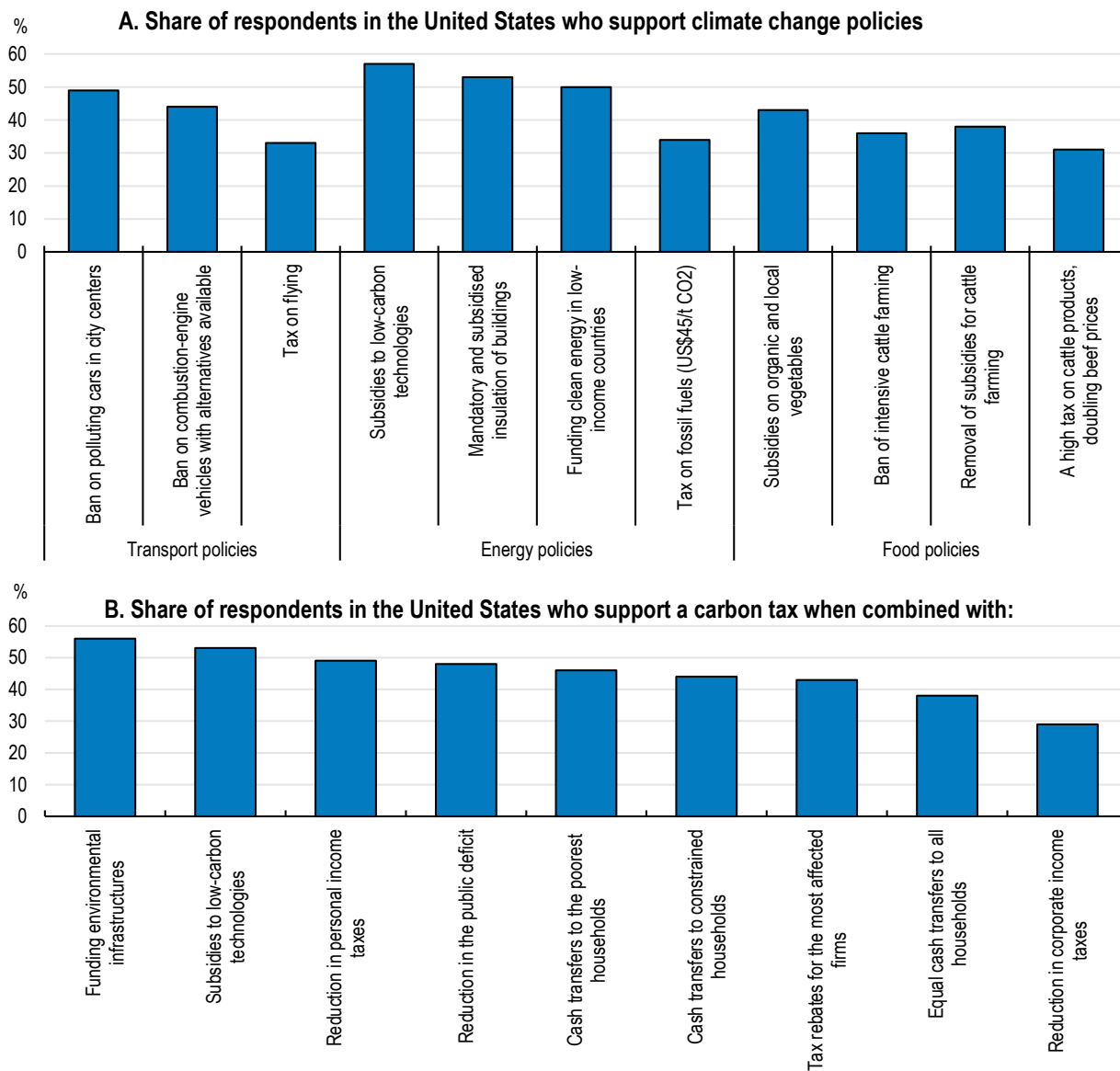
Source: OECD (2023), *Effective Carbon Rates 2023: Pricing Greenhouse Gas Emissions through Taxes and Emissions Trading*, OECD Series on Carbon Pricing and Energy Taxation, OECD Publishing, Paris, <https://doi.org/10.1787/b84d5b36-en>.

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Introducing a national cap and trade system would take time, with lower prices in an initial phase that gradually increase. Another approach would be to introduce a tax on emissions. Recent modelling has focused on a carbon fee that rises from USD15 per tonne of CO₂ to USD65 per tonne of CO₂ by 2035 with a carve out for retail gasoline sales, which are already subject to taxation at the federal level (Bistline et. al. 2024). A fee of this magnitude would be substantially below the recently estimated social cost of carbon. Estimates suggest that it would lower carbon emissions 45-47% below 2005 levels by 2030.

A broad-based carbon fee is appealing from an economic perspective as it would be a cost-effective means to achieving emission reductions (D’Arcangelo, et. al. 2022). It would also yield fiscal revenues during the transition and be helpful in providing clear and consistent signals to firms and households about choices and incentives that impact the climate. Nonetheless, uncompensated carbon pricing can be regressive because low-income households tend to spend a higher share of their income on electricity and their demand for it is inelastic (D’Arcangelo, et. al. 2022). A survey undertaken in 2021 highlighted a relative public preference for subsidies as a climate policy (Figure 1.39, Panel A), but most respondents were in favour of the introduction of a carbon tax if the revenues were used to fund environmental infrastructure or low carbon technologies (Figure 1.39, Panel B). A different survey undertaken in 2022 found carbon pricing was at least as popular in the United States as in most large European countries, though also found that it was less popular as a mitigation option than subsidies for low-carbon technologies (Dabla-Norris, et. al. 2023).

Figure 1.39. The public typically favour subsidies, but a carefully designed carbon tax would be acceptable



Source: Dechezlepretre, et. al. (2022)

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Box 1.7. Social cost of greenhouse gases estimates

In November 2023, the Environmental Protection Agency (EPA) released new estimates of the social cost of carbon (CO₂), social cost of methane (CH₄) and social cost of nitrous oxide (N₂O), collectively referred to as the “social cost of greenhouse gases”. These estimates are designed to be incorporated in cost-benefit analysis to inform government policies and reflect the societal net benefit of reducing greenhouse gas emissions by a metric tonne. They are presented with three sets of discount rates that reflect a range of near-term certainty-equivalent rates (Table 1.7). These estimates appear broadly in line with comparable figures from the EU. The EPA estimates can be revised and were lowered substantially during the previous administration through use of different assumptions.

Table 1.7. Estimates of the Social Cost of Greenhouse Gases, 2020 dollars

Estimates of the Social Cost of Greenhouse Gases, 2020-2080 (2020 dollars)

| Discount rate | Social cost of CO ₂ | | | Social cost of CH ₄ | | | Social cost of N ₂ O | | |
|---------------|--------------------------------|------|------|--------------------------------|-------|-------|---------------------------------|---------|---------|
| | 2.5% | 2.0% | 1.5% | 2.5% | 2.0% | 1.5% | 2.5% | 2.0% | 1.5% |
| 2020 | 120 | 190 | 340 | 1,300 | 1,600 | 2,300 | 35,000 | 54,000 | 87,000 |
| 2030 | 140 | 230 | 380 | 1,900 | 2,400 | 3,200 | 45,000 | 66,000 | 100,000 |
| 2040 | 170 | 270 | 430 | 2,700 | 3,300 | 4,200 | 55,000 | 79,000 | 120,000 |
| 2050 | 200 | 310 | 480 | 3,500 | 4,200 | 5,300 | 66,000 | 93,000 | 140,000 |
| 2060 | 230 | 350 | 530 | 4,300 | 5,100 | 6,300 | 76,000 | 110,000 | 150,000 |
| 2070 | 260 | 380 | 570 | 5,000 | 5,900 | 7,200 | 85,000 | 120,000 | 170,000 |
| 2080 | 280 | 410 | 600 | 5,800 | 6,800 | 8,200 | 95,000 | 130,000 | 180,000 |

Box Source: EPA, 2023c.

1.7.3. Further sectoral policy options exist for curbing carbon emissions

Effective decarbonisation should rely on non-price-based instruments, in addition to pricing measures (D’Arcangelo et al., 2022). Non-price-based policies at the sectoral level are especially important in areas where mitigation behaviour is less sensitive to price signals. In some instances, carbon pricing measures can interact with non-pricing measures to reinforce their efficacy in reducing emissions. For example, carbon pricing that makes internal combustion engine vehicles more expensive to operate can give an added boost to the take up of new public transport options. Progress in emission reduction across the energy, transport, industry, buildings and agriculture sectors has been uneven so far and there are a variety of sectoral reform options to achieve further mitigation.

Energy

Emissions from the energy sector fell by 35.9% between 2005 and 2022, at which time the sector accounted for around one quarter of US emissions. This has been aided by the gradual transition towards cleaner energy, though fossil fuels still account for around 80% of total energy supply. Current policies to achieve emission reductions in the energy sector are primarily federal government tax credits for renewable and clean energy production and investment, which were expanded as part of the IRA (Table 1.6), together with regulations. Based on initial cost estimates, these tax credits make up over one third of the value of IRA climate provisions (Bistline, et. al. 2023), though that proportion could be considerably larger given that the credits are uncapped (Committee for a Responsible Federal Budget, 2023). The tax credits can be taken as cash by tax exempt and governmental entities (i.e. “Direct Pay”)

and are transferrable to third parties for cash (important for entities with low tax bills). The tax credits subsidise the significant capital costs associated with renewable energy (D’Arcangelo, et. al. 2022) and help renewables maintain cost competitiveness with gas in an environment with limited carbon pricing.

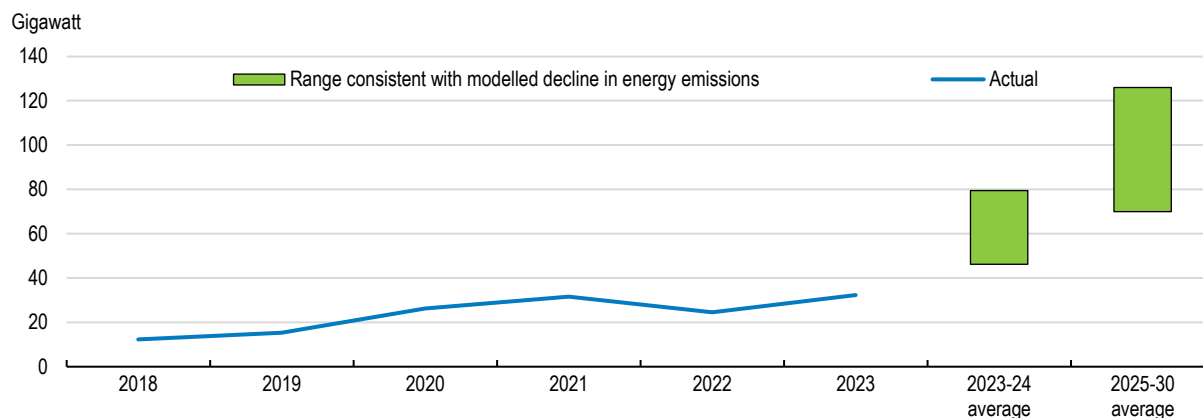
In addition, new carbon pollution standards for coal and gas-fired power plants have been finalised and public loans are available for new clean energy projects and the repurposing of existing fossil fuel infrastructure. There is also a nuclear production tax credit which, by encouraging greater nuclear generation capacity, will help support energy grids in accommodating the intermittency of renewable sources. At the state level, thirty states and the District of Columbia have either a renewable portfolio standard or a clean energy standard. These measures require a share of electricity generation to be from low carbon sources, with the proportion typically increasing over time and utilities able to comply with the standards through tradeable credits. As discussed, some states also have emission trading schemes in place for the electricity sector (Figure 1.38).

Modelling results suggest that the combination of federal and subnational government policies and private sector commitments puts the energy sector on an emission reduction trajectory consistent with achieving net zero emissions by 2050 (NASEM, 2023). However, the challenge will be connecting the required new electricity capacity: three modelling exercises suggest that annual capacity additions will need to rise from 32.3 GW in 2023 to be in the range of 60 to 127 GW in 2024 to remain on track (Energy Innovation, the REPEAT Project at Princeton University, and Rhodium Group; Figure 1.40). Further ahead, national transmission capacity must increase by two to five times by 2050 to connect often remotely located renewable sources to the grid (Larson et. al. 2021). However, average interconnection queue times, the time for a project requesting connection to the grid to begin commercial operations, have increased from less than two years for projects built in 2008 to five years for projects built in 2022 (Berkeley Lab, 2023).

The federal permitting system is a source of substantial delays to the connection of new electricity capacity. For completed transmission and renewable generation projects in 2022, the median time for an Environmental Impact Statement was 3.5 years (Sud, et. al. 2023). There were also significant delays in obtaining other permits, such as those from the Bureau of Land Management. The authorities have established initiatives to promote closer coordination between agencies undertaking environmental reviews for renewable energy projects, assistance for developers to provide early information so that permitting processes can be accelerated and stronger coordination between federal and subnational governments (The White House, 2022c). Such initiatives are important steps. To further promote the streamlining of permitting processes without undermining the review quality, the authorities should introduce time limits for permitting projects in pre-designated areas determined to have low environmental sensitivity. Faced with similar challenges, the European Union issued a directive in 2023 for member states to introduce permitting time limits for some renewable energy projects and simplified environmental assessments (Box 1.8).

Figure 1.40. Clean electricity capacity additions must rise rapidly

Annual clean electricity capacity additions underpinning models



Source: Clean Investment Monitor (2024).

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Box 1.8. EU directives to accelerate renewable energy projects

Lengthy administrative permit-granting procedures have been identified as a key barrier to investment in renewable energy projects and their related infrastructure in the European Union. In response, the European Union has issued several directives aiming to streamline permit-granting procedures. In December 2018, member states were directed to introduce rules on the maximum duration of the administrative part of the permit-granting procedure for renewable energy projects. In October 2023, a directive called on member states to undertake a coordinated mapping for the deployment of renewable energy and related infrastructure in coordination with local and regional authorities. As part of this, members were to designate specific land and sea or inland areas as renewables acceleration areas. In designating them, member states were warned avoid protected areas and consider restoration plans and appropriate mitigation measures.

Source: European Union (2018); European Union (2023).

Transport

Direct emissions from transport declined by 6.9% between 2005 and 2022, by which time the sector accounted for 29% of US emissions. Most sectoral emissions stem from passenger cars and light duty trucks. Existing emission reduction policies include consumer tax credits for the purchase of new or used clean vehicles. The credits are targeted by household income and car price thresholds and their design has been adjusted to allow them to be effectively refundable by allowing transferability to the vehicle dealer. However, the consumer tax credits are accompanied by stringent local content requirements. In response to concerns from major trading partners about these requirements, the United States Department of Treasury announced in December 2022 that electric vehicles leased by consumers can also qualify for up to USD7500 in commercial clean vehicle tax credits. The commercial clean vehicle tax credits do not have local content requirements, meaning foreign vehicles are more readily eligible. The share of leased electric vehicles rose from around 10% at the time of the Treasury announcement to above 30% in December 2023 (Cox Automotive, 2024). However, the commercial clean vehicle tax credit is weakly targeted compared with the consumer credit, as eligibility is not contingent on meeting the household income cap

and car price threshold. Investment in public transport has increased with USD90 billion allocated under the Infrastructure Investment and Jobs Act and battery charging networks are being bolstered through direct public spending and the availability of a tax credit for households and businesses installing charging capacity. Fuel excise taxes on gasoline and diesel at both the federal and state level are a means of pricing emissions in the transport sector and incentivise the shift towards low emission vehicles.

There has been a significant tightening in vehicle emission standards for light-duty, medium-duty and heavy-duty vehicles for the 2027-32 model years. These standards require a certain level of efficiency across the fleet of cars sold by a manufacturer and increase in stringency each year. The recent tightening in standards accords with a recommendation in the previous *OECD Economic Survey of the United States* (OECD, 2022b; Table 1.8). While the performance standards are technologically neutral, the Environmental Protection Agency estimates they will increase the penetration of battery electric vehicles in 2032 from 39% under a “no action” scenario to 67% (EPA, 2023a). New fuel economy standards have also been finalised. These will increase fuel economy (the distance vehicles must travel on a gallon of fuel) by 2% per year for passenger cars with model years 2027-31, 2% per year for light trucks with model years 2029-31 and 10% per year for heavy-duty pickup trucks and vans with model years 2030-32. At the state level, several states have Low Carbon Fuel Standards and there are Zero Emission Vehicle Programmes in 11 states accounting for around one third of the car fleet, which oblige automakers to sell a certain number of electric and fuel cell vehicles.

Table 1.8. Past OECD recommendations on achieving the climate transition

| Recommended in previous Survey | Action taken since October 2022 |
|--|--|
| Accelerate the tightening of fuel efficiency and tailpipe CO ₂ standards. | Vehicle emissions standards for light-duty, medium-duty and heavy-duty vehicles for the 2027-2032 model years have also been finalised. The proposed standards for light-duty vehicles reduce CO ₂ emissions per mile by 56% compared with the 2026 standards. New Corporate Average Fuel Economy standards have been proposed for model years 2027-2032. The proposed standards would increase fuel economy by 2% per year for passenger cars, 4% per year for light trucks and 10% per year for heavy-duty pickup trucks and vans. These new standards have been released for public comment and must be finalised by April 2025 |
| Make use of a broad range of climate mitigation policies to meet emission reduction targets, including regulation, public investment and carbon pricing. | |
| Develop a national climate strategy that explicitly takes into account emissions inequalities and the redistributive and regional effects of climate policies. | |
| Raise public expenditure on active labour market policies, with a focus on job placement and cost-effective retraining policies. | Five Workforce Hubs were established in May 2023, with the federal government partnering with state and local officials, employers, unions, community colleges, high schools, and other stakeholders to upskill the local workforce to meet the demand for labor driven by these investments. Four new Workforce Hubs were announced in April 2024. |
| Further expand existing weatherisation and retro-fitting programmes to cover middle-income households. | |
| Provide fiscal incentives for states to update their building energy codes. | |

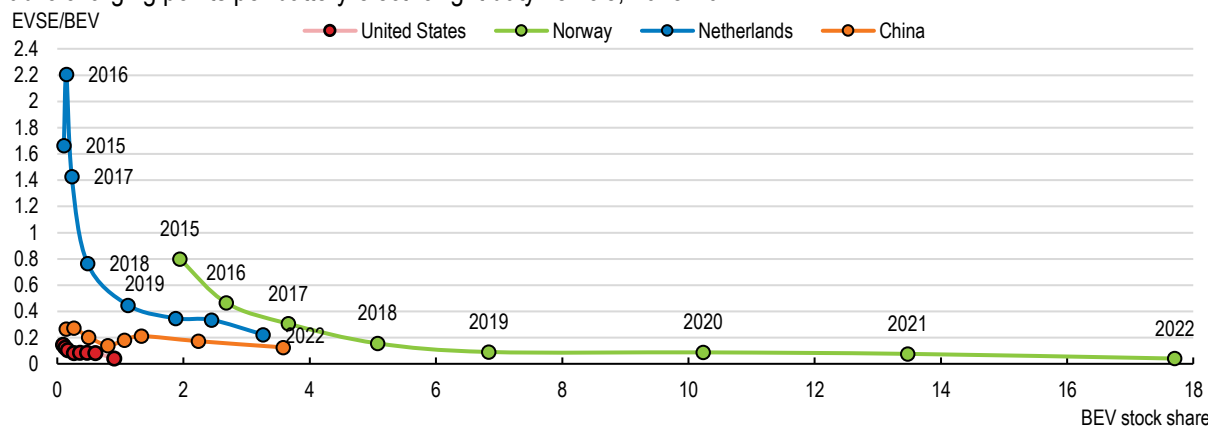
The pace of diffusion of low emission vehicles is in line with modelled pathways, though penetration varies greatly by region: while California had 232 electric vehicles registered per 10,000 population in 2022, North Dakota and Mississippi recorded just eight per 10,000 population. Modelling exercises suggest that current policies could be sufficient to achieve the administration’s target for electric vehicles to comprise 50% of all light duty cars sold in 2030 (Bistline et. al. 2023). However, the range of modelled outcomes is broad and will depend on consumer demand. The rapid rollout of electric vehicles will require good availability of charging infrastructure for potential buyers (Consumer Reports, 2022). Other countries with relatively high electric vehicle penetration had greater availability of charging infrastructure in the early stages of their

market than currently available in the United States (Figure 1.41). The number of public charging ports has grown rapidly, to around 183,000 according to the Joint Office of Energy and Transportation. However, there is estimated to be a need for at least 3 million public chargers by 2030 to facilitate the required electric vehicle fleet (NASEM, 2023). Charging infrastructure should benefit from the recent Federal Highway Administration announcement of new standards for federally funded electric vehicle chargers to ensure consistency, reliability and compatibility across the country (IEA, 2023).

Additional demand side policies that support the take up of low emission vehicles would help reduce transport emissions further. As discussed in Chapter 2, the federal excise tax on motor fuels has not increased since 1993. Motor fuel taxes in the United States are far below the norm in most other OECD countries. As well as raising fiscal revenue, increasing this levy would improve the relative attractiveness of low emission vehicles compared with those using motor fuels. Ongoing efforts should also be made to expand public engagement programmes that help consumers better recognise the cost savings of a low emissions vehicle over the vehicle lifetime.

Figure 1.41. Public charging points for electric vehicles are limited

Public charging points per battery-electric light duty vehicle, 2015-2022



Note: BEV stands for battery electric vehicle, EVSE stands for electric vehicle supply equipment. Charging points include only publicly available chargers, both fast and slow.

Source: IEA (2023), Global EV Outlook 2023, IEA, Paris <https://www.iea.org/reports/global-ev-outlook-2023>

StatLink  <https://stat.link/fdotxp>

Further investment in public transportation, including greening the fleet, would also help reduce transport emissions. However, a barrier to consumers adopting public transport is that it is only a realistic alternative to cars in compact urban areas with a high density of infrastructure services and shorter trip distances (OECD, 2022c). Urban sprawl in the United States is high compared with most OECD countries (OECD, 2018b) which may reflect the fact that most developable land is zoned exclusively for detached single-family housing. Modelling suggests that large-scale land use reforms that promote densification could reduce direct emissions from car use and associated upstream emissions by a collective 70 million tonnes per year (around 4% of total emissions from transport; Korn, et. al. 2024).

Industry

Emissions from the industrial sector declined by 9% between 2005 and 2022, at which point it accounted for just over 20% of overall carbon emissions. The sector represents a diverse range of products and processes with varying emissions intensity, with the manufacturing of cement, chemicals, iron and steel relatively carbon intensive. Recent policies to promote industrial decarbonisation have focused on supporting research and development in specific technologies, primarily hydrogen and carbon capture use and storage, which benefits from a tax credit established in 2008 that was increased and expanded in

2020. This is complemented by funding through the *Infrastructure Investment and Jobs Act* for 10 hydrogen hubs of producers, consumers and local connective infrastructure, reinforced by plans for a demand-side public support mechanism to provide greater market certainty (Department of Energy, 2023). In the petroleum and natural gas sector, pricing measures were introduced in the IRA in the form of methane emission charges for large emitters. The United States joined the Global Methane Pledge in October 2022, a voluntary commitment by 123 countries to collectively reduce global methane emissions across all sectors by at least 30% below 2020 levels by 2030.

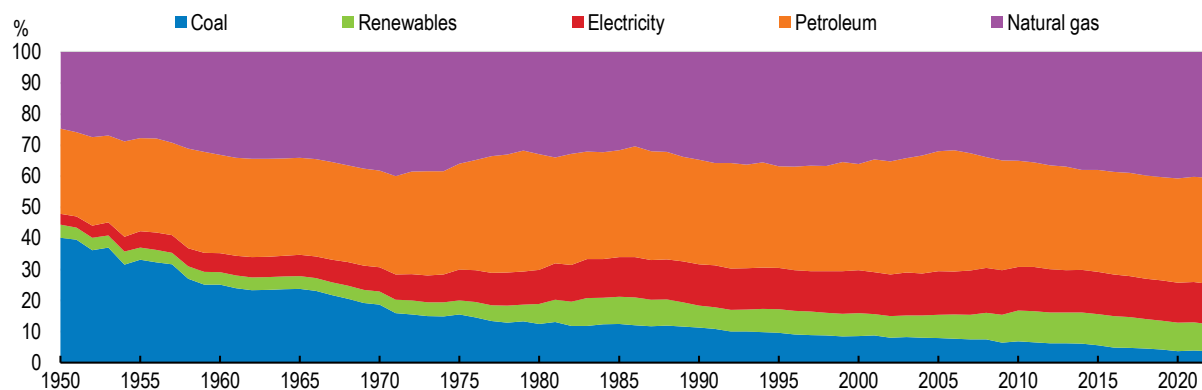
To decarbonise the industrial sector, the Department of Energy has identified four pillars to be pursued in parallel: 1) energy efficiency, 2) industrial electrification, 3) low-carbon fuels, feedstocks and energy sources, and 4) carbon capture, utilisation and storage. It has presented a path to achieving net zero emissions by 2050 in the sector with emissions falling by 29% between 2005 and 2030 (U.S. Department of Energy, 2022). However, modelling suggests that recent policy measures would only result in about half the needed abatement (NASEM, 2023). Around three-quarters of the cumulative direct industrial CO₂ emissions reductions are expected to come from the deployment of pre-commercial technologies or technology types for which some designs or components are not yet mature (IEA, 2020). Recent policy support for developing low carbon fuels, such as hydrogen and carbon capture and storage technologies, has been increased. However, R&D spending has accounted for a very low share of recent low-carbon technology support (OECD, 2023e). Given under-provision of R&D by private markets due to the public good properties of new knowledge, support for R&D investment for industrial decarbonisation is required, not least as knowledge spillovers from clean technologies can be particularly large (Dechezlepretre et. al. 2013). Such spillovers are likely to partially accrue to other OECD countries, benefitting the global climate transition.

The industrial sector has received more limited policy support for encouraging energy efficiency improvements in industry and industrial electrification, which could have a more near-term impact on reducing emissions than R&D spending (NASEM, 2023). In improving energy efficiency, some OECD countries such as Denmark, Finland, Ireland, Netherlands, Sweden and the United Kingdom have introduced long-term agreements under which companies commit to specified energy savings in return for tax incentives (Waide, 2016). However, these come with a fiscal cost. Given large differences in energy intensity within industrial subsectors in the United States, a tradeable performance standard for each industrial subsector could be introduced. This would be a flexible mechanism, that does not prescribe the method of improved energy efficiency, with the ability to buy and sell credits to incentivise innovation (Krupnick et. al., 2021).

The process of industrial electrification in the United States is occurring, but fossil fuels still accounted for 78% of energy used in 2022 (Figure 1.42). Efforts to demonstrate new electrification opportunities, such as industrial heat pumps, and building the workforce needed to support these technologies can support greater electrification. There may also be a need for government subsidies for fuel costs and the capital costs of fuel switching or carbon pricing to make electrification cost competitive with natural gas (NASEM, 2023). In the Netherlands, the combination of Sustainable Energy Transition Incentive Scheme subsidies and a carbon levy on industrial emissions has started to make electrification of industrial heat processes cost competitive (OECD, 2021b).

Figure 1.42. Fossil fuels still account for the majority of energy used in the industrial sector

Industrial sector energy use by source, % of total



Source: U.S. Energy Information Administration.

StatLink  <https://stat.link/iheagl>

Buildings

Direct emissions from residential and commercial buildings increased by 6.4% between 2005 and 2022, by which time they accounted for 12.5% of total greenhouse gas emissions. When electricity use from buildings is included, energy consumption in buildings contributes over 30% of total emissions. Emissions from buildings could be reduced by improvements in energy efficiency or substituting appliances using fossil fuels with those using electricity. Some tax credits for homeowners support improved energy efficiency in new and existing houses (e.g. Energy Efficient Home Improvement Credit), as well as the installation of residential clean energy (e.g. Residential Clean Energy Credit). Low-income households can obtain funding for home energy efficiency improvements through the Weatherization Assistance Programme, though the annual number of recipients is low. The IRA allocated funding for incentivising state and local governments to adopt the latest building energy codes.

Emissions are anticipated to fall in the period to 2030 under current policies, but not sufficiently fast to be consistent with a net zero pathway (Jenkins et. al. 2022). Implementing electric heating systems that are energy efficient is a fundamental step in decarbonising the sector. For example, heat pumps are three-to-five-times more efficient than natural gas boilers and many models also provide cooling (IEA, 2022). More generally, further efforts are needed to sharpen the incentives for decarbonising the existing building stock. States have building energy codes, but these are mostly applied only to new construction. Some regions in OECD countries apply these to the existing housing stock (OECD, 2022c), such as Emilia-Romagna (Italy) and Toronto (Canada). In such instances, the building energy code becomes applicable when building owners undertake renovations at a certain scale or when the building is rented or sold (OECD, 2022c).

Agriculture

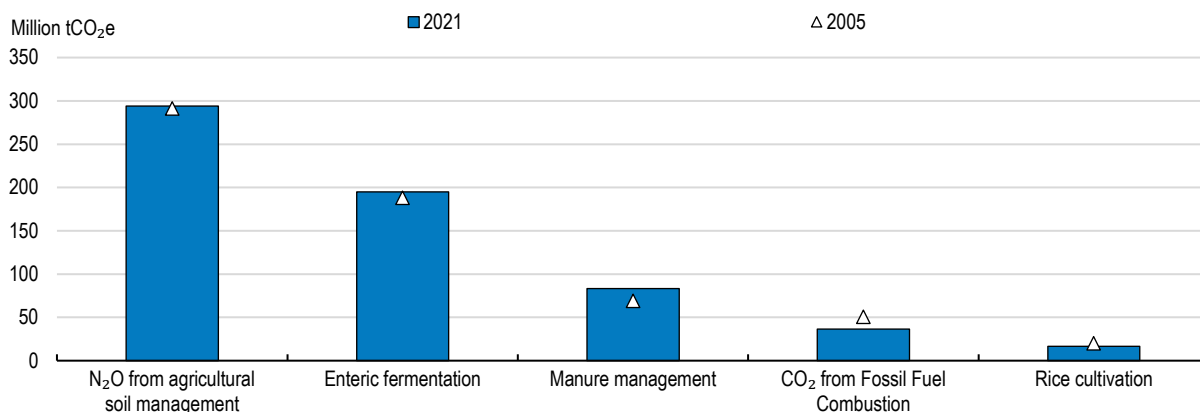
Emissions from the agriculture sector have been broadly flat, accounting for around 10% of total greenhouse gas emissions in 2022. Agricultural subsidy and extension services are the main policies currently used to support mitigation. These include the Environmental Quality Incentives Program, which provides funding for conservation practices such as cover crops, and the Regional Conservation Partnership Program, which provides technical and financial assistance to farmers for conservation. Overall, policy efforts to decarbonise the agricultural sector have so far been limited. The highest emitting agricultural activities are from soil management (primarily from fertiliser use) and enteric fermentation (a digestive process from ruminant livestock that produces methane; Figure 1.43). There is no agriculture-

specific emissions reduction target in the United States, unlike in other OECD countries such as most of the EU member states, Canada, New Zealand and the United Kingdom (OECD, 2022d). Such a target could be helpful to focus mitigation efforts, measure progress and send an important signal to the industry.

Reducing emissions in agriculture will require further investment in emissions-reducing technologies and their deployment. Greater research and development on sectoral emission reduction approaches would benefit domestic mitigation efforts. Public support for agricultural R&D and innovation is currently low compared with other OECD countries such as Canada, Australia and EU members (OECD, 2022d). It is challenging to tax emissions or establish emissions trading schemes in the agriculture sector, given the difficulty of measuring emissions that do not arise from fossil fuel use, such as methane emissions from livestock, but some countries such as Denmark have moved in this direction.

Figure 1.43. Emissions from agriculture come from different sources

Main components of United States greenhouse gas emissions from agriculture



Note: Nitrous oxide (N₂O).

Source: Environmental Protection Agency.

StatLink  <https://stat.link/a1ifpz>

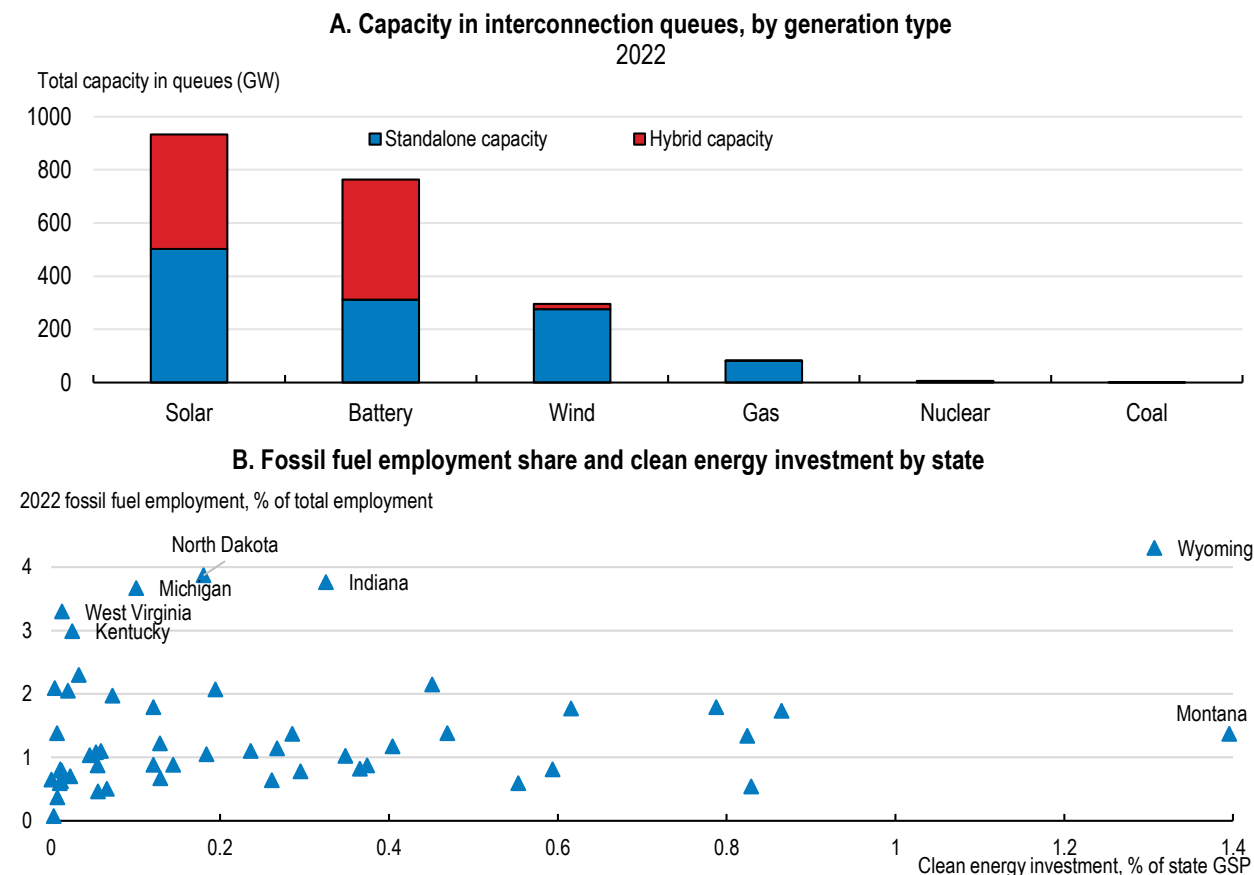
1.7.4. Policies can better ensure a Just Transition

The climate transition will reshape the United States energy industry and other sectors of the economy. Renewable energy projects comprised 96% of electricity capacity additions in interconnection queues at the end of 2022 (Figure 1.44, Panel A). There are substantial net medium-term benefits for employment in the United States from the climate transition (Shrestha et al. 2022; Foster et. al. 2023; Mayfield et. al. 2023), with anticipated new jobs in construction, manufacturing and service industries (Mahajan et al. 2022). However, new clean energy capacity will often not be in the same location as the previous fossil fuel industries (NASEM, 2023), despite efforts by the administration to design certain industrial policies to promote clean energy investment in energy communities (Box 1.4). Many states, such as West Virginia, Kentucky and Michigan that have a relatively high share of fossil fuel employment, have seen limited clean energy investment so far (Figure 1.44, Panel B).

Comprehensive and well targeted programmes to ease the transition for areas with a high concentration of fossil fuel jobs are needed. Studies of past labour market shocks in the United States show large lifetime earning losses for workers losing jobs and limited labour mobility to regions with better job prospects (Raimi, 2022). The individuals more prone to migrate during these episodes have been the younger and more educated (Hanson, 2023). This highlights the need for place-based policies to complement measures that reduce barriers to labour mobility. A key aspect is reskilling and up-skilling programmes for the local labour force (Botta, 2019; Causa, et. al. 2021). Spending on active labour market policies is low in the

United States compared to other OECD countries (OECD, 2022b) and should be scaled up for those negatively impacted by the climate transition. This could be coupled with extended unemployment insurance duration for workers from fossil fuel industries who enrol in skill development or higher education programmes, thereby giving them time to reskill and transition to a high-quality job. OECD countries including Germany (Ruhr region), Canada (Alberta) and the United Kingdom have introduced job-search and training schemes to assist workers from fossil fuel industries find green opportunities with equivalent skill needs (D’Arcangelo, et. al. 2022).

Figure 1.44. New generation capacity is overwhelmingly renewable



Note: In Panel A, “Hybrid capacity” are projects that collocate multiple different generation and/or storage types. In Panel B, clean energy investment is for the period 1 October 2021 to 30 September 2023.

Source: Rand, Joseph, Rose Strauss, Will Gorman, Joachim Seel, Julie Mulvaney Kemp, Seongeun Jeong, Dana Robson, and Ryan H. Wisser. “Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection As of the End of 2022.” (2023); and OECD calculations.

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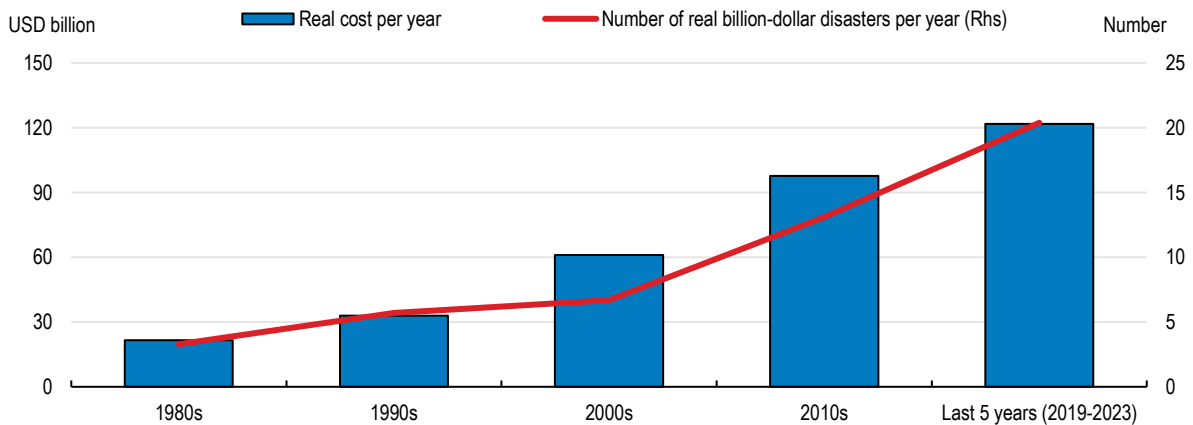
1.7.5. Efforts will be needed to adapt to climate risks

Climate change and higher climate variability increase the risks of climate hazards, affecting the frequency, intensity, extent and duration of extreme weather and climate events (Maes et. al., 2022). Compared to other OECD countries, the United States has particularly large exposure to the climate-related hazards of extreme temperatures, tropical cyclones and wildfires (Maes et. al., 2022). The frequency of disaster events has already rapidly risen. The average number of disaster events per year with losses exceeding USD1 billion (in real terms) doubled from the first decade of the 2000s to the 2019-2023 period (Figure 1.45). Such events are expected to occur with increasing frequency going forward, with the loss

burden disproportionately falling on lower-income and some marginalised groups. For instance, higher proportions of Native American, Hispanic and African American populations live in places prone to extreme wildfire, heat, floods, and permafrost thaw (USGCRP, 2023). Estimates suggest that the physical impacts of climate change have potential for long-lasting negative effects on economic growth and increasing economic inequality (Hsiang, et. al. 2017).


Figure 1.45. Costly disaster events have become more prevalent

Disaster events with losses exceeding USD1 billion, CPI adjusted



Note: Includes disasters related to drought, flooding, freezing, severe storm, tropical cyclones, wildfire and winter storms.

Source: National Centers for Environmental Information.

StatLink  <https://stat.link/ak98f0>

As in most OECD countries, the policy response to increased severe weather events has so far largely focused on emergency response and disaster recovery. The main source of support has been the Federal Emergency Management Agency Disaster Relief Fund, with spending from the fund having increased substantially since 2005 (CBO, 2022b). While allocating funds for such activities will remain important, the costs can be mitigated through well designed adaptation and risk prevention policies.

The Environmental Protection Agency published a Climate Adaptation Plan in 2014 which was updated in 2021, and each government agency is now mandated to develop its own climate resilience and adaptation plan. By the end of 2023, 23 federal agencies had such plans and 24 states either had a plan or were developing one. However, adaptation plans across jurisdictions are rarely coordinated (USGCRP, 2023). One factor that may help guide plans across agencies and states is the National Climate Resilience Framework, published by the administration in September 2023 (The White House, 2023d). While developing this framework and the various adaptation plans are important first steps, current policies are insufficient to both reduce current climate-related risks and keep pace with future changes in the climate (The White House, 2023d).

An array of different adaptation policy measures will be needed to mitigate physical climate risks. Recent OECD work has placed these into four different categories: economic instruments, regulations, information provision and direct provision of public goods (OECD, 2024e). These policies are often complementary and there are already examples of each type of policy being employed in certain contexts in the United States.

Economic instruments include financial incentives that reduce financial barriers for adopting climate resilient technologies given positive externalities from the investment. An example is the Colorado Wildfire Mitigation Deduction that provides owners tax credits for wildfire mitigation practices. Risk-based premiums in the insurance market can have a similar effect (OECD, 2023f). However, stringent regulation of insurance premiums in some states can be an impediment to such pricing. While designed to protect

consumers from high-cost insurance products, stringent regulations of insurance premiums can limit the ability for insurers to align premiums with expected losses in those areas with high climate risk. Some large insurers have now withdrawn from disaster-prone states such as California and Florida (Gall, 2023). In turn, this has reduced insurance availability, leaving some households and businesses more vulnerable to climate-related disasters. Consideration should be given to other ways to protect consumers against unaffordable insurance premiums without blunting pricing signals for climate risk, such as support for risk reduction and adaptation activities.

Regulations can be an effective adaptation approach when firms and individuals are unresponsive to price signals, when pricing policies may be politically difficult to implement or to overcome coordination failures (OECD, 2024e). A key regulatory measure can be land-use policies that restrict development in areas with elevated climate risk. For example, the absence of land-use regulations informed by wildfire risk assessments has been coupled with strong population growth in at-risk areas in the United States (Radeloff et. al., 2018). In Portugal, construction is forbidden in areas characterised by “high” and “very high” wildfire hazard (OECD, 2023f). Other examples of regulatory policies are building codes that set minimum requirements that increase the resilience of buildings to climate risk. The *Infrastructure Investment and Jobs Act* included grants to cities and states that undertake such measures.

Information provision is important in enhancing awareness of exposure to climate risk to inform decision-making. A Climate Risk and Resilience Portal has been developed through a public-private partnership that provides free, granular climate data, allowing the public to view mid-century and end-of-century climate projections at the county level. Further measures that promote climate-related disclosures by businesses are being introduced. In March 2024, the Securities and Exchange Commission adopted final rules requiring firms to include certain climate-related information in their registration statements and annual reports, in line with Financial Stability Board Taskforce for Climate-Related Disclosure recommendations. These should be complemented with further efforts to quantify the economic and physical risks from climate change. For instance, large areas of the United States have not yet been mapped for flood risk (The White House, 2023d). There is the potential that the proliferation of information on climate risks exacerbates inequalities if it leads to private underinvestment in communities vulnerable to climate risk, given these communities tend to be more socio-economically disadvantaged (EPA, 2021). Initiatives such as Justice40 - which targets 40% of the overall benefits of certain Federal climate, clean energy, affordable and sustainable housing and other investments flowing to disadvantaged communities - can be important to lean against these forces.

Direct public funding for specific adaptation measures will also be needed. This is especially the case where large positive externalities result in under provision by the private sector (OECD, 2024e). Climate-resilient infrastructure will often require some direct involvement from the government, though care should be taken not to crowd-out private investment. The *Infrastructure Investment and Jobs Act* included USD8.25 billion for wildfire management and various initiatives for coastal protection infrastructure, though further public support for such infrastructure will be needed as the physical impacts of climate change become more visible. There may also be a role for direct government support in overcoming the coverage protection gaps in insurance markets through establishing catastrophe risk insurance programs. An example is the Australian Cyclone Reinsurance Pool (Box 1.9). Nonetheless, any such interventions can come with material fiscal costs and would need to be preceded by a thorough assessment of protection gaps and potential financial vulnerabilities related to exposures to climate risks.

Box 1.9. Australian Cyclone Reinsurance Pool

The Australian government has established a reinsurance pool for cyclone and related flooding damage to improve the accessibility and affordability of insurance in cyclone-prone areas. The government-backed reinsurance is available for household, strata (unit), and small business property insurance policies and offers discounts for properties that have undertaken cyclone and flood mitigation activities. The cyclone pool operates Australia wide but targets support to cyclone-prone areas and provides reinsurance for insurers operating in those areas.

The reinsurance pool is backed by an annually reinstated AUD 10 billion government guarantee. If the guarantee is likely to be exceeded by a single cyclone event or series of cyclone events within a single year, the government will increase the guarantee to support the cyclone pool to meet all its obligations.

1.8. Policy recommendations from the Key Policy Insights

| MAIN FINDINGS | RECOMMENDATIONS (Key recommendations in bold) |
|---|---|
| Managing short-term macroeconomic imbalances | |
| Growth has been resilient but the general government deficit rose to 8% of GDP in 2023, while the debt ratio is at a historical high. | Steadily consolidate the public finances starting in fiscal year 2025, front-loading the adjustment to reflect cyclical conditions. |
| Inflationary pressures have eased, but services inflation remains higher than before the pandemic. | Reduce the Federal Funds Rate once there are clearer signs that inflation is durably moderating to meet the 2% target. |
| Bank balance sheets appear in good health overall, but there are some fragilities including large unrealised losses on debt securities on bank balance sheets. Dysfunction in the U.S. Treasury market required in 2019 and 2020 required emergency intervention from regulators. | Implement proposed regulations that would include unrealised capital gains and losses on “available-for-sale” securities in calculations of regulatory capital for large banking institutions. Implement proposed reforms to the US Treasury market that require greater transparency of market dealers and expand the scope of transactions passing through a central clearing house. |
| Supporting medium-term economic growth | |
| There has been an increase in the restrictiveness of trade and investment policy, partly due to national security concerns, and policies have sought to favour domestic production in some sectors. | Maintain and strengthen open trade and investment policies. Conduct economic assessments of the costs, benefits and international spillovers of any restrictive or distortionary trade and investment policy measures. |
| A structural decline in productivity growth from the early 1990s has been accompanied by indicators of declining competition. | Strengthen competition policies and antitrust enforcement in concentrated industries with high prices, such as telecommunications. Encourage data portability initiatives, including “open banking”, that reduce switching costs and better allow comparison between products. |
| The United States is the global leader in the development of artificial intelligence. | Further develop the regulatory framework related to artificial intelligence to promote competition and open markets for the technology. |
| Regulations related to political finance are less restrictive than in other OECD countries. | Strengthen regulatory standards on political finance. |
| A decline in standardised school test scores has been most pronounced for economically disadvantaged students. Enrolment rates in higher education have fallen. | Expand tailored measures to further accelerate the learning of disadvantaged students. Improve engagement of educational authorities with former students who stopped higher education without earning a credential. |
| Investment in specific industries, such as semiconductors, are anticipated to lead to significant shortages in engineers and computer scientists. Visa pathways are not always available due to caps on temporary and permanent visas. | Redesign temporary and permanent employment-based immigration visas to better align them with demand for professionals in priority fields. |
| Gains in the female labour force participation rate of working age women have largely stagnated over recent decades. Net formal childcare costs are high and the United States is the only OECD country without paid maternity leave at the national level. | Ensure all those eligible for childcare subsidies can access them and introduce a national paid parental leave entitlement. |

| MAIN FINDINGS | RECOMMENDATIONS (Key recommendations in bold) |
|--|--|
| Achieving the climate transition | |
| More ambitious climate policies introduced in recent years will reduce carbon emissions, but they rely heavily on subsidies and are unlikely to be enough to meet the 2030 emissions target. | <p>Implement existing carbon mitigation policies.</p> <p>Consider gradually introducing a broad-based carbon fee or pricing that increases over time, with revenues dedicated to clean investment projects and to compensating vulnerable groups.</p> |
| Additions to electricity capacity will need to rise rapidly in the short-term to facilitate increased electrification. The permitting system is a source of substantial delays to the connection of new electricity capacity. | <p>Introduce time limits for permitting in pre-designated areas determined to have low environmental sensitivity.</p> <p>Further improve interagency coordination and streamline permitting processes.</p> |
| While the climate transition can create jobs, workers in areas reliant on carbon-intensive jobs may be adversely affected. | <p>Continue to develop focused active labour market policies for fossil fuel industry workers losing their jobs.</p> |
| The availability of charging infrastructure is the main barrier for potential buyers of low emission vehicles. Urban sprawl is high, increasing transport emissions. | <p>Increase investment in public charging ports.</p> <p>Reduce the share of developable land zoned exclusively for detached single-family housing.</p> |
| R&D spending accounted for a very low share of recent public climate funding. There have also been limited policies encouraging electrification and energy efficiency improvements in industry. | <p>Increase the share of climate funding for R&D devoted to industrial decarbonisation.</p> |
| Direct emissions from residential and commercial buildings have risen since 2005 and current policies are not sufficient to decarbonise the sector. | <p>Further incentivise the installation of energy saving technologies in the new and existing housing stock.</p> |
| Agricultural emissions have increased since 2005 and there is no emission reduction target for the sector. Agricultural R&D is low compared with other OECD countries. | <p>Introduce an emission reduction target for the agricultural sector to focus mitigation efforts.</p> <p>Increase the share of R&D dedicated to decarbonisation technologies in the agricultural sector.</p> |
| Exposure to some climate-related hazards such as extreme temperatures, cyclones and wildfires are high compared to other OECD countries. However, current adaptation policies are insufficient to address current or future climate risks. | <p>Expand the use of economic instruments, regulations, information provision and direct public provision to facilitate adaptation to climate risks.</p> <p>Consider climate risk when developing land use policies.</p> <p>Ensure that market prices reflect climate risk, including in insurance markets.</p> <p>Further improve the availability of public information about climate risk, including by mapping the entire country for flood risk.</p> |

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Climate mitigation policies of US governments

| | Sector share of total emissions (%) | Major policy initiative | Initiative details | Federal (F) or State (S) government policy |
|-----------|-------------------------------------|---|--|--|
| Energy | 24.8 | Renewable Production and Clean Energy Production Tax Credit (IRA) | For the construction of facilities generating net zero GHG electricity from wind, biomass, geothermal, solar, landfill and trash, hydropower and marine renewable energy. The credit ranges from 0.3 cents/kWh to 1.5 cents/kWh, with the higher credit for eligible projects that satisfy certain prevailing wage and apprenticeship requirements. | F |
| | | Renewable Investment and Clean Energy Investment Tax Credit (IRA) | For investment in fuel cell, solar, geothermal, small wind, energy storage, biogas, microgrid controllers and combined heat and power properties. The credit is up to 30% of the qualified investment. | F |
| | | Nuclear Production Tax Credit (IRA) | Up to 1.5 cents/kWh for nuclear facilities producing electricity from 2024 through 2032. | F |
| | | Public loans (IRA) | Including USD40 billion for innovative clean energy projects including carbon capture, new renewable systems and nuclear and USD250 billion for the repurposing of existing fossil fuel infrastructure. | F |
| | | Electricity transmission and grid upgrades (Infrastructure Investment and Jobs Act) | Accelerating the deployment of new transmission lines to connect clean electricity (USD21.3 billion), clean energy demonstrations of innovative clean technologies (USD21.5 billion), funding for clean energy manufacturing facilities and domestic geological mapping of critical mineral potential (USD8.6 billion). | F |
| | | Carbon pollution standards for coal and gas-fired power plants. | A final rule for carbon pollution standards was announced in April 2024 for existing coal-fired and new natural gas-fired power plants that would ensure that all coal-fired plants that plan to run in the long-term and all new baseload gas-fired plants control 90 percent of their carbon pollution. | F |
| | | State-based carbon pricing systems | Thirteen states have active carbon-pricing programs for the energy sector in place: California, Washington and the eleven Northeast states that make up the Regional Greenhouse Gas Initiative (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Virginia). The clearing price at a Regional Greenhouse Gas Initiative auction on 6 December 2023 was USD13.85 per tonne for CO ₂ emissions allowances. | S |
| | | Renewable energy standard or clean energy standard. | Thirty states and the District of Columbia require electric utilities to deliver a certain amount of electricity from renewable or other clean electricity sources. | S |
| Transport | 28.9 | Clean Vehicle Credit, Used Clean Vehicle Credits, Commercial Clean Vehicle Credit (IRA) | The Clean Vehicle Credit (cost estimated at USD19 billion in the 2023-2027 financial year budget window) is a tax credit of up to \$7,500 for vehicles placed in service by end-2032. Full eligibility requires: Above a threshold proportion of an electric vehicle battery components to be manufactured or assembled in North America. Threshold percentages increase each year from 40% in 2023 to 80% in the years after 2026. At least a certain threshold proportion of its critical minerals to have been extracted or processed in the United States or in a country with which the United States has a free trade agreement. Threshold percentages increase each year from 50% in 2023 to 100% in the years after 2028. The vehicle is under a retail price cap of \$80,000 for vans, SUVs and pickup trucks and \$55,000 for other vehicles. | F |

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| | | <p>A gross vehicle weight rating of less than 14,000 pounds. A battery capacity of at least 7 kilowatt hours. All qualified vehicles must undergo final assembly in North America. Taxpayers' modified adjusted gross incomes for either the current or previous year must be at or below certain thresholds: \$300,000 for married couples, \$150,000 for single filers and \$225,000 for heads of household. The Used Clean Vehicle Credit (estimated cost of less than \$250 million over the financial year 2023-2027 budget window) is a tax credit equal to 30% of the used vehicle sale price, up to a maximum credit of \$4,000. Eligibility requires: The vehicle to be purchased for \$25,000 or less. A gross vehicle weight rating of less than 14,000 pounds. Battery capacity of at least 7 kilowatt hours. Taxpayers' modified adjusted gross incomes for either the current or previous year must be at or below certain thresholds: \$150,000 for married couples \$75,000 for single filers and \$112,500 for heads of household. The Credit for Qualified Commercial Clean Vehicles (cost estimated at USD15 billion in the 2023-2027 financial year budget window) allows businesses and tax-exempt organisations to receive a tax credit of up to \$40,000. For electric vehicles, the credit equals the lesser of the incremental cost of the vehicle or 30% of the vehicle's cost basis. The vehicle must satisfy other criteria related to gross vehicle weight rating, battery capacity and must be used for business purposes in the United States.</p> | |
| | Alternative Fuel Vehicle Refueling Property Tax Credit (IRA). | A tax credit for refueling and recharging property in a home or business equal to 6% of the cost with a maximum credit of \$100,000 for each single item of property. From 1 January 2023, qualifying property is limited to those in low-income communities or outside urban areas. | F |
| | Transport infrastructure investment (Infrastructure Investment and Jobs Act). | Investment in public transit (USD90 billion), electric vehicle charging network (USD7.5 billion) and battery supply chains (USD7 billion). | F |
| | Vehicle emission standards | In 2021, the Environmental Protection Agency finalised vehicle emission standards for passenger cars and light trucks for model year 2023-2026. The standards increase in stringency each year and are modelled to reduce CO ₂ emissions per mile across the industry fleet by a cumulative 28.3% over the period. Vehicle emissions standards for light-duty, medium-duty and heavy-duty vehicles for the 2027-2032 model years have also been finalised. The proposed standards for light-duty vehicles reduce CO ₂ emissions per mile by 56% compared with the 2026 standards. | F |
| | Fuel economy standards | Corporate Average Fuel Economy standards were finalised in June 2024. Under the standards, fuel economy will need to increase 2% per year for model years 2027-2031 for passenger cars, while light trucks will increase 2% per year for model years 2029-2031. Heavy-duty pickup truck and van fuel efficiency will increase 10% per year for model years 2030-2032 and 8% per year for model years 2033-2035. | F |
| | Emissions standards for airplanes | In 2020, EPA finalised emissions standards that apply to certain new commercial airplanes, including all large passenger jets. These standards match the international airplane carbon dioxide standards adopted by the International Civil Aviation Organization in 2017. | F |
| | Renewable fuel standard | The standard requires a certain volume of renewable fuel (e.g. biomass-based diesel, cellulosic biofuel, advanced biofuel) to replace or reduce the quantity of petroleum-based transportation fuel, heating oil or jet fuel. In mid-2023, the Environmental Protection Agency announced final renewable fuel standards for 2023, 2024 and 2025 with gradual increases in the volume of renewable fuel in each year. Measure allows for tradeable permits to be used for compliance purposes. | F |
| | Low Carbon Fuel | Sets annual carbon intensity benchmarks for transportation fuels that | S |

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|----------------------------|------|---|--|-----|
| | | Standards | decrease over time. California, Oregon and Washington currently have such standards. Measure allows for tradeable permits to be used for compliance purposes. | |
| | | Zero Emission Vehicle Programs | Requires automakers to sell a certain number of electric and fuel cell vehicles. Credit trading and other flexible compliance measures are often part of these programmes. Eleven states have ZEV programs: California, Colorado, Connecticut, Maine, Maryland, Massachusetts, New York, New Jersey, Oregon, Rhode Island, and Vermont. | S |
| Industry | 22.7 | Tax credit for carbon capture and storage | The tax credit was increased and the scope expanded as part of the Bipartisan Budget Act in February 2018. Department of Treasury estimated the cost of the tax credits to be USD2.3 billion over 2020-2029. | F |
| | | Research and Development | The Energy Act of 2020 increased funding for various relevant technologies, such as carbon capture use and storage, direct air capture, advanced nuclear reactors, and energy storage technologies. The Infrastructure Investment and Jobs Act allocated \$8 billion for 6-10 hydrogen hubs that create networks of hydrogen producers, consumers and local connective infrastructure and USD6.4 billion in funding for carbon capture use and storage. The IRA allocated USD5.8 billion in funding for the Advanced Industrial Facilities Deployment Program which supports demonstrations at scale of transformative low-carbon technologies directly involved in products in heavy industry. | F |
| | | Methane Emissions Reduction Program (IRA) | Aims to reduce methane emissions from the petroleum and natural gas sector through a waste emissions charge for methane. The charge applies to facilities that emit more than 25,000 metric tonnes of CO ₂ equivalent per year or that exceed statutorily specified waste emissions thresholds set by Congress. The charge starts at USD900 per metric tonne for 2024 reported methane emissions and USD1,500 per metric tonne for emissions years 2026 and later. | F |
| Residential and commercial | 12.7 | Energy efficiency standards for household appliances | Federal appliance standards across 60 use categories. The US Department of Energy is required to revisit the standards every six years. | F |
| | | Energy Efficiency Home Improvement Credit (IRA) | Households receive up to \$3,200 annually in tax credits to lower the cost of energy efficient upgrades, including the purchase of heat pumps, insulation, efficient doors and windows, electrical panel upgrades, and energy audits. CBO estimated cost of USD12.5bn for the 2022-2031 period. | F |
| | | Residential Clean Energy Credit (IRA) | A 30% tax credit to lower the installation cost of residential clean energy, including rooftop solar, wind, geothermal and battery storage. The credit falls to 22 percent by 2034. CBO estimated cost of USD22bn for the 2022-2031 period. | F |
| | | New Energy Efficient Home Credit (IRA) | Up to \$5,000 in tax credits for each new energy-efficient home and up to \$1,000 for each unit in a multi-family building. CBO estimated cost of USD2bn for the 2022-2031 period. | F |
| | | Energy Efficient Commercial Buildings Deduction (IRA) | A tax deduction for new or retrofitted energy efficient commercial building property with a USD0.50-\$1 base tax deduction per square foot, increasing to up to USD5 per square foot if wage and apprenticeship requirements are met. | |
| | | Weatherization Assistance Programme | Federal government allocates funds to state and local governments which then use them to pay for home improvements for roughly 35,000 low-income homeowners (programme budget was USD1.6bn in 2021). Households with elderly or disabled residents or children are prioritised. | F/S |
| | | Updating building energy codes (IRA) | Most states have statewide building energy codes for residential and commercial buildings. The IRA includes USD1 billion in grants to state and local governments to adopt the latest building energy codes and to implement more stringent zero-energy codes for buildings with net zero energy consumption. | F/S |
| | | Energy Efficiency Resource Standards | More than half of US state have mandatory or voluntary Energy Efficiency Resource Standards. These require electric or natural gas utilities to achieve an energy savings targets (typically a percentage of | S |

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| | | | sales). | |
| Agriculture | | Environmental Quality Incentives Program | Provides technical and financial assistance to producers to deliver environmental benefits, such as improving soil carbon and sequestering carbon dioxide. Funding of approximately USD2.8bn per year. | F |
| | | Regional Conservation Partnership Program | Supports partner-driven conservation projects that help agricultural producers and nonindustrial private forestland owners improve soil carbon, sequester carbon dioxide, or otherwise reduce emissions. Funding of approximately USD1.3bn per year. | F |
| | | USDA's Rural Energy for America Program | Provides grants and loan guarantees to help farmers implement renewable energy systems and energy efficiency improvements. Funding of approximately USD100 million per year. | F |

2

Managing fiscal pressures in the United States

Jesse Bricker

Fiscal pressures are rising in the United States from past debt accumulation, a large deficit, future demographic changes, and a changing interest rate environment. The necessary fiscal responses to past economic crises have provided relief to families and businesses and contributed to the current strong economic growth. But the accumulated fiscal response has led to the highest debt to GDP ratio in generations, and these pressures are now being compounded with future social needs. A more prudent path for United States public finances will involve better aligning revenues and expenditures. A multi-year fiscal adjustment that includes spending adjustments, notably achieving savings on pensions and healthcare, and increases in taxation, particularly on capital incomes, should begin in the near term to narrow the deficit and put debt on a more prudent path.

The United States is facing mounting fiscal pressures with rising debt, a large deficit, and increasing ageing and health costs, as well as from climate and defence needs. The ratio of general government gross debt to GDP, at around 120% in 2023, is the highest since World War II, having risen sharply during the Global Financial Crisis and the Covid pandemic, and is among the highest in the OECD. The general government budget deficits are large, amounting to nearly 8% of GDP in 2023.

Under current tax and spending settings, the United States' debt ratio is expected to increase by a further 30 to 50 percentage points of GDP within the next 20 years due to a growing mismatch between spending on the provision of public services, social insurance and productive investments in infrastructure, and a past narrowing of the tax base through discretionary tax cuts. Further increases in debt would make the United States economy more vulnerable to the risks associated with any future economic shocks by constraining its ability to conduct economic stabilisation in future downturns. High debt could undermine the sustainability of current spending programmes, including healthcare and social security.

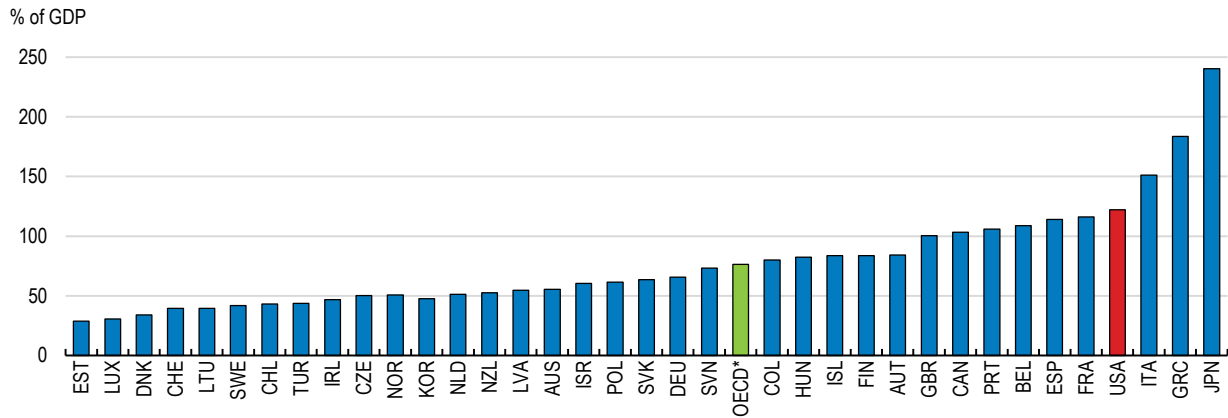
The United States public finances need to be put on a more prudent path by better aligning expenditures and revenues. A multi-year fiscal adjustment that includes spending adjustments, notably achieving savings on pensions and healthcare, and increases in taxation, particularly on capital incomes, should begin this year to narrow the deficit and put debt on a more prudent path. A more robust and less complicated federal budgeting process would help to achieve these outcomes.

2.1. Fiscal pressures in the United States reflect past emergency spending and a mismatch between spending and revenue

Government debt and the deficit as a share of GDP in the United States are among the highest in the OECD (Figure 2.1). General gross government debt currently stands near 120% of GDP and federal debt held by the public at nearly 100% of GDP, the highest levels since the post-World War II period (Figure 2.1; CBO 2024). The debt ratio has increased rapidly in recent decades, doubling between 2003 and 2023, despite generally favourable debt dynamics (Figure 2.2). Most of this recent increase is due to the exceptional measures during the Global Financial Crisis and the Covid pandemic with the debt ratio increasing by about 30 percentage points from 2007-2010 and by about 15 percentage points from 2019-2023. The size of the United States discretionary fiscal response to recent crises was larger than in some other countries and growth exiting the pandemic was also stronger. This Survey focuses on gross general government debt, as it is the most comparable across OECD countries and is defined using national accounting standards. It is somewhat larger than the federal debt held by the public given the liabilities of states and other government entities, although it has followed a similar path (CBO, 2024). Net debt—the ratio of debt to GDP, net of financial assets—is lower but shows a similar pattern of increase (Figure 2.2). Rising debt and large deficits have essentially occurred at the federal level as most state governments have strict borrowing restrictions, although some of the federal deficit funding is directed toward states and localities (Brochado, Dougherty and de Biase, 2024). The debt ratio remains higher relative to the pre-pandemic years, while other OECD countries have, on average, returned to their pre-pandemic levels (Figure 2.2), although this partly reflects higher inflation elsewhere.

Figure 2.1. The government debt to GDP ratio is high compared with other OECD countries

2023 or latest year available

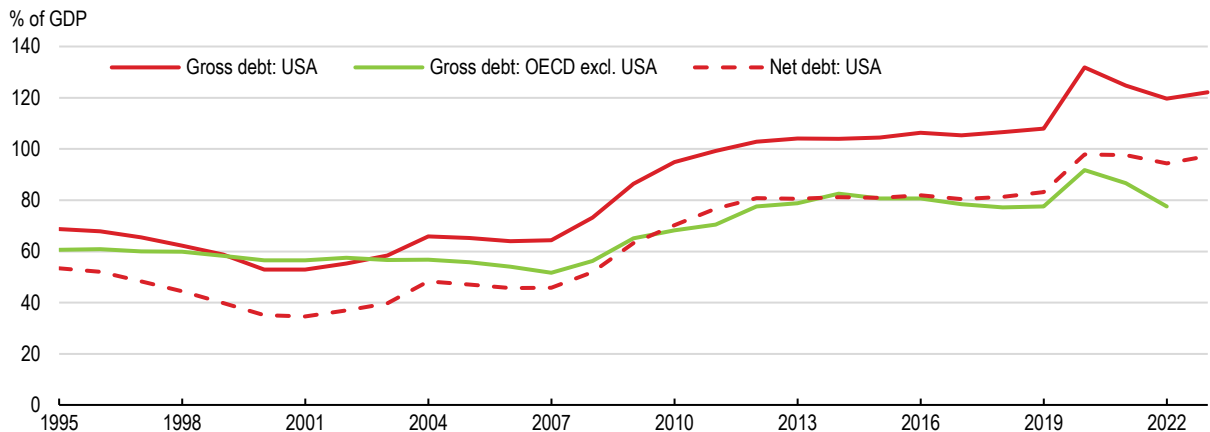


Note: Gross general government debt as a share of GDP, 2023 using GGFLQ. OECD* is all OECD countries excluding the United States. Gross general government debt encompasses both federal and sub-federal (state and local) debt to allow cross-country comparisons.

Source: OECD Analytical Database

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Figure 2.2. The government debt ratio has nearly doubled since 2007



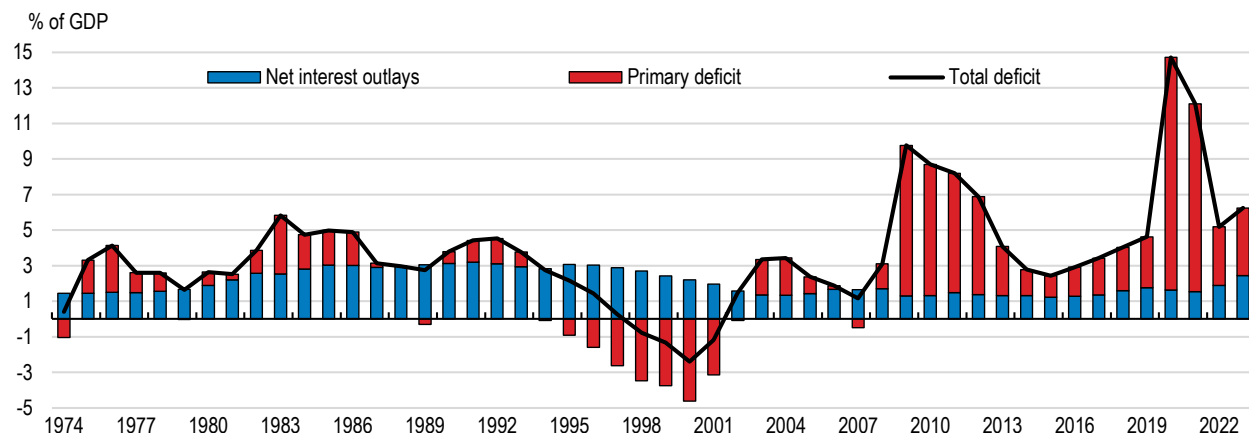
Note: Gross general government debt to GDP encompasses both federal and sub-federal (state and local) debt to allow cross-country comparisons. Net debt is defined as the gross debt minus the value of government assets.

Source: OECD Analytical Database.

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However, large deficits have been a persistent feature of the US economy over recent decades, even during periods of sustained economic expansion. From 2013 to 2019, the general government deficit averaged around 5½ percent of GDP, even as the economy expanded at an average annual rate of close to 3½ percent of GDP (Figure 2.4). At the federal level, in the past 20 years, the United States government has only had one year with a primary balance surplus, although there was a period in the 1990s when primary surpluses were the norm (Figure 2.3). Despite large headline and primary deficits, the debt ratio was broadly flat during the immediate pre-pandemic years due to interest rates on government debt being far below the nominal growth rate of the economy.

Figure 2.3. The US federal government has run a primary deficit during most of the past two decades

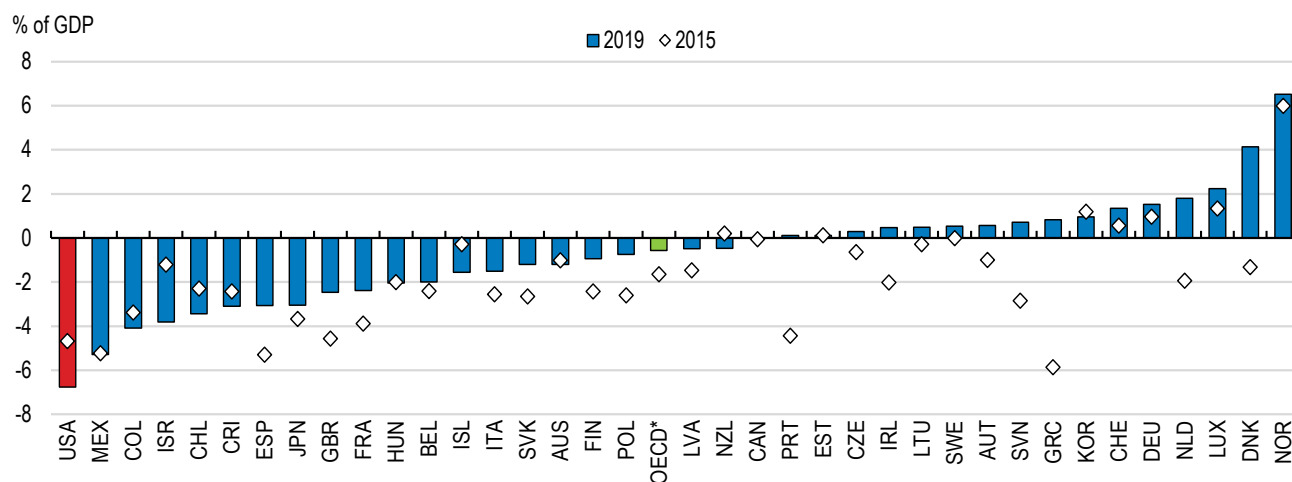


Note: Budget deficits for the United States federal government only.
Source: CBO (2024).

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Figure 2.4. General government deficits were relatively large compared to other countries even during the pre-pandemic economic expansion

General government fiscal balance



Note: OECD* is all OECD countries excluding the United States. This figure shows the net lending as a share of GDP using NLGQ. General government debt includes both federal and sub-federal (state and local) government debt, which best allows cross-country comparisons.
Source: OECD Analytical Database.

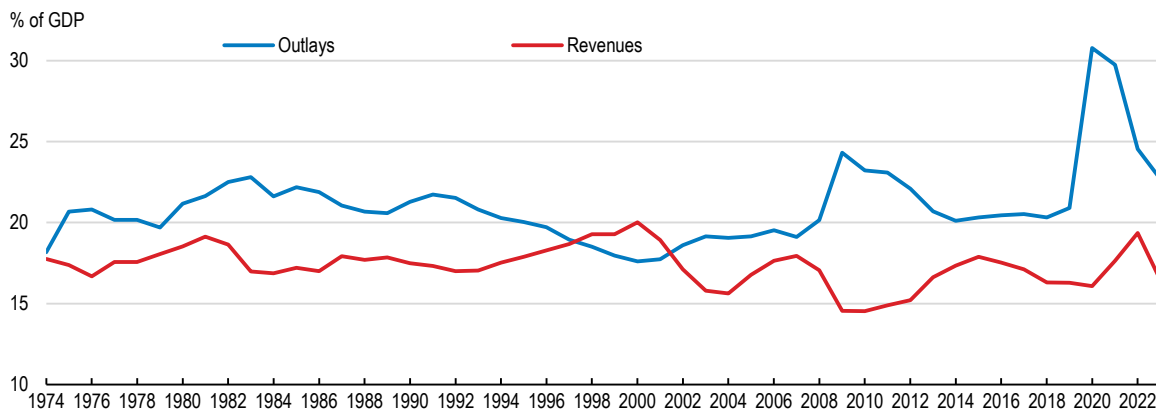
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2.1.1. There has been a growing mismatch between spending and revenue

Large and persistent deficits at the federal level reflect a growing mismatch between revenues and spending in recent decades (Figure 2.5). Federal spending as a share of GDP declined during the late 1990s as defence spending and interest payments eased, while the 1990 Budget Enforcement Act added Congressional rules designed to limit new spending and discretionary tax cuts. Since 2000, federal spending relative to GDP has been on a trend increase with increases mostly due to rising health and pensions expenditure. Moreover, spending rose strongly around the Global Financial Crisis and the

pandemic, while interest costs are now rising. Federal revenues as a share of GDP are lower than prior to 2000 with overall revenues as share of GDP amongst the lowest in the OECD. The trend decline in federal revenues primarily reflects a series of discretionary tax cutting packages instituted since 2000, which impacted personal income taxes, the estate tax and the statutory corporate tax rate (Gale and Orzag, 2004; Gale, 2019).

Figure 2.5. Federal revenues as a share of GDP have declined in recent decades, while spending has risen



Note: This figure shows total federal outlays (blue) and revenues (red) as a share of GDP, 1974-2023.

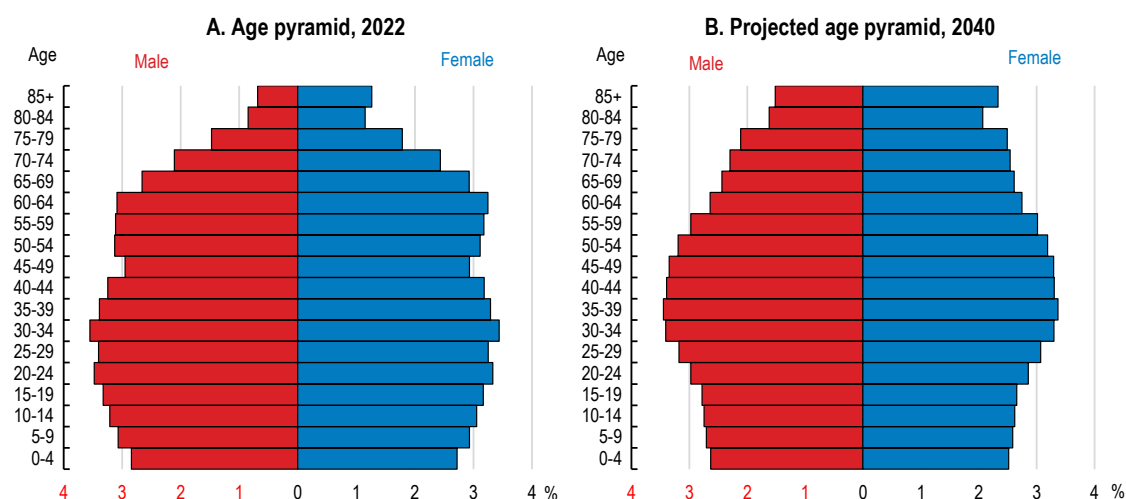
Source: CBO, 2024.

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2.1.2. There are significant pressures for higher future public spending

The primary services that the government provides, such as Social Security pensions, medical care, and national defence, create pressures to raise overall spending in the future. Ageing of the population, geopolitical tensions, climate change and higher real interest rates will require higher federal spending in the future if existing programmes are maintained. Under mandatory spending programmes, spending will increase as a share of GDP in line with the number of recipients. The number of people aged over 65 is expected to increase by 32% by 2040 as a relatively large cohort of people in their 60s—the “baby boom” generation—ages and lives longer in retirement, although the age pyramid in the United States is more balanced than in many other OECD countries (Figure 2.6).

Figure 2.6. The population is ageing as people living longer and bigger cohorts enter retirement



Source: U.S. Census Bureau.

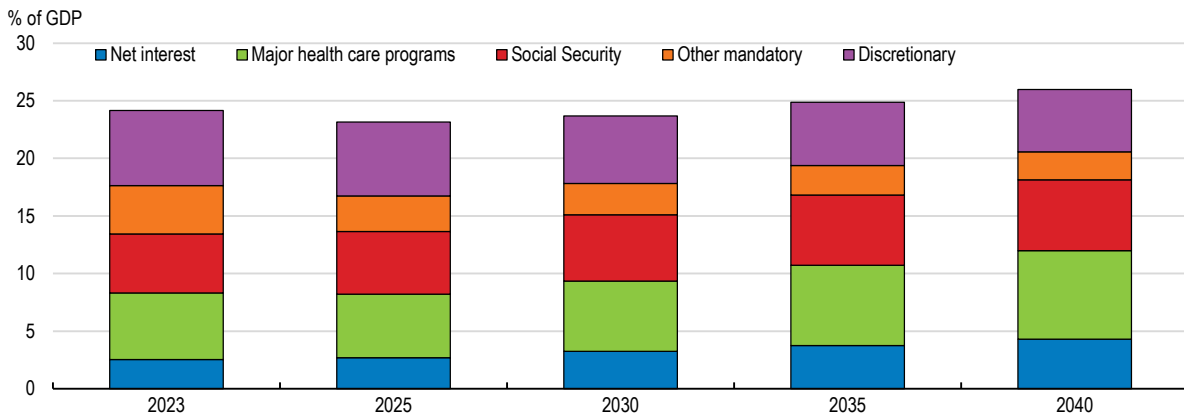
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Social Security is expected to add 1 percentage point of GDP to spending from 2023 to 2040 (Figure 2.7). The dependency ratio - the ratio of the population aged 65 or older to those ages 20-64 - is expected to increase from 0.30 to 0.38 over this period. Population ageing is already underway in the United States and half of the expected increase in the dependency ratio from 2010-2040 has already occurred. An increase in the 1980s in the payroll tax that funds Social Security allowed the program to receive more in contributions over the past 30 years than it has paid out, with the balance being accumulated as trust fund reserve assets to the system (Box 2.9). These trust funds are now being drawn down to help pay for baby boom cohort benefits and are expected to last through 2035. After that point, incoming payroll tax contributions will cover only 75-80% of expected benefit outlays: new income sources, benefit cuts or a combination of the two would be needed to ensure full Social Security benefit payments (Congressional Research Service, 2023).

Health costs for government health programs are expected to increase as a share of GDP by 1.8 percentage points by 2040 (CBO 2024). Most of the expected increase in health costs as a share of GDP arises not from ageing, but from health cost increases that are anticipated to exceed the rate of economic growth (CBO 2023d). While there is uncertainty about these cost increases, further pressures could arise from slow productivity growth in the health sector via Baumol effects and from rising incomes serving to increase the demand for health services. The United States health care sector has the highest per capita health costs in the OECD, owing primarily to higher prices paid for medical goods and services. Despite high spending, the United States has below average life expectancy (OECD 2023) and lower insurance coverage than elsewhere, although this has improved over the past decade. Cost pressures arise from provider consolidations and prices for prescription drugs that often exceed double the prices paid in other OECD countries. However, the existing high costs also leave space for well-designed policies to help bring down costs. In recent years, federal health spending per capita has increased at a slower pace than forecast and at a slower pace than the private market due in part to improvements in medical treatments and policies, which could help limit future spending (Cutler et al 2019; CBO 2022).


Figure 2.7. Health care, ageing, interest payments account for most of the forecast increase in federal spending

Forecasted disaggregated spending



Note: Federal spending only. Major health care programs include Medicare, Medicaid, CHIP, and market subsidies under the Affordable Care Act. Discretionary spending is defined as federal outlays that must be appropriated annually and includes both defence and non-defence spending. Defence is about half of discretionary spending.

Source: CBO (2023).

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Government spending on defence, climate, public investment, and other areas may contribute to further pressures on the federal budget. Defence spending as a share of GDP has been around one-third lower on average over past decades than prior to 1990, but this may reverse as geopolitical risks in the world increase. For example, the military efforts in Afghanistan and Iraq in the early 2000s led to a 1.5 percentage point increase in defence spending as a share of GDP (Figure 2.8). While the government is undertaking major public infrastructure investments, the ageing capital stock in the United States may require a more sustained effort over many years to raise the public capital stock. Public expectations for higher quality public services and social pressures may induce further spending pressures in the years to come. Each of these factors may call for government spending of hundreds of billions of dollars more each year above current levels and would need to be addressed by reductions in spending elsewhere or higher taxes. At the same time, interest costs on federal debt service are expected to increase by 1.5 percentage points of GDP through 2040 as the average interest rate on federal debt is expected to increase over time following monetary policy normalisation and with a higher debt stock (CBO 2024).

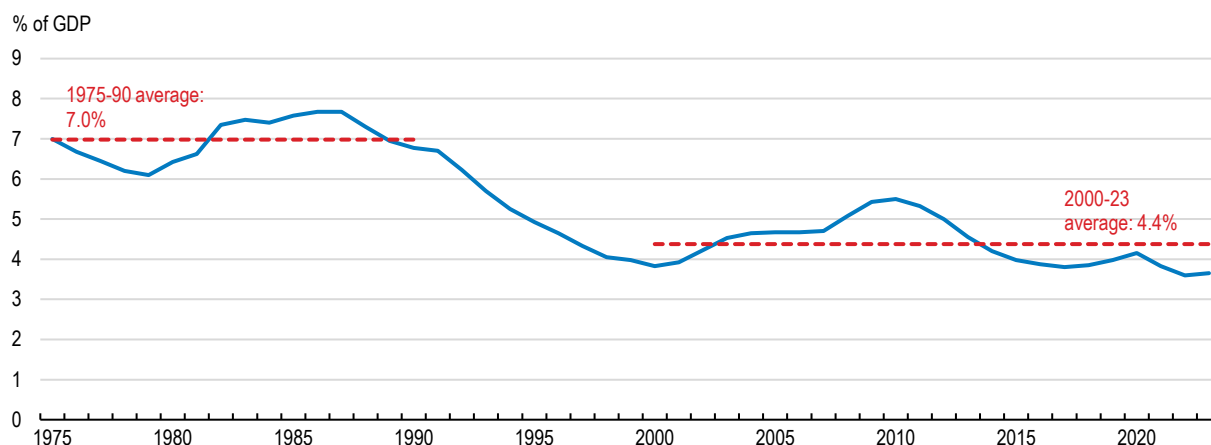
The United States has ambitious climate goals and the Inflation Reduction Act (IRA) of 2022 included direct spending and tax credits that will help the United States reach about 50% of their Paris Accords goals. As noted in Chapter 1, additional spending may also be needed to achieve fully climate change mitigation objectives, including under existing programmes to reduce emissions and to deliver the remaining gap with national climate goals and to fund adaptation measures. The extent of these pressures is difficult to quantify and depends in part on how much of the costs are carried by the private sector and on whether revenue-raising approaches, such as a carbon tax, can be implemented. The remaining cost of fully meeting climate goals could reach 0.5% of GDP annually and would need to be financed. The fiscal impact of a carbon fee in the United States could be revenue-generating or revenue-neutral even under a scenario where the federal government subsidises some households or the gasoline tax base is eroded (de Mooij and Gaspar, 2023).

Taken together, federal public expenditure on ageing-related costs and debt servicing costs alone are expected to increase by about 2.5% of GDP over the next decade, though in official projections these pressures are projected to be partially offset by discretionary spending declines and the exhaustion of

Covid relief spending (Figure 2.7; CBO, 2024; OECD, 2024). Without policy changes, this would widen the primary federal deficit that has already averaged around 3% of GDP in 2023 and 2024. With current tax rates and spending policies remaining in place, these pressures alone would raise the debt ratio by 30 to 50 percentage points over the next 20 years if carried forward under standard OECD forecasts of interest rates and growth (CBO 2024; Figure 2.13).

Figure 2.8. National defence spending as a share of GDP has declined

Defence spending, % of GDP, 1975-2023.



Note: Government consumption expenditures and gross investment: Federal national defence.

Source: Federal Reserve Bank of St. Louis, BEA.

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2.2. Fiscal pressures need to be addressed to maintain living standards and reduce risks

The expected large medium-run imbalances between spending and tax revenues – leading to a rising debt ratio – raise questions about the sustainability of current fiscal policies and the risks associated with these policies. Government spending is needed to provide essential public services, such as law and order and defence, social insurance including healthcare and pensions, productive investments in infrastructure, investment in education and to reduce poverty. Fiscal policies should be supportive of both current and future economic growth and financial stability (Furman and Summers, 2020). This includes retaining the ability to undertake countercyclical fiscal policy to stabilise the business cycle and manage economic crises, such as the Global Financial Crisis and the Covid pandemic.

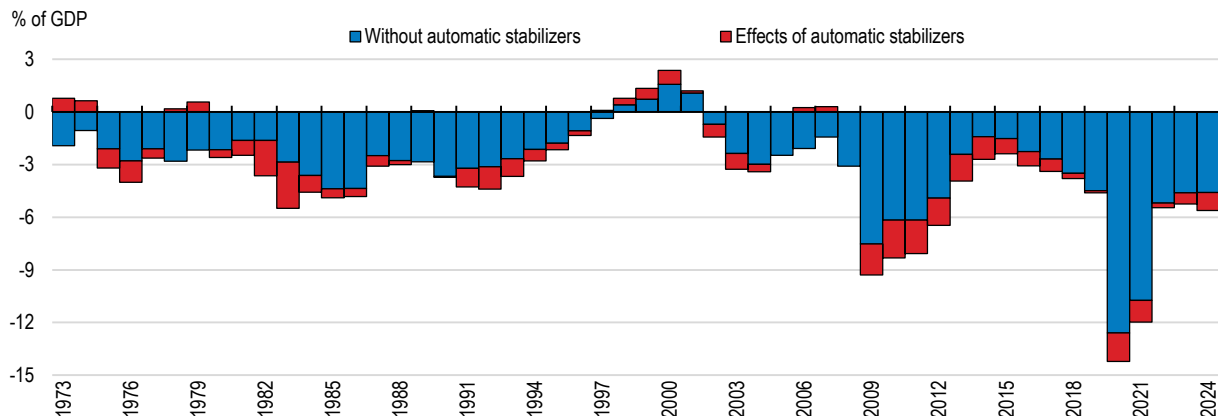
2.2.1. Fiscal policy needs to maintain its capacity to stabilise the economy when negative shocks hit

Fiscal policy, through government spending and revenues, should be in a position to help stabilise the economy after shocks. Governments can rely on automatic stabilisers, such as unemployment insurance that help stabilise the economy without any discretionary intervention, or can enact temporary fiscal responses in a discretionary manner. Automatic stabilisers are often preferred over discretionary fiscal policy, as the benefits are immediate and also temporary, limiting the potential budgetary cost (Blanchard et al., 2010). However, automatic stabilisers play a more limited role in the management of the economic cycle in the United States than in other OECD countries (Maravalle and Rowdanowicz 2020). This reflects a relatively small government and weaker progressivity in the tax system.

To offset this, the United States government is typically much more active in deploying discretionary measures at the federal level (Romer 2021). Most of the increase in deficits over the past decades was due to discretionary fiscal policy (Figure 2.9). The discretionary fiscal response during the Covid period was larger in the United States than in other countries, with growth exiting the pandemic also stronger in the United States. But automatic stabilisers tend to match the business cycle more closely and unwinding discretionary policies is typically stickier and can lead to ratcheting up of debt (Romer 2021; Égert, 2014).

Figure 2.9. Discretionary fiscal measures play a key role in managing the cycle

Deficits with and without stabilisers



Source: CBO (2023e).

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Elevated debt ratios and persistent primary deficits increase the risks in the event of a future economic shock. A fiscal response to a demand or supply shock can help in economic stabilisation, but governments are less likely to use fiscal policy to stabilise the economy as the size of steady-state debt ratios increases (Romer, 2021; Égert, 2014). Sometimes, the ability of governments to respond is constrained through market forces, but just as often the constraints are self-imposed by fiscal policymakers (Romer and Romer, 2019). Though the United States has consistently been able to borrow at relatively low rates to finance its debt, the risk that it will no longer be able to do so could rise along with structural debt levels. A central government that is less able, due to increased borrowing rates (Rachel and Summers, 2019) or less willing to respond to the economic shock due to perceptions of elevated debt levels, risks further amplifying the shock.

2.2.2. High and rising debt creates risks and is not prudent

Large persistent deficits over the medium term are expected to significantly increase debt ratios, which are already at historically high levels. These deficits increase the risk of a costly fiscal correction in the future and are not prudent, as they are expected to lead to rapid debt ratio increases under plausible future scenarios for economic growth and interest rates. While public borrowing can be useful to finance investment, smooth spending, and to stabilise the economy, it is ultimately constrained by the willingness to lend to the government. The creditworthiness of the government depends on its credibility, its ability and willingness to repay its obligations, and the ability to adjust the public finances and repay its obligations in an adverse growth or interest rate scenario. The United States has never intentionally defaulted on its obligations and enjoys significant advantages given the role of the US dollar in the international monetary system, as well as from its large, liquid, and open debt markets. However, its fiscal credibility has been weakened by repeated government shutdowns, debt ceiling crises, and difficulties in managing the budget

process in Congress with the “erosion of governance” the lead reason given for the recent ratings downgrade of United States debt (Fitch, 2023).

The United States, like many OECD countries, benefitted from favourable debt dynamics due to nominal interest rates being far below GDP growth (Box 2.1). This allowed the government to run large deficits, while the debt ratio increased only modestly (Figure 2.2). This eased fiscal constraints and risks, while creating an efficiency case for higher debt (Blanchard, 2019). However, the relationship between interest rates and growth has been unstable over time and interest rates have risen significantly over the past two years. It is now an open question whether interest rates will remain below growth rates on a sustained basis.

Box 2.1. Drivers of debt dynamics

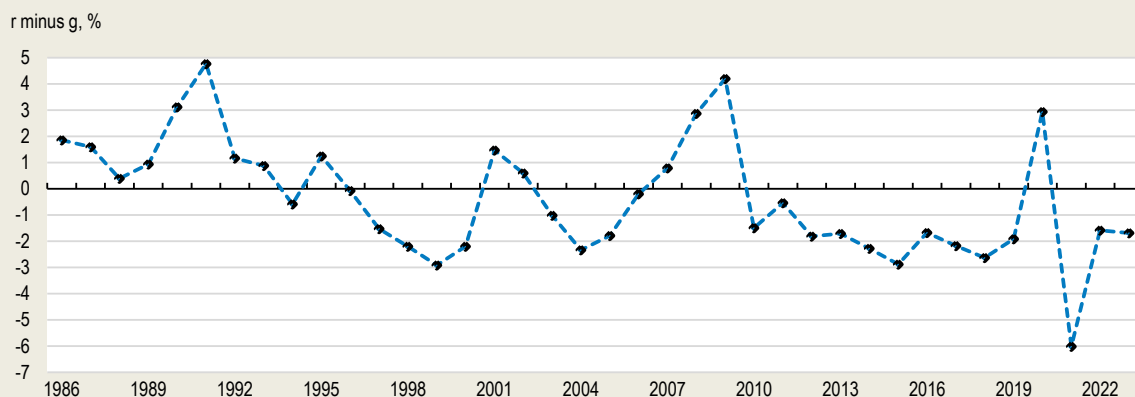
The ratio of government debt to GDP provides a measure of debt relative to the revenue raising capacity of the economy. The dynamics of the debt ratio ultimately depend on the current primary balances (pb_t), the current average real interest rate on government debt (r_t), the real growth rate of the economy (g_t), and last period's debt ratio (d_{t-1}).

$$\Delta d_t = -pb_t + \left(\frac{r_t - g_t}{1 + g_t} \right) d_{t-1}$$

A negative primary balance—or a primary deficit—exerts upward pressure on the debt ratio. The past debt ratio exerts upward pressure when $r > g$, but downward pressure is exerted when the interest rate on government debt is less than the growth rate of the economy ($r < g$), allowing a lower share of past debts to be carried forward.


The United States in recent years benefitted from favourable debt dynamics, as $r < g$ (Figure 2.10). However, the future path of real interest rates is uncertain, with demographic factors, savings rates, and income inequality dynamics possibly pushing real rates downward, while current elevated deficits and emerging funding needs for climate and infrastructure exert countervailing pressures (Mian et al 2021; Furman and Summers, 2019; Chapter 1). While in the period 1986-2010, r was often greater than g , this configuration requires a stronger primary balance to stabilise the debt ratio (Figure 2.10).

Figure 2.10. Economic growth minus the interest rate paid on federal debt has often been negative in recent years but less so historically



Note: Plot shows real economic growth minus real interest rates paid on federal debt, 1986-2023.

Source: CBO (2023d); OECD calculation

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The future path of the debt ratio (d) will depend on the interplay of the interest rate on government debt

(r) and the growth rate of the economy (g). When the difference between r and g is close to zero, the debt ratio will increase as long as the primary balance (pb) is in deficit. When r is greater than g , the primary balance must be in surplus to keep the debt ratio from growing.

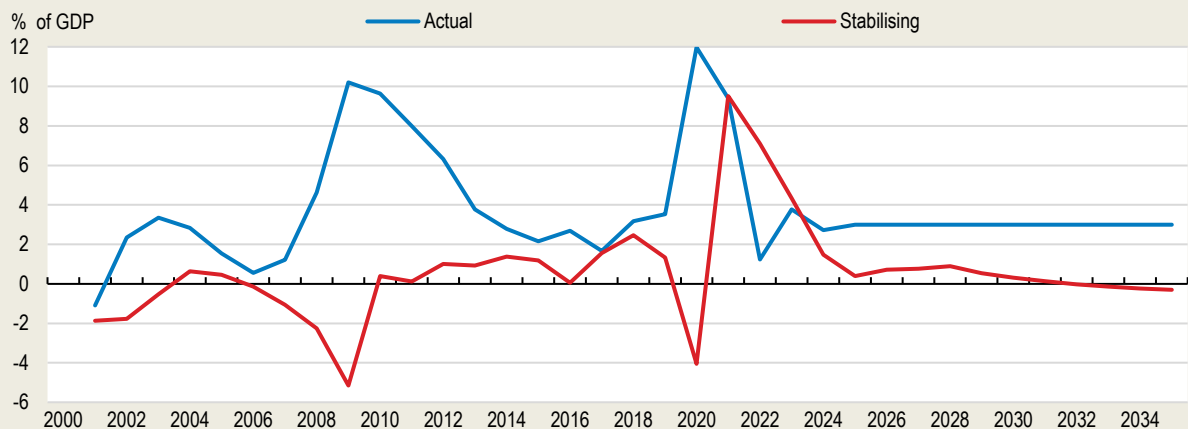
The debt ratio can be stabilised by targeting a primary balance as in the equation below. When r is less than g , the stabilising primary balance is negative—a primary deficit—whereas a primary surplus is necessary when r is greater than g . Projected future dynamics of r and g will influence expected future stabilising primary balances.

$$pb_t^{stabilize} = \left(\frac{r_t - g_t}{1 + g_t} \right) * d_t$$

There are no clear rules for debt ratio sustainability, but one rule of thumb takes the probability that the debt ratio will be stable in a medium-to-longer-term forecast coupled with the credibility of plans to keep the debt ratio stable. The future debt ratio path is assessed based on the current forecasts of interest rates and economic growth. The probability of an increasing debt path can be estimated by including measures of uncertainty—including potential future shocks—in a stochastic debt sustainability analysis (Blanchard, 2023). The sensitivity to these shocks increases in a linear way in the level of debt, so a debt ratio that is twice as high requires twice as large a change in the primary balance to stabilise the ratio (Barnes, Casey, and Jordan-Doak, 2021). If the future debt ratio path is projected to increase at a rapid pace, debt sustainability would depend on a credible plan to stabilise the debt ratio growth, including credible space to reduce spending or raise revenue. The maximum feasible debt ratio depends on the maximum primary surplus—itsself thought to depend on credible plans to reduce spending or raise revenue—when $r > g$, and on growth, interest rates, debt, and its feedback to rates when $r < g$.

Figure 2.11. Expected primary balances will not support debt stabilisation


Primary deficits to stabilise the debt ratio and actual primary deficits, both realised and forecasted



Note: Actual is defined using NLGXQ for past years, and is assumed to be 3% for projected years. Stabilising primary balance is defined using the equation above and baseline projections for r , g .

Source: OECD Analytical Database, OECD calculations.

Source: Blanchard, Leandro, Zettelmeyer (2021).

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A larger deficit and higher debt raise fiscal risks in the event of adverse outcomes. A larger deficit implies that a negative shock to growth or urgent spending requirement would bring the deficit to an even higher level, that may be harder to finance. On the other hand, a higher debt ratio makes the public finances more

sensitive to adverse growth or interest rate developments. At some point, the required primary balance to stabilise the debt ratio may be too high to achieve (Bohm, 1998; Blanchard, Leandro, and Zettelmeyer, 2021).

There is significant uncertainty about the level at which the debt ratio becomes problematic for the United States and other countries. This will depend on the level of debt and the deficit, interest and growth trends and volatility, and the credibility of the policy framework. The dynamics of public debt are non-linear with respect to the main determinants and so risk can amplify, while sensitivity to shocks increases with the level of the debt ratio and large fiscal adjustments may be harder to achieve. The varied experiences of OECD countries with debt ratios higher than the United States (Japan, Italy, Greece) illustrates the risks, but also the range of outcomes. Given the risks associated with elevated debt ratios, policymakers should endeavor to keep them at prudent levels.

Higher government borrowing can also weigh on the economy by crowding out private investment. An increase in the debt ratio is associated with slower GDP growth, especially when the debt level is already elevated (de Soyres et al., 2022). But, the effects of high debt ratios on economic growth remain very uncertain (Furman and Summers 2019). Long-run interest rates in the United States typically increase by two to three basis points for every percentage point increase in the debt ratio, making private investment more costly and lowering productivity, and leading to a deterioration in the dynamics of interest rates and growth (Gamber and Seliski, 2019; Box 2.1).

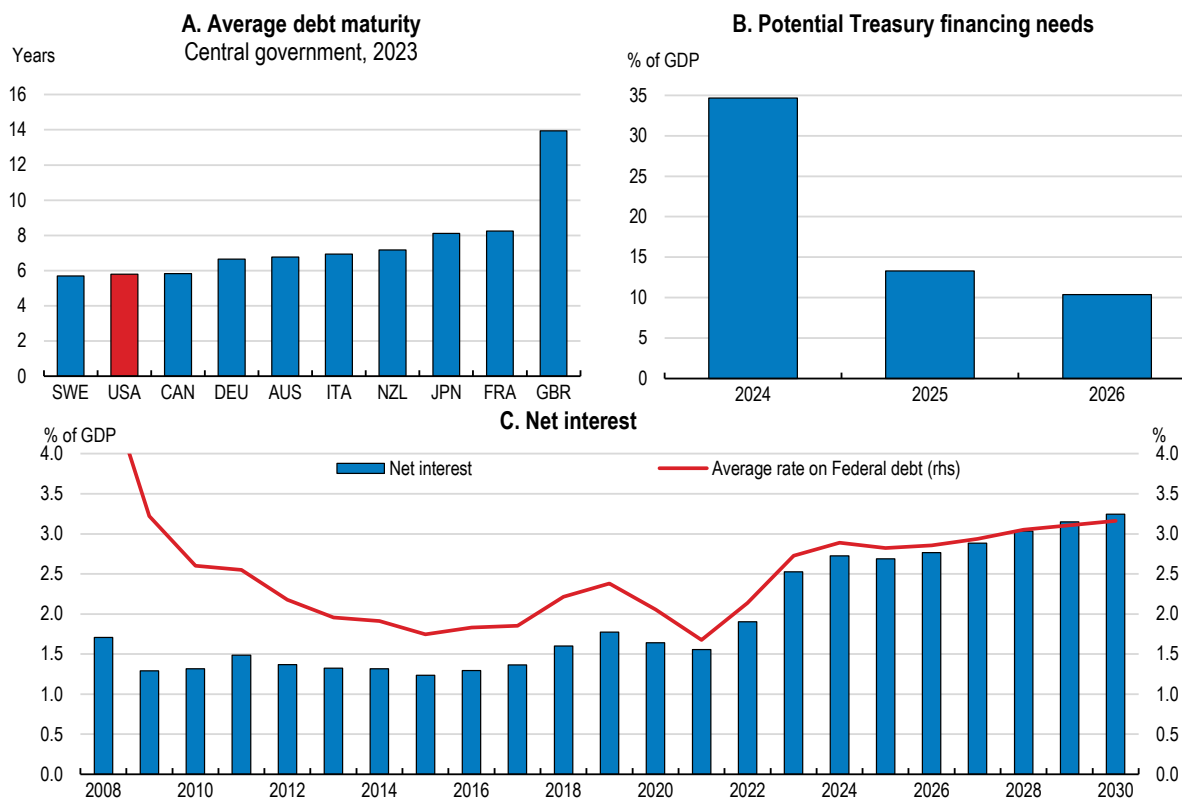
The United States government currently enjoys favourable financing conditions even with an elevated debt ratio, with demand for high quality government securities continuing to rise (Arslanalp and Eichengreen, 2023). But, there are some indicators that point to risks. Market concerns about deficits helped drive long-term Treasury yields higher in the fall of 2023 and current projections of federal deficits remain an upside risk to Treasury yields (US Treasury 2024a, 2024b). A downgrade to United States debt ratings noted of risks that the political system may be unable to rein in the primary deficits (Fitch, 2023). Deficit financing of government expenditures may also become more difficult as the composition of purchasers of Treasuries changes: after a large increase in the central bank balance sheet, the Federal Reserve has become a net seller of US Treasuries, and financial institutions and households have increased their purchases of Treasuries. These buyers may be more interest-rate sensitive, which could lead to sudden changes in interest rates. The volume of Treasury issuance has increased sharply since 2009 and again the Covid pandemic and will increase further if spending and revenues remain on current trends, creating further pressures on the market to absorb the higher volume of securities. Treasury securities are issued in a mix of short-term (Treasury bills), medium term (Treasury notes), or long-term (Treasury bonds) durations and are purchased by institutional investors, domestic and foreign central banks, and other market participants. The average maturity of central government debt in the United States is less than 6 years and on the lower end compared to other OECD countries (Figure 2.12, Panel A).

With higher interest rates, the United States will have to refinance a larger share of its debt relative to other OECD countries at higher rates than currently paid. This year, the United States will need to refinance or originate debt in the amount of about 35% of GDP (Figure 2.12, Panel B). Most of this debt is in the form of short-term bills, which were issued after interest rates began to rise, but medium- and longer-term debt will also need to be refinanced and new debt will be needed to cover the primary deficit. Average debt maturity is lower than in many other OECD countries. While abrupt changes in interest rates are not common, other advanced economies have experienced sharp increases in long-term yields in response to concerns about fiscal policy plans, including political events that have negatively impacted on market confidence. The United States could expect lower economic growth if the risk premium on public debt increased (Tedeschi, 2024).

Even in the absence of abrupt changes in interest rates, the average interest rate on federal debt is expected to increase in the future (CBO, 2024; Figure 2.12, panel C). The current average interest rate on the stock of federal debt is near 3%, a level not seen since the Global Financial Crisis 15 years ago. At

that time, though, the debt ratio was in the 60-to-90% range, and net interest payments on the debt were about 1.5% of GDP. But, the higher debt ratio today amplifies the effect of increased levels of interest rates, with net interest repayment now representing 2.5% of GDP, about 1 percentage point more for the same average interest rate paid on federal debt that prevailed 15 years ago (Figure 2.12, panel C). About 33% of total debt held by the public is held by foreign holders, which is lower than in the past but still represents a material stream of income that flows out of the country (Peterson Foundation, 2023).

Figure 2.12. The average maturity of US central government debt is relatively low, and refinancing needs are relatively high in the near-term



Note: Panel A shows average debt maturity of the central government, including the central bank. Panel B plots the share of Treasury debt that will come due in 2024, 2025, and 2026 as a share of expected GDP in those years. The amounts are calculated as of January 1, 2024. In panel B, the first column shows the share of Treasury debt that is coming due in 2024 (about 32% of expected GDP), plus new financing of the primary deficit (3% of GDP). Most of the debt coming due in 2024 is short term that will be financed again at a short term or potentially at longer terms. The 2025 and 2026 values are notes and bonds that are coming due in those years, and does not include any short term bills that may be refinanced during 2024, making 2025 and 2026 estimates a lower bound. Panel C shows net interest payments on federal debt (historical and forecasted) along with the average rate (historical and forecasted) on federal debt from CBO (2024).

Source: Bloomberg; CBO (2024), and OECD calculations.

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2.2.3. The fiscal position is challenging in the coming years

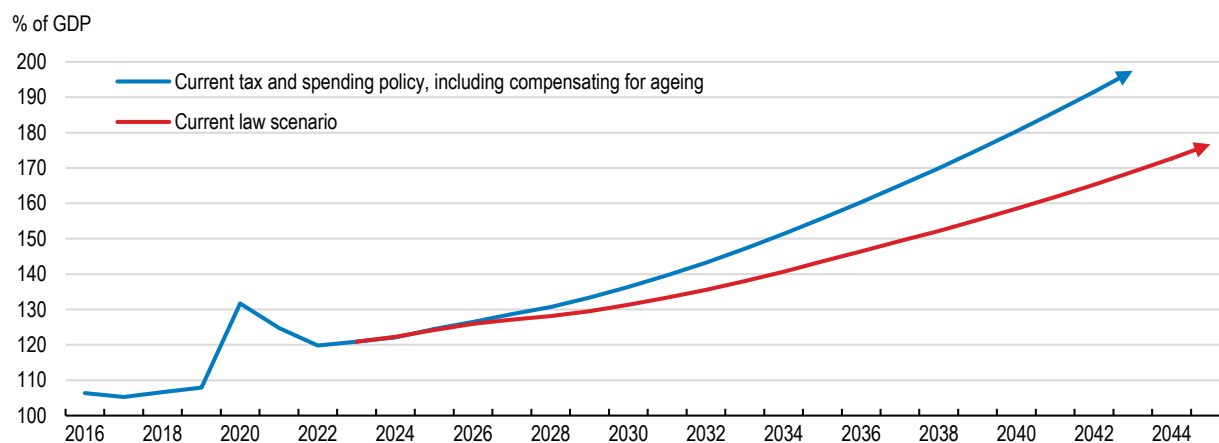
The fiscal position in the United States is challenging, with underlying misalignment of revenue and spending trends now exacerbated by the high debt levels (Box 2.2). If current taxing and spending policies were left unchanged, the gross general government debt ratio would increase from around 120 percent in 2023 to more than 175 percent in 2040 (blue line, Figure 2.13). This current policy scenario carries forward the current imbalances between revenues and spending, leading to future primary deficits and adds net ageing costs and health cost growth to the primary balance, implicitly assuming that these costs are fully deficit financed (full modelling details are provided in Box 2.3).

The debt ratio increases in these projections because the anticipated primary deficits are larger than the primary balances needed to stabilise the debt ratio, which in 2024 is estimated to be a primary deficit of around 1.5% of GDP (Figure 2.11). The higher debt associated with larger deficits compounds, leading to upward debt pressure in subsequent years.

An alternative scenario assumes that scheduled future law changes to tax and spending will be carried out as planned as assumed by CBO (2023). Many of the individual provisions of the 2017 TCJA legislation were written to expire at the end of 2025, and certain corporate revenue raises are also scheduled to be phased in during this time. In addition, the Fiscal Responsibility Act of 2023 caps discretionary spending in the near and middle term. Under the current law, federal tax revenues are scheduled to increase in 2026 and discretionary spending is expected to decrease over the next 10 years. Accordingly, primary deficits in this “current law” scenario are expected to be smaller than the current policy scenario, although there are significant doubts about whether these legislated changes will be implemented or whether measures will be taken to avoid rising debt. Nevertheless, the debt ratio still rises significantly even if the legislated changes were fully implemented with the general government gross debt ratio rising to around 130% in 2030 and 160% by 2040 (red line in Figure 2.13).

Box 2.3 provides sensitivity analysis of the current policy forecast using the baseline and alternate forecasts for interest rates and growth from CBO (2023) and CBO (2024). The range of scenarios all point to a rapidly rising future debt ratio (Box 2.3, Figure 2.14).

Figure 2.13. Under current policies and current law scenarios, the United States debt ratio is scheduled to increase rapidly over the next decades.



Note: the current tax and spending policy scenario assumes that the structural primary federal fiscal balance before accounting for net ageing-related costs remains constant at -3.0 percent—the average of 2023 and 2024 (projected) federal primary deficits—and incorporates an estimate of net ageing costs to be financed. Net ageing costs are defined as changes in expenditure on old-age pensions and health and long-term care costs. The current law scenario assumes the primary fiscal balance path estimated by CBO (2024).

Source: OECD Analytical Database, CBO (2024), OECD calculations.

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Box 2.2. Fiscal assumptions

Under the current tax and spending policy scenario, the current federal fiscal stance is projected to continue into the future with the tax system as it is today and with existing spending programmes projected forward in their current form. The primary balance reflects the imbalance in revenues and spending, which will grow due to higher interest costs, ageing and cost trends.

Current revenues are still being influenced by the 2017 Tax Cuts and Jobs Act (TCJA), with revenues between 0.5-1% of GDP lower than in the absence of this legislation (Committee for a Responsible Federal Budget, 2024), and these tax policies persist in the current policy scenario. But the pandemic disrupted the usual trends in revenue to GDP, with forecasts of capital income—especially capital gains—proving volatile in 2022 and 2023.

On the spending side, direct spending and tax credits in the Inflation Reduction Act (IRA) may contribute 0.2-0.4 percentage points to the deficit in the future (see Chapter 1), though offset by the exhaustion of the remaining extraordinary pandemic-era spending. Discretionary spending should be lower in 2024 as the Fiscal Responsibility Act (FRA) placed caps on discretionary spending enforced by sequestration in 2024, though with less credible enforcement in later years (Penn Wharton Budget Model 2023).

Overall, the average of the 2023 and forecasted 2024 federal primary budget deficit (about 3 percent of GDP, CBO 2024) is a good representation of current taxing and spending policies and the initial starting point from the primary deficit.

Box 2.3. Debt ratio projections – OECD Long-Term Model (LTM)

The debt ratio projections in this Survey are based on the OECD Long Term Model (LTM, see Guillemette, 2019), a long-term modelling framework covering OECD and major advanced economies in a consistent way.

The underlying economic projections reflect demographics and an assumed process of economic convergence with risk-free interest rates linked to the rate of economic growth at a global level and assumed to be exogenous to fiscal choices in the model. However, as the debt ratio increases, long-term interest rates at the federal level also increase by about 2 basis points for every percentage point change in the debt to GDP ratio (Gamber and Seliski, 2019; Rachel and Summers, 2019) to reflect the increases in risk. Modeled interest rates are applied to federal debt, and state and local debt ratios are then added. Interest costs are modelled in a stylised way based on interest rates rather than on specific refinancing needs.

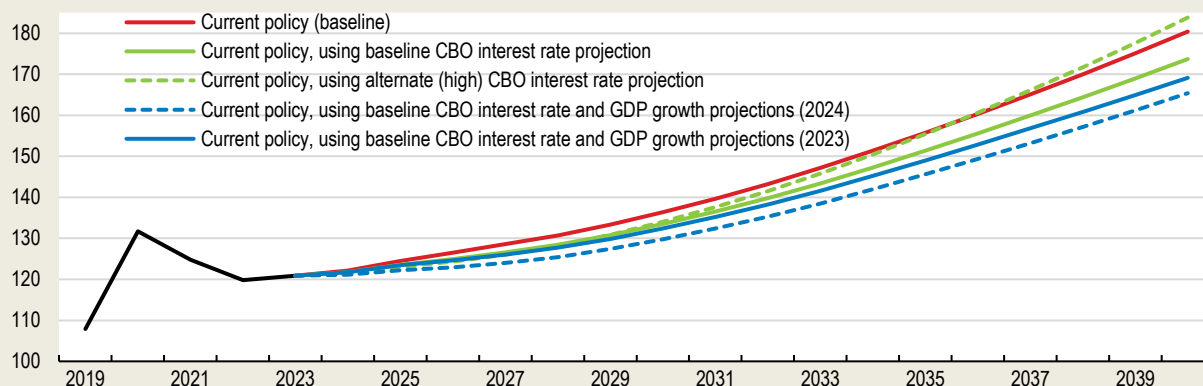
The modeled path of rates and GDP growth are similar to those projected by the CBO (2023b, 2024), though the combination of higher forecasted rates and lower forecast GDP growth leads - other things equal - to a steeper debt ratio growth than under the CBO forecasts. However, the range of scenarios all point to a rising debt ratio under current policies (Figure 2.14).

Real potential GDP growth is forecasted to decline in large part to ageing implying a decline in potential labor force growth. Net migration could help offset these declines, though, at a benefit to the debt ratio. The increase in future potential growth after the large increase in 2023 net migration in CBO (2024) leads to a debt ratio about 4 percentage points lower in 2030 that using the lower CBO (2023) growth, which did not include this net migration (Figure 2.14).

Figure 2.14. The debt ratio rises across a range of interest and growth scenarios


Gross debt ratio forecasts under alternative scenarios

% of GDP



Note: The current tax and spending policy represents the projected debt ratio under the baseline assumptions. The “Current policy, using baseline CBO interest rate projection” scenario uses the projected interest rate paid on federal debt from CBO (2023) for the future interest rate, and maintains the baseline growth forecast. The “Current policies, using alternate (high) CBO interest rate projection” repeats this exercise using an alternate forecast from CBO (2023) that with faster interest rate increases. The “Current Policy, using baseline CBO interest rate and GDP growth projection (2023)” uses both the projected interest rate paid on federal debt and the projections for GDP growth from CBO (2023). The “Current Policy, using baseline CBO interest rate and GDP growth projection (2024)” uses projections for GDP growth from CBO (2024), which include higher potential growth in the future in response to the recent increase in net migration.

Source: OECD Analytical Database, CBO (2023), CBO (2024), OECD calculations.

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Box 2.4. Assessing debt sustainability through alternate methods

The typical debt ratio measure used throughout this survey compares the stock of accumulated debt relative to current GDP, a flow, as described in Box 2.1. An alternate measure compares the flow of interest payments on the current debt, after adjusting for inflation, to current GDP (Furman and Summers 2020).

Though still developing as a metric, a sustainable debt is often deemed in this approach to be where current inflation-adjusted interest payments to GDP is 2% or less, is not forecast to exceed 2% in the near term, and is not rising sharply.

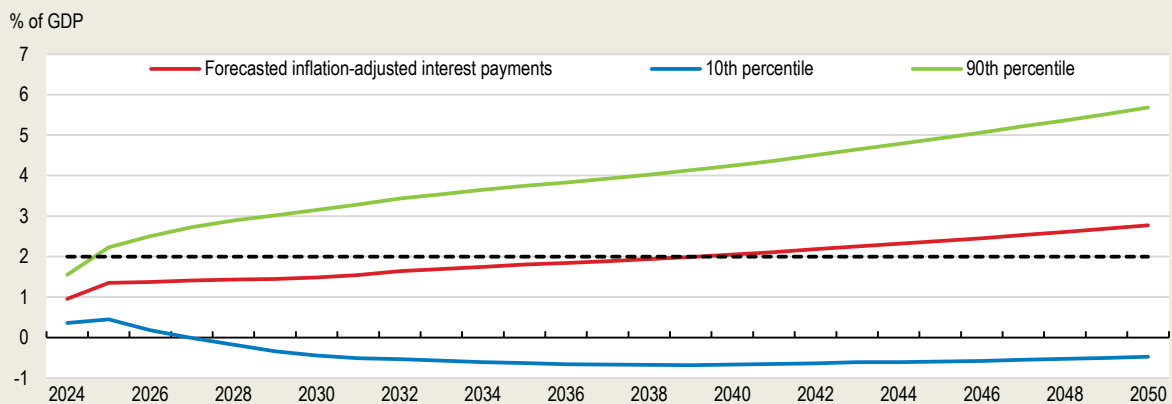
$$\left(\frac{\text{real interest payments}}{\text{GDP}}\right)_t = \left(\frac{\text{interest payments}_t - \text{inflation}_t * \text{debt}_{t-1}}{\text{GDP}_t}\right)$$

Currently, the inflation-adjusted interest payment to GDP ratio in the United States is less than 2% and in most forecasts this ratio is expected to remain below 2% in the near term, though rising close to 2% by the end of the decade as interest payments on federal debt are expected to rise (Figure 2.15). Forecasts are inherently uncertain and models that incorporate potential economic shocks show a nontrivial probability that inflation-adjusted interest payments to GDP in the United States will exceed 2% in the near term (Sakthivel et al. 2024). As the odds of crossing the 2% threshold rise over time, the chance to take pre-emptive action falls.

A difficulty with this approach is that interest rates can move suddenly and this measure of debt sustainability is highly sensitive to these changes at a high debt ratio. As debt and deficits are slower-moving, this may complicate the use of this measure in long-term fiscal planning.

Figure 2.15. Inflation-adjusted interest costs are rising

Interest costs are expected to increase but stay less than 2% of GDP, though the probability of interest costs rising above 2% are more than 10% in 2025 and increasing over time.



Note: Federal debt and interest payment only. The 90th and 10th percentiles are based on one million simulations of interest costs under modeled economic conditions. Inflation adjusted interest costs can be negative if nominal interest payments are less than last period's debt adjusted for inflation (see above equation).

Source: Sakthivel et al (2024).

StatLink  <https://stat.link/btmvgu>

Source: Furman and Summers (2020), Sakthivel et al (2024).

2.3. Narrowing the budget deficit and putting the public finances on a more prudent path

The United States should undertake a gradual fiscal adjustment to narrow the deficit starting this year and put the debt ratio on a more prudent path rather than the current rising trajectory, as well as to reduce fiscal support for the economy at this point of the cycle as discussed in Chapter 1. This will require better aligning spending and revenues in the years ahead, which can be supported by strengthening the fiscal framework.

2.3.1. Improving the fiscal framework

When the debt ratio is projected to increase, a credible fiscal plan to stabilise debt ratio growth, including identifying space to reduce spending or raise revenue, can create additional fiscal room for manoeuvre. Strengthening the fiscal framework would help to achieve the necessary balancing of spending and taxation, while reducing risks by lowering debt and making the process more credible and robust. The current arrangements have led to brinkmanship around the debt ceiling with regular threats of partial shutdowns of federal government activities. A stronger fiscal framework with a focus on medium-term stability, prioritisation between different spending and tax policies, and communication efficiencies could help to better manage the public finances.

Public budgeting in the United States differs from most other OECD countries, where parliamentary systems are the norm. These countries generally operate on an annual budgeting cycle, where the executive proposes a budget and parliament approves the budget. Typically, the executive and parliamentary majorities are from the same political party and agree on the budget, though, in cases where they cannot, the government may fall. The budget that is passed is typically largely followed during the year with adjustments possible for unforeseen events. In the United States, the federal government is set up with three equal co-existing branches: the executive and the legislative—both popularly elected—and the judicial branch. The executive and legislative branches have traditionally both played a role in fiscal policy in the United States. The political process in the United States often results in a divided government, where the party that occupies the executive (the Presidency) does not control the legislative branch (Congress). Unlike parliamentary or presidential systems in many other OECD countries, this can introduce strong conflict in the budgeting process and make it more complex to balance different priorities. It has become increasingly difficult in recent years to reach agreement around the budget. Over time, procedures and the role of the Presidency and Congress have ebbed and flowed (Box 2.5).

Box 2.5. History of the budget process in the United States.

Though the United States Constitution granted Congress the power to tax and spend, both the President and Congress have traditionally played a role in the budget process. Prior to 1920, government was much smaller and there was no official federal budget.

The Budget Act of 1921 set up the current Office of Management and Budget (OMB) - the executive branch budget office - and also set up the current process, whereby the Executive submits a recommended budget to Congress annually. The Congress began from that budget blueprint to pass taxing and spending legislation, though the Executive branch held a de facto veto over some spending through the use of impounding, or withholding, some funds.

The 1974 Congressional Budget Act (CBA) set up the current budget process and was designed to increase the role of the legislature in budgeting. It set up a general budget timetable (Table 2.1) and established the Congressional Budget Office (CBO) as the Congressional counterpart to the Executive's OMB, and ended the impounding of funds by the Executive. The Congress set up a Budget Committee with 12 subcommittees with oversight over the main federal government agencies.

The current budget process is complex

The budget process is complex given the role of the executive and the Congress and different aspects of the budget are set in different ways. Federal spending comes in two types: annually appropriated discretionary spending, which Congress and the President must agree upon each year, and mandatory spending on programs that have been legislated in the past and are typically authorised to pay benefits according to a set formula. The appropriated discretionary spending bills cover about 25% of federal government spending (Box 2.6). Both mandatory spending and discretionary tax changes are decided separately through the general legislative process rather than with the annual appropriations budget. There is therefore an important disconnect between the annual Congressional budget legislation process - which focuses on just the discretionary appropriations bills - and the overall position taking into account taxes and mandatory spending. This further implies that measures that impact the budgetary position can be enacted at any time, such as tax cuts, through general legislation. This budget process is very different from in most OECD countries (OECD 2019).

Box 2.6. The current budget process

In the United States, discretionary spending legislation is voted upon each year in the annual appropriations bill. These appropriations bills cover about 25 percent of federal government spending. Discretionary changes to mandatory spending and taxes need to be legislated separately and are taken up as politically and budgetarily necessary.

The President begins the annual appropriations process by submitting a detailed budget to Congress that lays out the preferred fiscal policies of the Executive branch—detailed revenues, spending, deficits—which have been worked out between the OMB and the federal agencies. The budget covers a 10-year period, though the 1974 Congressional Budget Act (CBA) only specifies a minimum of 5-year period. The President’s budget includes changes to mandatory spending, in addition to discretionary spending, though the annual appropriations bill taken up by Congress only covers discretionary spending. Table 2.1 describes the timetable.

Typically, the President’s budget is submitted to Congress by the first Monday in February, and the CBO issues a report on that budget to the 12 budget subcommittees who, in turn, offer budget priorities six weeks later. These budget priorities can be very different from the priorities in the budget submitted to them by the President, especially when the political party in control of the Executive is different from the party—or parties—in control of the Congress.

By April 15, the Congress should pass a “concurrent resolution” on the budget which distributes the appropriations bills to the 12 subcommittees and sets basic parameters for the appropriations legislation for Congress. The budget resolution provides a broad outline—a 302(a) allocation—of the budget amounts, not the detailed amounts in the President’s budget, and sets a general revenue floor that subcommittees have to abide by. In the middle of the year, the Congress finalises the bills; if the President agrees, the appropriations bills become law.

The final budget bill needs to be agreed upon by the Congress, receive majority votes in both the House of Representatives and the Senate and be signed by the President. However, the budget timetable is governed by rules set by the Congress - not laws or other actionable legislative duties - and the same body that sets the rules can also choose to waive the rules. If the budget bills are not signed into law by September 30, either the Congress and President agree to short-term extensions of the previous budget legislation or the 12 federal agencies shut down until a budget agreement is in place.

The fiscal year for the United States federal government begins on October 1 of the prior calendar year

and ends on September 30 of the current calendar year. In general, the federal budget process begins with the OMB coordinating budgets for the 12 main federal agencies in the middle-late part of the prior calendar year.

Table 2.1. Congressional budget process timetable

| On or before: | Action to be Completed |
|---|---|
| First Monday in February | President submits a budget. |
| February 15 | Congressional Budget Office submits report on the economic and budget outlook to Budget Committees. |
| Not later than 6 weeks after President submits budget | Committees submit views and estimates to Budget Committees. |
| April 1 | Senate Budget Committee reports concurrent resolution on the budget. |
| April 15 | Congress completes action on concurrent resolution on the budget. |
| May 15 | Annual appropriations bills may be considered in the House. |
| June 10 | House Appropriations Committee reports last annual appropriation bill |
| June 15 | Congress completes action on reconciliation legislation. |
| June 30 | House completes action on annual appropriations bills. |
| October 1 | Fiscal year begins. |

Source: Source: Section 300, Congressional Budget Act, 2 US.C. §631

Source: CBPP (2023)

Appropriated discretionary spending

Annual appropriations bills to fund the 12 main government agencies are taken up each year after the President submits an annual budget (in a process described in Box 2.6). Though the President's budget encompasses all spending (appropriated discretionary spending and mandatory spending) and taxes, the appropriations bills cover only discretionary spending—representing about 25% of all federal spending. But, disagreements on budget priorities between the President and Congress have helped create budgeting delays: only in one in four fiscal years has the budget timeline described in the Congressional Budget Act of 1974 been kept (see Table 2.1). Absent an agreement, the President and Congress can agree to short-term funding for the 12 government agencies, called a continuing resolution, which typically funds the government agencies at the previously agreed-upon levels until a longer-term agreement can be reached. Since 2007, continuing resolutions have been used in 12 budget years. Otherwise, government funding for these government agencies will lapse and the government agency functions will cease at those agencies. These so-called government shutdowns have happened 10 times, most recently in 2013, 2018 and 2019. Importantly, these shutdowns keep appropriated federal spending from being disbursed, but generally do not affect mandatory spending.

Within this process, legislation has periodically been passed that intends to control overall future discretionary spending. Recently, the Fiscal Responsibility Act (2023) instituted a spending cap for discretionary spending in FY2024 and FY2025—with caps below nominal FY2023 levels—with targets for FY2026-FY2029 discretionary spending (Committee for a Responsible Federal Budget 2023b; Penn Wharton Budget Model, 2023). In the past, the 1990 Budget Enforcement Act legislated similar limits on annual appropriations bills, as did the 2011 Budget Control Act of 2011 (BCA). However, these constraints have frequently proven ineffective in the medium term, in part because subsequent legislation has been used to raise the spending caps. For example, the spending caps in the BCA were raised for every fiscal year from 2014 to 2021, sometimes by more than 15 percent above the BCA limits (Diamond and Engebretson, 2023).

Mandatory spending and taxes

Mandatory spending and discretionary tax changes are decided separately through the general legislative process rather than with the annual appropriations budget. Mandatory spending includes all spending that is not decided on an annual basis and represents about 75% of total federal spending. These programs are often created and funded by past legislation with eligibility requirements and a promise to fund benefits for all eligible beneficiaries (for example, Social Security, Medicare, and Medicaid). These tax and mandatory spending are approved by general legislation, and the approval of the President, the majority of the House, and either 60 or more votes in the Senate - to pass under regular rules - or 51 or more votes in the Senate under modified “reconciliation” rules. Budget legislation, therefore, can be introduced at any time and passed whenever politically and budgetarily feasible rather than part of an annual cycle.

However, there are some key rules that apply to any piece of general legislation with budgetary implications. First, such bills are often passed through the “reconciliation” process. This requires only a majority - 51 votes - in the Senate as opposed to 60 votes, which is often needed to overcome Senate rules in typical legislation. Reconciliation bills impose some constraints, including that the legislation must not increase the deficit outside of the budget window taken up in reconciliation. For example, the Economic Growth and Tax Relief Reconciliation Act (EGTRRA), Jobs and Growth Tax Relief Reconciliation Act (JGTRRA), and Tax Cuts and Jobs Act (TCJA) all increased the deficits in the 10-year budget window through decreased tax revenue, but each had key pieces of the legislation that expire prior to the 10-year budget window, increasing revenue enough by the end of the budget window to comply with the reconciliation rules (Congressional Research Service, 2010). In practice, many of these measures are not allowed to expire and are effectively rolled over into the next period, so that the deficit never returns to the initial level. Furthermore, the Congressional Budget Office is obliged to make its projections on the basis of legislated policy, implying that those projections are too optimistic if provisions due to expire under reconciliation are unlikely to be unwound, although CBO does produce other projections on a more realistic basis.

Second, Congress has other rules that apply to cap deficit spending from mandatory programs. To discourage deficits to pay for mandatory spending, Congress has enacted statutory Pay-As-You-Go (PAYGO) practices, beginning in 1990. PAYGO mandates “sequestration” of funding to mandatory programs, meaning that if Congress authorises new spending over certain limits then other programs have to be cut in response to make the overall impact deficit neutral. These rules helped Congress reduce spending during the 1990s. However, Congress can also pass subsequent legislation that lifts the overall budget limit or gets around the PAYGO requirement in other ways. In 2001, Congress waived PAYGO enforcement of the EGTRRA legislation, and allowed PAYGO to expire in 2002. In response to budget deficits, Congress reinstated PAYGO in 2007, though it has been subsequently repealed and reinstated several times since then (CBPP 2019).

The debt ceiling

Overall, the budget rules in Congress are less effective than they are intended (CRFB 2023). They may be effective when there is political agreement to enforce the rules, but this has seldom been the case in recent years. The key remaining fiscal constraint in the United States, then, is the debt limit—also called the debt ceiling. The debt limit is set in Congressional legislation and is a statutory limit on the amount of aggregate outstanding United States Treasury debt. But, the design of the debt ceiling does not necessarily align with good public budgeting, as it neither constrains discretionary or mandatory spending, nor does it change tax revenue. Instead, it limits the ability of the US Treasury to finance obligations that previous Congresses and Presidents have made in the past (US Treasury 2023). It provides little guidance for policy when the ceiling is not binding but has a very strong impact when it does. Aside from its poor design as a budget constraint, the debt ceiling has potentially damaging effects for the United States and global economy if it is breached: by not allowing any further borrowing while the United States runs a primary

deficit, reaching the debt limit could mean a default on the United States federal debt. Governments that borrow in their own currency, such as the United States, rarely default (Beers et al 2020), but the presence of the debt limit creates an unnecessary possibility for such an event. Two key features of the U.S Treasury make the effects uncertain but potentially severe: Treasuries are the benchmark “safe” asset and the U.S. dollar is the global reserve currency, meaning that financial notions of risk would be upended by such a default (Engen, Follette, and Laforde, 2013). Modelling of a short duration default leads at least to slower economic growth through higher public and private borrowing costs, lower income from Social Security and government transfers, with the knock-on effects possibly leading to a financial crisis (White House, 2021). In recent years, brinkmanship around the debt ceiling has also seen it mostly used to pursue political objectives around tax and spending measures, rather than to manage the overall fiscal stance.

Box 2.7. Public budgeting and fiscal rules in other OECD countries

Fiscal rules are constraints on fiscal policy, usually in the form of numerical limits on a budgetary variable, including debt, the debt ratio, the budget balance or the structural balance as a share of GDP, or spending growth or levels. These rules can be enshrined in constitutions, primary or secondary law, parliamentary procedures or by convention. Countries have often combined rules. Across the OECD, deficit rules and debt rules have generally been the most common, but in recent years there has been growing interest in expenditure rules.

These developments are reflected in the EU fiscal framework, which faces specific demands as a mechanism to enforce budgetary discipline across a set of diverse countries. The framework initially focused on a 3% of GDP ceiling for the deficit and a 60% of GDP debt ceiling. To address concerns about stabilisation of the cycle, the focus was shifted to a medium-term objective (MTO) for the structural budget with countries expected to reduce the structural deficit by around 0.5% of GDP annually until the MTO is reached and the deficit falls durably below the 3% level.

The most recent EU reforms in December 2023 introduce country-specific medium-term fiscal plans aimed at putting debt on a prudent path that is defined by debt sustainability analysis and implemented through a revenue-adjusted spending ceiling. The medium-term is defined as a 4-year window. While the details are complicated, the revenue-adjusted spending ceilings are broadly determined by the individual country’s economic situation, where countries are required to set policies consistent with a high probability of the debt ratio being stable based on policy settings at the end of the medium-term window. The 4-year window can be extended to 7 years if countries undertake growth-enhancing reforms. In addition, a number of the existing requirements and additional constraints apply.

Source: Budgeting and public expenditures in OECD countries (2019), OECD EU Survey.

A more robust and simple medium-term fiscal framework could help

The allocation of financial responsibilities under the United States Constitution, and clarified under the 1974 Congressional Budget Act, defines the overall design which remains unique among OECD countries. However, many OECD countries have adopted fiscal rules that aim to control the overall budgetary position and the accumulation of debt. These rules aim to encode a political commitment to stable public finances and constrain the discretionary use of fiscal policy through procedural mechanisms or by increasing the political cost of expanding deficits. A range of approaches has been used. In the United States, various frameworks have been applied including the debt ceiling, constraints on spending and/or taxation, such as the Fiscal Responsibility Act, and other Congressional procedures. In other countries and in the European Union, a range of fiscal variables have been the subject of rules including the budget balance, the structural balance, debt ceilings and spending rules, including discretionary tax measure-adjusted spending caps (see Box 2.7). While the United States and international experience shows that rules can be broken and

do not guarantee good outcomes, particularly when there is a lack of political appetite to apply them. Fiscal rules can be combined with monitoring to increase the credibility of the rules by offering a clear and simple framework (OECD 2019).

In the United States context, existing fiscal rules would be strengthened by a simple target with a strong medium-term focus that would increase public awareness of fiscal choices. This could be achieved by replacing the existing debt ceiling with an agreed simple medium-term debt ratio target. Existing Congressional rules typically aim to be more binding than a target but have often been bypassed and the procedures are very complex and opaque with little traction in wider public debate. The key objective of the proposed approach would be to increase the medium-term orientation of the management of the public finances. A simple target around which spending and choices could be framed would increase clarity for the public, politicians and markets about fiscal choices, rather than relying entirely on complex Congressional rules, and should make politicians more accountable for their choices. The medium-term focus would allow for necessary countercyclical and policy action in the short run, while maintaining focus on the medium-term implications of decisions that raise debt. Removing the debt ceiling would reduce risks and the possibility of brinkmanship and have little impact on budgetary outcomes.

A simple medium-term debt ratio target could be agreed by the President and Congress, making this a central focus for negotiations between the branches and giving accountability to both parties to achieve it. This could be set, for example, every 4 years at the start of each Presidency, leading to accountability at the end of the respective mandates. Each annual appropriations bill and any other changes to tax or mandatory spending would then need to show how these are consistent with meeting the medium-term target. To support this measure, there would need to be independent and credible projections of debt relative to target under current policies. The CBO is well-placed to produce regular forecasts to support monitoring of whether policy is on track with the medium-term target.

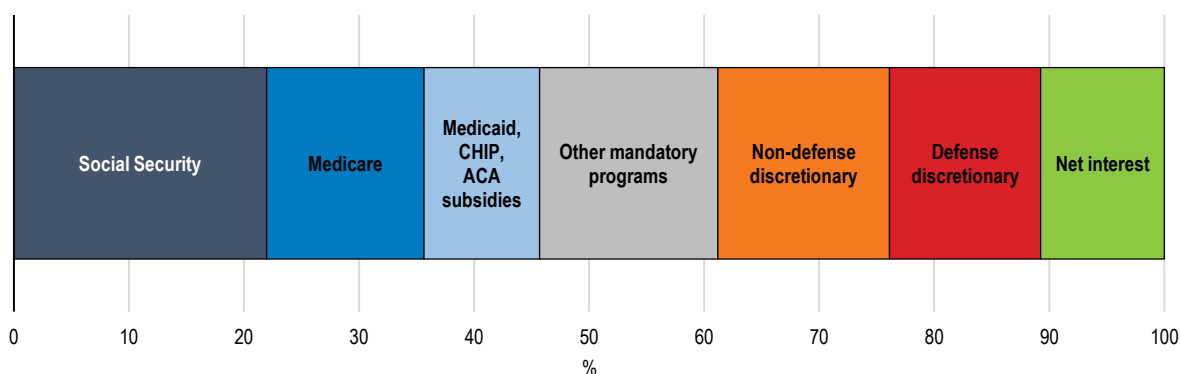
This framework would be supported by only allowing 2-to-3 year temporary measures rather than measures that are legislated over the current 10-year budget window. Most other OECD countries have medium-term budgeting frameworks, but the time horizon is typically 3 to 5 years, a horizon long enough to signal the direction of policy changes (OECD 2019). In contrast, the 10-year budget horizon has been used to obfuscate the direction of medium- and long-term policy change, by allowing what are effectively intended as permanent tax cuts to be passed as temporary 10-year changes. There is no genuine need for temporary measures lasting 10 years, while this provision has been widely abused to get around the fiscal rules. Closing this loophole would help to focus the public finances on a more realistic baseline.

2.3.2. Spending and revenue alignment

On the spending side, the scale of the fiscal adjustment will be particularly challenging given the composition of government spending. In the United States, general government expenditures are low overall compared to other OECD countries as a share of GDP (Figure 2.19, panel B), with the composition of spending skewed toward defence and health and less toward social insurance relative to other OECD and EU countries (Figure 2.17). At the federal level, spending is already heavily tilted to mandatory spending on social pension, health spending, and interest repayments - which make up more than 57% of federal spending - rather than discretionary spending (Figure 2.16). Within non-mandatory spending, defence spending makes up around half of this component. It may be difficult politically to cut entitlement or key spending on important social programmes that are needed to maintain the living standards of many American citizens. If Social Security and most public health benefits are protected during any spending adjustment, then the remaining defence and other discretionary spending would have to be severely curtailed, with government expenditures already low in these areas relative to most OECD countries as a share of GDP. It is important that key areas of spending, such as education, research and public investment are not adversely impacted as they are needed to sustain future growth.

Figure 2.16. Federal outlays are dominated by mandatory Social Security and medical spending

Fiscal year 2023



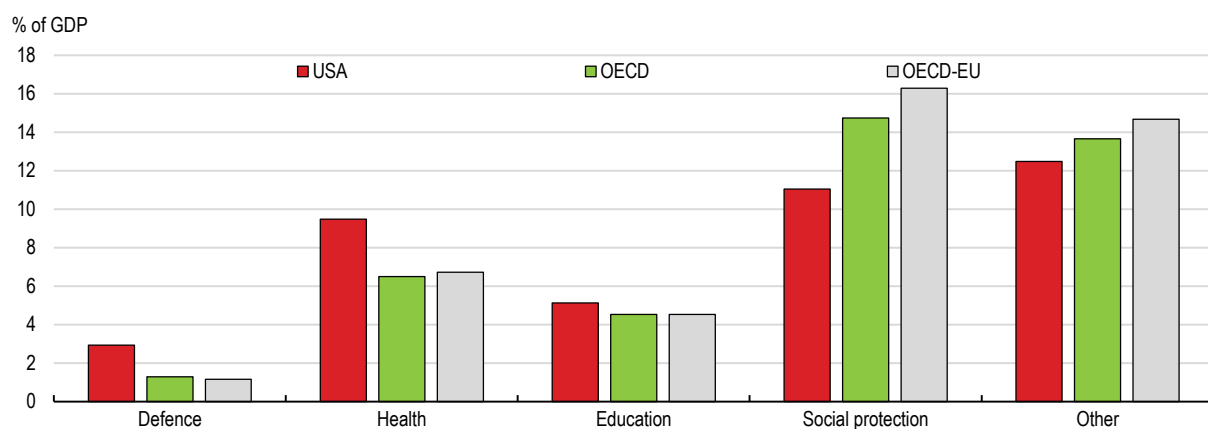
Note: Federal spending only.

Source: OMB (2023), CBO (2024).

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Nevertheless, there is scope to improve the targeting of social spending and to reduce health spending, which is the highest per capita in the OECD. At the same time, health outcomes in the United States are below average relative to other OECD countries (Figure 2.18). Some of the disparity in health spending and outcomes is due to social factors outside of the control of the health system. But, a range of policies to raise efficiency through improving competition, negotiation and taxes expenditures could lead to lower per capital health costs for the same health outcomes (Nunn, Parsons, and Shambaugh, 2020; Dutu and Sicari, 2016).

Figure 2.17. Relative to other OECD countries, the United States spends a higher share of GDP on health and defence, but less on social insurance



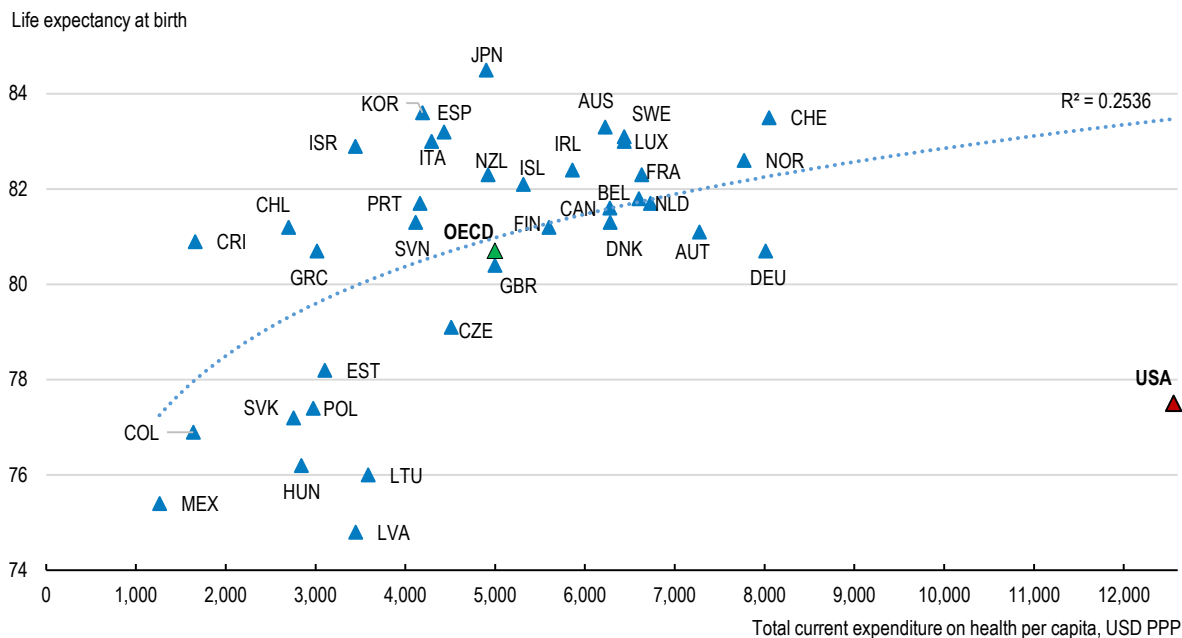
Note: Both federal and sub-federal spending to allow cross-country comparisons. Most US education spending is at the sub-federal level.

Source: OECD National Accounts Statistics (database); Eurostat Government finance statistics (database).

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Figure 2.18. Health care expenditures per capita are highest in the OECD even as health outcomes lag most other countries

2022 or latest year available



Source: OECD Health Statistics (database).

StatLink  <https://stat.link/y3drxa>

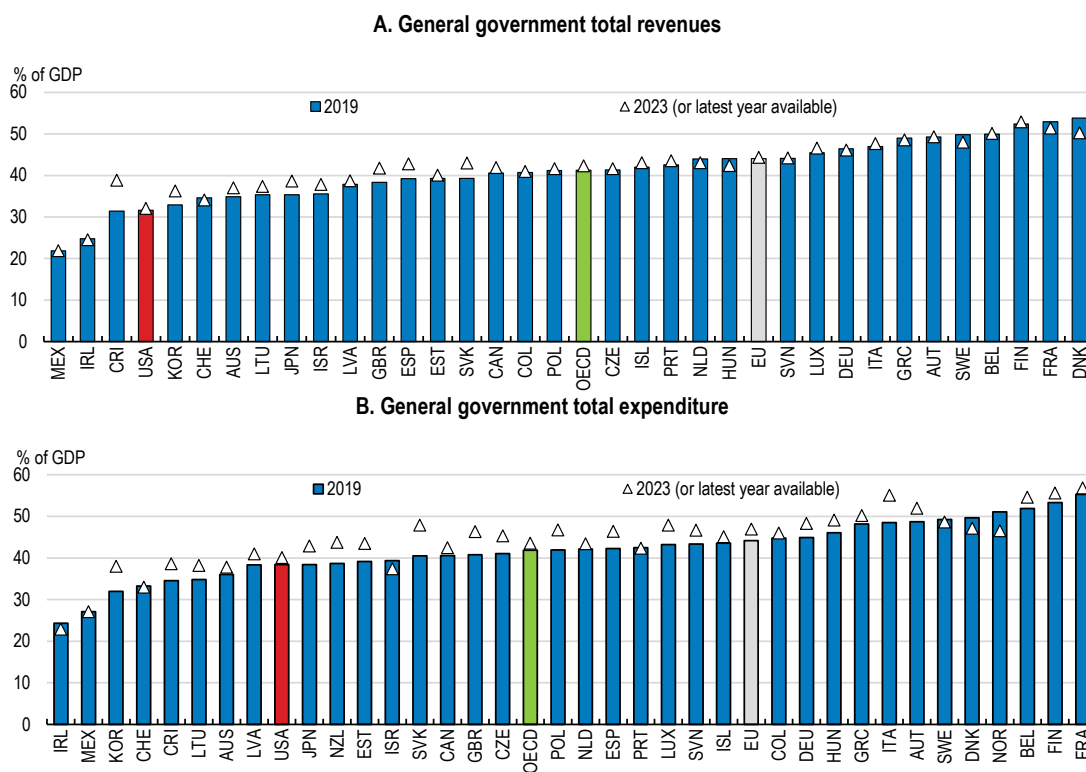
In the United States, there is more space to raise revenue than many other OECD countries: general government revenues are among the lowest in the OECD (Figure 2.19, panel A), and countries with comparable debt ratios have higher revenues as a share of GDP (Figure 2.20). Revenues at the federal level are a mix of individual income taxes, payroll taxes, corporate taxes, and a variety of other taxes, such as excise taxes and customs duties. At the local levels, revenues mainly come from property taxes, sales taxes, and additional income taxes. The main source of federal revenue is individual income taxes and taxes on payrolls that fund Social Security and Medicare, with corporate taxes providing a small share. Relative to other OECD countries, general government revenues in the United States are skewed to personal income taxes and taxes to fund social pensions and less likely to come from corporate and consumption taxes (Figure 2.21).

Box 2.8. State and local finances

States and localities fund themselves mainly with income taxes, property taxes, and consumption taxes in the form of sales taxes. In the United States, most property taxes and consumptions taxes are collected by localities rather than the federal government (Figure 2.21). Most education spending is at the local level (Figure 2.17). The short run budget outlook for states and localities is sanguine, as states and localities received a lot of transfers from the federal government during the pandemic that have not been spent down (OECD, 2024; Brochado, Dougherty and de Biase, 2024). But, in the medium term, the state balanced budget amendments coupled with recent tax cut legislation will lead to procyclical amplifications of the business cycle in case of economic shocks. In the long run, pension funding is a worry for some states, with several underfunded.

Debt taken out by states and localities is included in general government debt, but federal debt is the most important component of general government debt. Nearly all US states have balanced budget amendments. Localities can run deficits, but on a modest scale relative to the federal government. In net borrowing terms, the states and localities had a surplus in 2022 of USD149 billion and a deficit of USD186 billion in 2023. By comparison, federal net borrowing was USD1.27 trillion in 2022 and USD2.34 trillion in 2023 (Board of Governors of the Federal Reserve System, 2024). State and local expenditures are about 50% as large as current federal expenditures. The debt ratio figures in this chapter include debt held by states and localities.

Figure 2.19. Government revenues and expenditures are low relative to other OECD countries



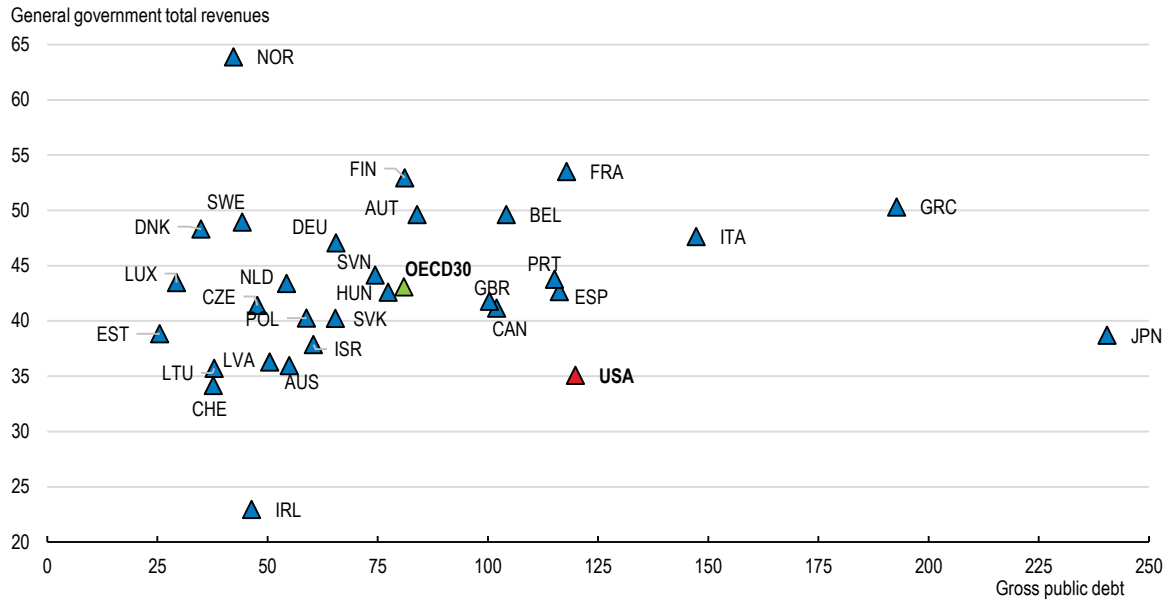
Note: This figure shows the average revenue-to-GDP ratio (panel A) and expenditure-to-GDP ratio (panel B) in the OECD countries. The United States is near the bottom of the distribution in both panels.

Source: OECD Analytical Database.

StatLink <https://stat.link/gh3iz1>

Figure 2.20. Among countries with similar debt ratios, the United States has low tax revenues.

% of GDP, 2022

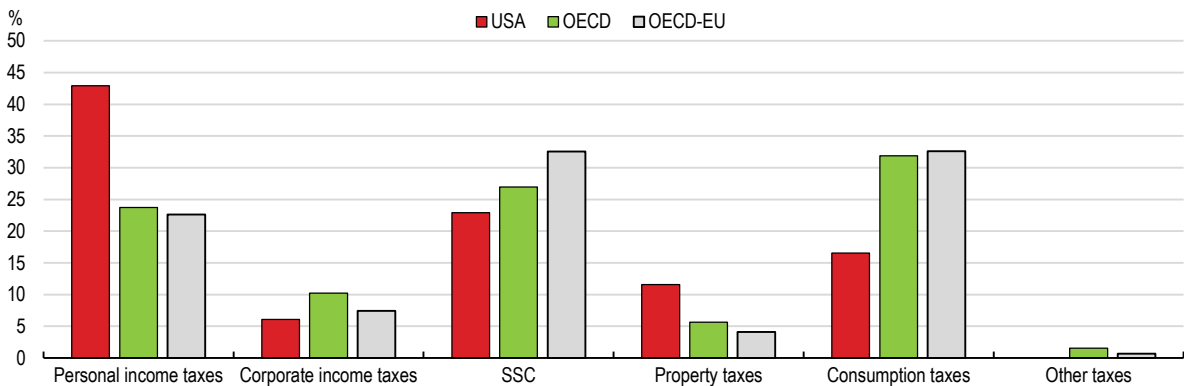


Source: OECD Analytical Database.

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Figure 2.21. United States tax revenues are tilted toward personal income taxes and less towards corporate taxes and consumption taxes

Share of revenues in total revenues, 2021



Note: federal and sub-federal revenues are shown to allow cross-country comparisons. Most property and consumption taxes are at sub-federal level in the United States. SSC is Social Security contributions.

Source: OECD Revenue Statistics.

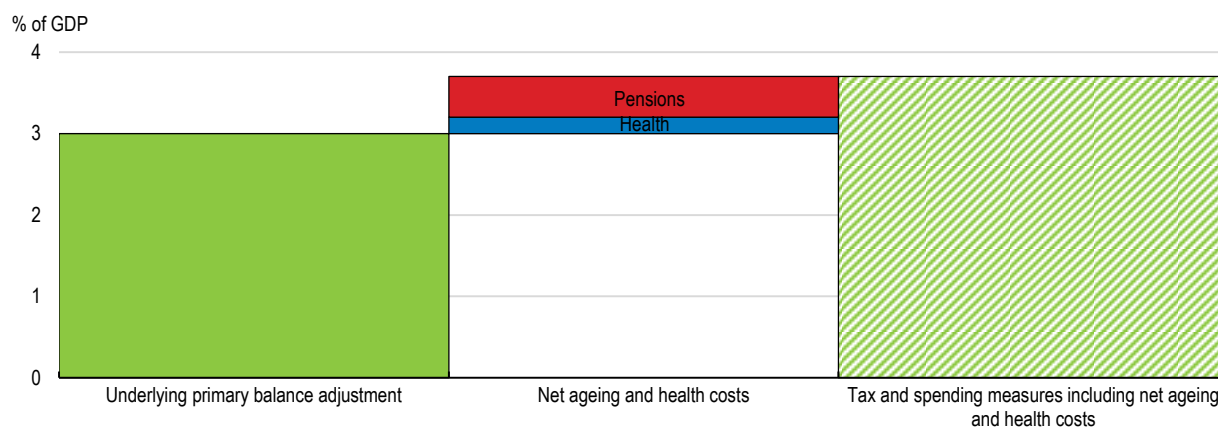
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2.4. Putting debt on a more prudent path will involve more revenue and less spending

Putting the United States on a more prudent fiscal path over the long term will require a significant fiscal effort to align spending and revenue. The debt ratio could be stabilised around its current high level by undertaking a fiscal adjustment over 5 years, eventually improving the fiscal balance by about 3.5 percentage points of GDP compared to the baseline, with most of the adjustment reflecting a narrowing of the structural deficit and other adjustments to further offset expected rising costs in the future (Figure 2.22). With rising interest rates, the real interest paid on federal debt is expected to slowly rise over time toward parity with economic growth absent a change in the deficit path.

The fiscal consolidation should be implemented over a number of years to limit the impact on the economy and could begin to be implemented immediately given the underlying strength of the economy and lingering inflationary pressures (see Chapter 1). A wide range of policy measures will be needed including raising federal revenues—from individual, corporate, a payroll tax that funds Social Security, and estate taxes—and restraining expenditures to help gradually align taxes and spending.

Figure 2.22. Required fiscal adjustment to broadly stabilise debt over the long term



Note: The first green bar represents a fiscal adjustment to broadly stabilise the debt ratio over a ten year window under the current fiscal policies (described in Box 2.2). The blue area in the second column represents projected additional health costs in the next ten years that are not included in the first green bar, and the red area represents additional pension costs that are not included in the first blue bar. The total potential adjustment, then, may be the sum of these columns, shown in light green in the third column.

Source: CBO (2024), OECD Analytical Database, OECD calculations

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Personal and estate tax schedules under the Tax Cuts and Jobs Act are set to expire at the end of the 2025 calendar year, as are some components of the corporate tax schedule, and should prompt action on these measures relatively quickly. Past recommendations in Surveys aimed at reducing inefficiencies in the tax code and restraining public spending should be considered (Table 2.2). Given the required adjustment efforts, any fiscal adjustment package is likely to include some measures that impose costs on the economy, but may also help to ensure that demand remains on a steady path which could avoid a more dramatic correction at a later point. The United States has successfully undertaken a fiscal consolidation of a similar magnitude during the 1990s, eventually running primary surpluses for several years until the year 2001 (Figure 2.5).

Table 2.2. Past fiscal recommendations and actions taken since the previous Survey

| Past recommendation | Action taken since | Recommended in this Survey |
|--|--------------------|---|
| Eliminate itemised deductions | | Retaining the TCJA limits on itemised deductions after TCJA sunseting. |
| Change treatment of capital gains from inherited assets | | Included in these recommendations again. |
| Use chained CPI (in place of headline CPI) to index Social Security and other benefits | | Included in these recommendations again. |
| Raise the full retirement age in Social Security | | Proposed partial indexing to life expectancy, or lower benefits for some high income beneficiaries. |
| Raise revenue and promote spending efficiency to stabilise the debt ratio. | | Detailed plan included here, including main recommendations from past. |

Source: OECD (2022)

2.4.1. Reforms to the pension system could increase its sustainability

Social Security spending represents 22% of total federal government spending, primarily on retirement pensions, and will rise as the population ages, but there is scope for savings to make the system more sustainable. The system is designed on a pay-as-you-go basis, but has benefitted from a trust fund built up in earlier years that will run out in a few years (Box 2.9). This will lead to a question about whether to reform entitlements or raise revenues, either by raising the payroll tax earmarked for Social Security or through general taxation.

Many OECD countries have raised the minimum retirement age to improve sustainability, including the United States where the full retirement age has been gradually rising towards 67 by 2025, though reduced benefit pensions are still available at age 62. Continuing raising the retirement age beyond 2025 to reach a higher level would reduce pressure on the Social Security system. For example, an increase in the retirement age by 8 months for every one-year increase in life expectancy would result in future workers collecting benefits for the same share of their lives as present cohorts. Alternatively, phasing in an increase to age 70 for the full retirement age could save on future system expenditures, though most of these savings would not begin immediately (CBO 2023d). Full retirement age in the United States is already above the OECD average, and an increase to age 70 would put the United States near the top of planned retirement age even with below average benefits (OECD Pensions 2021). Increases in the retirement age in other OECD countries are often implicitly or explicitly tied to increases in life expectancy (OECD Denmark Survey 2024). However, life expectancy in the United States is not higher today than a decade ago, so the expected budgetary benefits may not be immediate and upwards only indexation might be warranted. Distributional concerns with large differences in mortality by income and wealth require some caution in raising retirement ages, for example by allowing retirement at the current retirement age for those with long contribution histories, who are typically people who started work young and have lower life expectancies because of their employment and social profile.

Box 2.9. Social Security and Medicare funding

The United States funds an old-age pension (Social Security) and health insurance plan (Medicare) with a payroll tax. Nearly all workers contribute to the **Social Security program**, and workers with 40 “Covered Quarters”—a quarter of work with more than a minimal amount of earnings—become insured by the program. Benefits increase with the amount paid into the system, and the monthly benefit is a function of the average monthly earnings over the 35-year period of highest earnings. The program ensures the highest return on contributions comes from lower-income contributors, and under current law the Social Security benefit replaces 90 percent of the first approximately \$1,000 in average monthly earnings, 32 percent of the next \$5,000, and 15 percent of the remaining, up to a limit. A current beneficiary with median lifetime earnings could expect about a 42% earnings replacement rate, while beneficiaries at the highest end could expect about a 28% replacement rate and those near the poverty line could expect a nearly 80% replacement rate (Burkhalter and Chaplain, 2023).

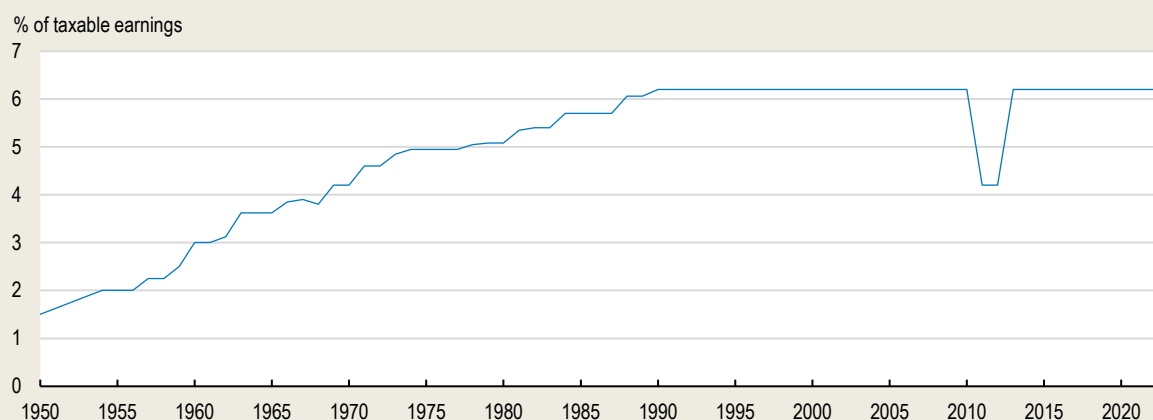
The current **Medicare program** covers a variety of health treatments for beneficiaries aged 65 or older. The largest is “Part B,” which covers health provider office visits, and Parts A, C, and D cover hospitalisation, additional private coverage, and prescription drug benefits respectively.

Currently, the payroll tax that funds Social Security stands at 15.3 percent of payroll with contributions split equally between employers and employees. Of the 15.3 percent, 12.4 percent funds the Social Security program—the Old Age and Survivors Insurance and Disability Insurance program, or OASDI—and the remaining 2.9 percent funds the Medicare Hospital Insurance program (HI).

Both programs were created on a pay-as-you-go basis, whereby contributions to the program contemporaneously fund the current beneficiaries of the program. Changes to the contributions have evolved since inception, though the most recent change to payroll tax rates occurred in 1990, the last in a gradual increase in payroll tax rates that was legislated in 1983 (Social Security Administration, 1983) (Figure 2.23).


Figure 2.23. Employee payroll tax rates to Social Security have not increased since 1990

Social security tax paid by employees



Note: Employees typically pay half of the total payroll tax, with employers contributing an equal share. Currently, employees pay 6.2 percent of earnings to OASDI and 1.45 percent to Medicare-HI.

Source: Social Security Administration (2023).

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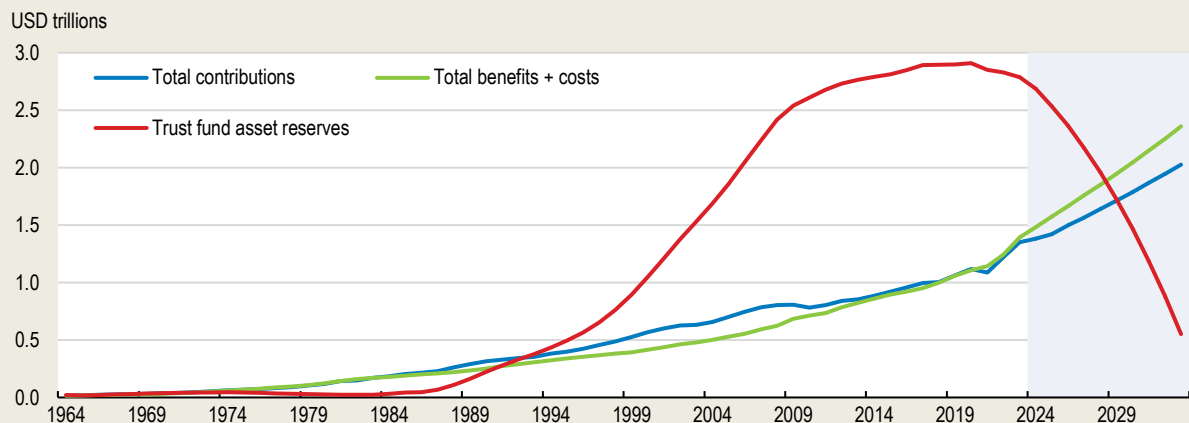
A 1983 reform of Social Security brought forward some scheduled payroll tax increases and increased “full retirement age” from age 65 to age 67, somewhat above the current OECD average, in a graduated change for future retirees born after 1955 (Greenspan Commission Report of the National Commission on Social Security Reform, 1983). These changes allowed the programme to collect more in revenue than it paid out, with the excess set aside in a “trust fund” pre-funding to ensure adequate payroll tax funding as the population ages. Beneficiaries that wait until age 70 to claim receive a 24% increase in benefits, relative to the age 67 benefit.

The trust fund purchases special US Treasuries: the excess revenues are deposited in the Treasury General Fund and the Social Security trust funds has a claim on these US Treasury securities. “The trust fund balance represents the amount of money owed to the Social Security trust funds by the General Fund of the Treasury” (Congressional Research Service, 2023).

From 2021, the amount needed to pay out beneficiaries exceeded the amount of incoming payroll taxes, leading the trust fund to wind down its assets. This amount of saved excess payroll tax is enough to cover full benefits until approximately year in 2035 (Figure 2.24).


The Social Security system is only authorised to pay benefits using current or accumulated payroll taxes under the Anti-deficiency Act. Once the trust funds are exhausted, the Social Security system would revert to a full pay-as-you-go system. However, incoming payroll taxes would only be enough to pay about 75-80% of full benefits. Under the Social Security Act, beneficiaries are entitled to their full benefits. It is unclear how this situation would be managed given the different legal requirements or in practice.

Figure 2.24. Social Security trust fund reserves are scheduled to be exhausted in 2035



Note: The figure above combines the OAS and DI trust funds. After trust fund exhaustion, reduced benefits—most likely 75-80% of the full benefit amount—are expected with the system reverting to a full pay-as-you-go system.

Source: Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds (2024).

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Another approach to reducing costs would reduce Social Security benefits for higher-income retirees to raise the sustainability of the system overall, who are likely to have private pensions and significant wealth. Higher income beneficiaries have tended to live longer than lower-income beneficiaries, and life expectancy gains for high income beneficiaries in excess of gains for lower income beneficiaries has led to a growing wedge in expected benefits for these two groups (Goldman and Orzag, 2014; Sabelhaus 2023). A reduction in benefits for higher income beneficiaries can also reduce this growing inequity in the system. However, the savings will vary with how many workers' benefits are affected and how aggressively the benefits are curtailed (see Box 2.9 for information on replacement rates). A future benefit reduction

that reduced the top marginal replacement rate on lifetime earnings from 15% to between 5% to 10%—which would affect the top 30% of earners (CBO 2023c)—and phased in over 9 years, would reduce the deficit by 15 billion by the last year of the phase-in. If benefits are curtailed for the top 50% of earners and phased-in over 5 years, the plan would reduce the deficit by about \$60 billion (CBO 2023c).

Spending on the main entitlement programs including Social Security could be more cost-effective if cost of living adjustments (COLAs) were made consistent with COLA adjustments for the rest of the tax code. Benefits for these programs are adjusted annually according to the based-weighted US Consumer Price Index (CPI), even though the chained CPI is used for most indexing in the US tax system (CBO 2023c). This may tend to raise the value of pensions in real terms over time as households substitute between products. Indexing Social Security benefits along with Medicare benefits to the chained CPI, as recommended in the 2022 United States Survey (OECD 2022), could save more than \$250 billion over ten years (CBO 2023c). Overall, either system of indexation to prices over time implies a fall in the value of pensions relative to wages. While reducing fiscal costs relative to GDP, this would over long periods lower replacement rates and could lead to pressures for additional government spending on welfare supports for pensioners on low incomes.

Raising revenue could help to pay for the higher number of recipients of Social Security pensions: the OASDI payroll tax rate was last changed in 1990, as the last of a graduated set of payroll tax increases initiated in 1983 (Figure 2.23). The payroll tax that funds the OASDI Social Security program is a flat tax (Box 2.9) that applies to all wages up to a capped maximum amount, is just under \$169,000 in 2024 and adjusted for inflation annually. The payroll tax rate in the US is below the OECD average for public pension funding and many OECD countries with low payroll tax rates have no taxable cap. About 5-10 percent of earners have total earnings above the taxable maximum. Increasing the payroll tax by 1 percentage point, increasing the maximum taxable earnings that are subject to Social Security payroll taxes, and using chained CPI for the cost-of-living benefit increases is estimated to close about 88 percent of the current shortfall in Social Security funding 75-years ahead and allow it to remain solvent until 2078 (Committee for a Responsible Federal Budget, 2021).

The accumulation of the Social Security Funds has helped maintain the full funding of the system for a prolonged period, although it is now coming to an end. The Social Security system assesses its financial status across a 75-year funding window, but there is no requirement to pre-fund it. Adding additional funding has helped fully fund the system in the past. There would be a case to consider pre-funding it again, raising contributions or adjusting benefits to maintain solvency for a prolonged period to anticipate increasing numbers of claimants in the future. The funds could continue to be used to reduce market funding requirements by investing in Treasury securities or through investments in financial markets. The Canada Pension Plan is designed to be solvent at a rolling 75-year horizon and has built up large reserves that are invested in financial assets (OECD Pensions at a Glance 2021, Chapter 2).

Box 2.10. The federal government role in health care

While much of US healthcare is privately provided, the government plays a large role in financing healthcare directly through Medicare and Medicaid reimbursements and indirectly through favourable tax treatment of many private health insurance contributions.

The **Medicare program** offers primary care, hospitalisation, and prescription drug health benefits for beneficiaries, mainly those aged 65 or older. Medicare beneficiaries may opt for traditional Medicare, where the federal government pays medical providers for medical service in a fee-for-service (FFS) structure, or may opt for a private health plan, called Medicare Advantage, where Medicare pays a private health plan provider, who then assumes responsibility for providing Medicare benefits to the beneficiary.

The base prices for the traditional Medicare FFS are set annually by the Centers for Medicare and Medicaid Services (CMMS) through a combination of laws and regulations (CBO 2022). The final price for hospital and physician services are modified for geographic differences, intensity of services, and other factors. While prices have risen, the price setting in the Medicare FFS market has allowed prices to grow more slowly in the 2010s than in the commercial market, which mostly operates on a FFS basis (Figure 2.25, CBO 2022). Prices are set in the US private commercial market by negotiations between insurers and providers, though the process is opaque and are often undisclosed trade secrets. The increase in private health prices feeds into the costs of publicly-provided health care as they are an input into the annual revision to Medicare's base prices (Rakshit et al 2023).

Medicaid is a means-tested government health insurance program for those with low incomes, with two-thirds of the funding coming from the federal level, though with the programs operated by each US state. Coverage can vary across the states depending on the amount they contribute. Most overall spending goes to Medicaid managed care organisations (MCOs), who organise care for Medicaid beneficiaries, with less than 25% of funding going to FFS plans. The federal government ensures that Medicaid plans meet basic minimum requirements, and states are refunded in full up to a statutory cap. Medicaid repayment rate in FFS are usually lower than private health insurers, which contributes to lower cost growth relative to private plans (KFF 2023).

The **federal tax code** allows employer contributions to employer-sponsored insurance (ESI) to be excluded from income and payroll taxes. This income exclusion is uncapped and benefits those on higher incomes more by achieving greater reductions in their tax liability for given plan, while also benefitting from being able to access costly plans. The average ESI exclusion from a family is over USD 20 000 per year.

2.4.2. The government could do more to improve cost-efficiency of the exceptionally costly healthcare system

Health expenditures in the United States are the highest in the OECD on a per-capita basis (Figure 2.18), mostly because health prices are relatively high. Medical prices in the United States are high for a variety of reasons. First, prices in private health plans have grown much faster than inflation and much faster than other government-provided health plans. Half of health coverage in the United States relies on these private health plans, and most use fee-for-service (FFS) payments, which also encourages inefficient treatment along patients' treatment pathways (Anderson et al, 2019). Second, many OECD countries regulate health spending (see Box 2.11) when relying on fee-for-service health payments, but the United States does very little to determine prices. Third, pharmaceutical prices are very high compared to other OECD countries, even with relatively high use of generics, and there is little regulation of prices (OECD Health 2021). Purchasing is typically done by pharmacy benefit managers and consolidation in the industry

has weakened competition (Mattingly et al 2023). The largest government-provided health programs have been barred from negotiating drugs prices, although the Inflation Reduction Act (IRA) granted limited pharmaceuticals drug negotiation to Medicare to begin in 2023 and 2024. Fourth, there is increasingly a lack of competition in hospital, primary care and state health insurance markets that leads to higher costs (CBO 2022). Finally, around 8% of the population are uninsured, a level which is at historic lows after the Affordable Care Act broadened the population eligible for Medicaid but is still among the highest in the OECD (OECD 2023). Lack of coverage leads to higher costs and complicates public health management, including in the management of the opioid epidemic, obesity, and in the development of preventive healthcare.

Changes in federal tax policy can increase efficiency and cost effectiveness of health spending, while removing one of the largest tax expenditures in the personal tax code. Health care spending per capita in the private health insurance market has grown faster than government-provided health care (Figure 2.25). The United States tax code subsidises these private health plans by excluding the amount of personal and employer contributions to health plan coverage from the federal income tax system. These employer-provided plans are often generous in services and have lower cost sharing properties than other plans (CBO 2023b). This tax exclusion for employer-sponsored health insurance plans is one of the costliest tax expenditures (Tax Policy Center 2024) and is also regressive, with more generous plans often selected by higher-income workers (CBO 2023b). Ending this subsidy for most workers could build pressure to slow health price increases. A proposal to limit the favourable tax treatment to only plans below the current median cost could raise 0.3 percent of GDP in revenue and can exert further downward pressure on prices as individuals search for less expensive options.

The federal government also has a large direct role in providing health insurance and increased efficiency and cost effectiveness should be a priority in its direct provision of health care. The price of medical care for both Medicare and Medicaid are more regulated than the private market, and spending per enrollee has grown at a slower pace than private health plans in the United States (Figure 2.25). During this time, traditional Medicare has shifted away from the fee-for-service (FFS) model and toward a value-based health care model, where payment is dependent on health outcomes rather than health services as in the capitation model of funding (see Box 2.10). Early estimates show that these programs may keep costs down (Commonwealth Fund 2023b). Plans to shift nearly all remaining traditional Medicare and Medicaid spending to these value-based plans would likely generate further spending efficiencies with better health outcomes.

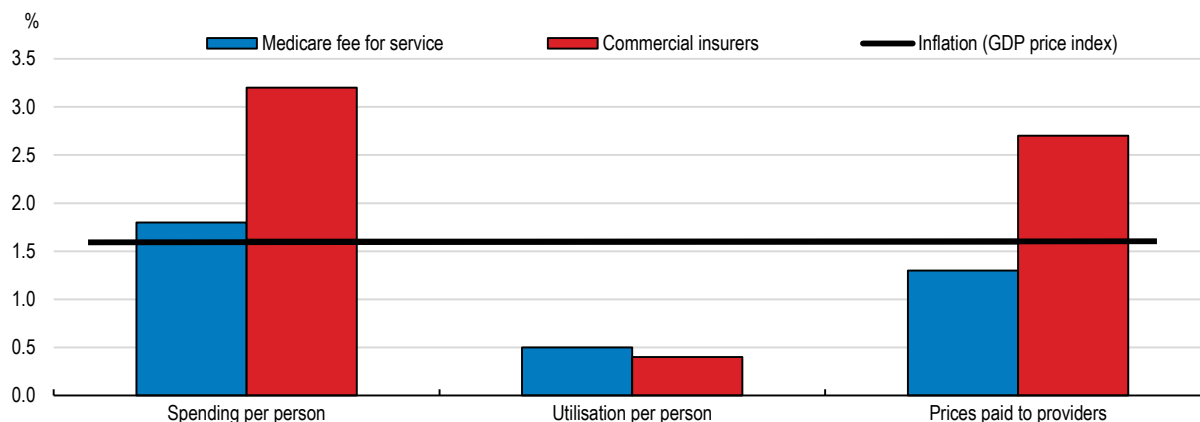
Further spending efficiencies can be targeted in Medicare Advantage, the private option for beneficiaries (see Box 2.10). The federal government pays Medicare Advantage plans an average of 4 percent more than it would cost the traditional Medicare program to cover a similar beneficiary (CBO 2032b; Medicare Payment Advisory Commission, 2022). Enhancements to the competitive bidding process for Medicare Advantage can also yield further cost savings (Lieberman, et al 2018)). Increasing Medicare Part B premiums—the amount that beneficiaries spend on monthly coverage—can help slow federal spending on Medicare, and shifting these costs to beneficiaries may also serve as a brake on health costs (CBO 2023b). The federal government could further slow their health expenditures through a reduction in federal payments to graduate medical education at teaching hospitals (CBO 2023c) and by shifting more costs to Medicare beneficiaries who enroll in supplemental Medigap insurance (CBO 2023c).

High health prices add to the fiscal costs of providing health care, with two-thirds of the projected Medicare federal health expenditure increase due to per capita health costs growing in excess of per capita GDP, while population ageing accounts for one-third (CBO 2023). Policies to reduce the cost of medical care in general, then, will reduce the fiscal cost of health. Federal health spending is expected to grow by 1.0 percentage points of GDP over the next decade, with about 0.67 percentage points of that increase due to excess cost growth. If Medicare spending continues to grow around the pace of inflation, much of that excess cost growth could be saved (Figure 2.25).

Cost savings can be achieved by expanding the ability of the federal government to negotiate on prices of prescription drugs. As part of the IRA, 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 (0.7% of GDP) over a decade, though the number of pharmaceuticals eligible for price negotiations is restricted (CBO, 2021c). The authorities should expand the number of drugs subject to negotiation by Medicare, after monitoring the impact of the recent changes on prices and pharmaceutical innovation, for more cost savings for the have the potential to limit the costs of both federal and private health insurance. This should lower prices and excess profits in the pharmaceuticals industry. Direct negotiation is an important part of constraining drug price growth in other OECD countries (Box 2.11).

Competition in health markets should also be enhanced, as industry consolidation has served to push up health care prices in the United States. The share of US hospital and physician markets that are highly concentrated has increased since 2010, and increased concentration is associated with less price competition (CBO 2022). As noted in previous surveys, 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).

Figure 2.25. Spending growth is stronger in private markets than in Medicare, 2013-2018



Note: This figure compares spending growth in Medicare's FFS program with health spending growth in the private commercial market, which are also mostly FFS providers. Spending grew at 1.8% annually for the Medicare FFS program from 2013-2018 (left blue bar), about the rate of inflation as measured by the GDP price index (black line). Most of the spending growth was from prices paid to providers (1.3 percentage points of the 1.8), with increased health utilisation accounting for the other 0.5 annualised percentage point increase. In contrast, health spending in the commercial market increased at a 3.2% rate, twice the rate of inflation (left red bar). Most of the increase is due to prices paid to health providers (2.7 percentage points of the 3.2), and prices paid grew much faster than inflation.

Source: CBO (2022).

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Box 2.11. There are many different ways OECD countries manage the interaction of public and private health insurance and provision

Among those with health insurance in the United States, about half of the population are enrolled in private health plans - often employer-sponsored - with federal plans such as Medicare and Medicaid covering most of the remaining half (see Box 2.10). In the United States, the incentives for fee-for-service and third-party billing provide upward pressure on health prices. Competition policies have often been considered to help drive prices down, along with forms of managed care and value-based care in the public health programs.

Among other OECD countries, Germany and France are two examples that have a mix of public and private health insurance coverage and fee-for-service payments, but manage to keep health costs lower than in the United States. Both generally do so by engaging in direct negotiations with representatives of medical providers. In Estonia, medical services prices are regulated in a different way that is more similar to value-based care options now being applied in some US public health programs.

In Germany, health insurance is compulsory and about 90 percent are covered by public statutory health programs (SHIs), and those earning above an income threshold are eligible for private health insurance (PHI) coverage. Public health programs are mainly funded through a payroll tax, and individuals can choose from over 100 sickness funds in the SHI national health exchanges. Prices and quantities of health service are set in annual negotiations between the sickness funds and associations that represent medical service providers. There are no copayments for most routine visits, but capitation rules in the SHI programs reduce the incentive to treat patients above the capitation thresholds. Average per capita spending on health is the highest in the EU, though considerably lower than in the United States. Drug prices are negotiated bilaterally between the public health programs and the manufacturer, and the price is determined, in part, by the incremental benefit of the drug (Robinson et al 2019).

In France, there is nearly universal health coverage through public SHIs, and the coverage is funded by a mix of payroll taxes, income taxes, along with other taxes and state subsidies. There are many public SHIs, though the type of employment situation governs the SHI plan. PHIs are mainly complementary to the SHIs, offering dental and vision coverage where the SHIs have gaps, and offering other payment billing assistance. Nearly all individuals in France have a PHI. French medical providers are often reimbursed in a fee-for-service system and the SHIs do not compete against each other. Health care cost sharing via copayments or other fees for medical visits is typical, as in the United States. France has controlled costs by engaging in price negotiation with unions representing medical providers, though without regulations on quantity, and has also used central purchasing by the government to control costs. The price of a new drug in France is determined in direct negotiation between the government and the manufacturer, and is partly determined by its medical benefit relative to similar drugs. Drug prices are also capped in subsequent years (Commonwealth Fund, 2019).

Estonia funds a health care system with a social contribution tax. The governing body of the health system contracts with primary care physicians to provide medical services these medical providers are paid largely by capitation payments, whereby payment is given prospectively to providers to manage care for a set of patients, while contracts with hospitals are based on activity and diagnosis-related groups (DRGs). These both serve to control costs and provide incentives to treat patients in a cost-effective way and avoid overtreatment. While most payments in the United States health system are based on retrospective fee for service payments, some of Medicare's value-based health plans provide payments in a similar capitation form.

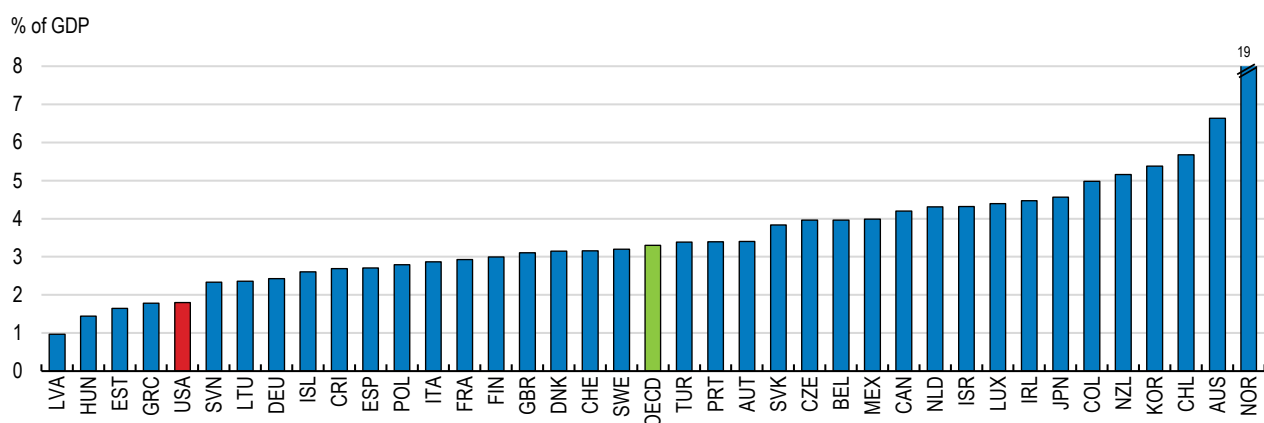
Source: Gusmano et al (2020), Commonwealth Fund International Health Care System Profiles (2023), Estonia Survey (2024).

2.4.3. Corporate and business taxes now raise very little revenue

Corporate tax revenue as a share of GDP in the United States is among the lowest in the OECD (Figure 2.26). As part of the 2017 Tax Cuts and Jobs Act (TCJA) legislation, the federal statutory corporate rate was reduced from 35 percent to 21 percent (see Box 2.12). In the two decades prior to the TCJA, federal corporate tax revenue averaged 2% of GDP but federal corporate tax revenues fell to 1% of GDP after the TCJA, even as corporate profits as a share of GDP increased and corporate tax revenues in other OECD countries stayed about level (OECD 2023). Increasing taxation of profits and corporations has been identified as a good avenue to raise additional revenues in the United States to support public spending (Cournède et al 2014). An increase in the statutory federal corporate tax rate in the United States to 28 percent—halfway between the current and the prior rate—has been suggested as a way to help ease fiscal pressure, with the increased rate expected to raise more than USD 1 trillion in revenue, or 0.5 percent of GDP per year (Clausing and Sarin, 2023; Furman, 2020; Zidar and Zwick, 2023; US Treasury 2023).

Figure 2.26. Corporate income tax revenues in the United States are among the lowest in the OECD

2022



Note: Data includes both federal and sub-national corporate taxes.

Source: OECD Corporate Tax Database.

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The impact of corporate tax on investment is complex and nuanced (Hanappi et al., 2023), and US states often levy their own corporate tax, so changes in the federal rate should be monitored to ensure tax competition between states does not intensify. Applying a lower rate to a broader base should minimise economic distortions, but changes to the corporate sector—both due to the rise of pass-through corporations and due to rising market concentration—have narrowed the tax base over time. Still, corporate taxes can be an efficient revenue source, especially when levied on excess profits and economic rents, rather than normal returns to capital (Clausing 2023, Clausing and Sarin, 2023; Furman, 2020). Recent evidence suggests that about 75% of the United States corporate tax base is attributable to excess returns (Power and Frerick, 2016).

The corporate tax can also increase the equity of the tax system. Raising more revenue through taxes on profits shifts the burden to wealthier people under standard incidence assumptions, as they are more likely to hold assets and receive profits (Cronin et al 2013). In the United States, more than 80 percent of corporate equities and mutual funds are held by the wealthiest 10 percent of families (Aladangady et al 2023). Reductions in the corporate tax rate are regressive, but are often justified on the grounds that a tax is levied both on the entity (through the corporate tax) and then on the investor through individual level taxation of dividends and capital gains. But more than 70% of US corporate equities are held by tax-exempt entities, foreigners, or in tax-advantaged investment accounts such as 401(k)s, meaning that the entity-

level corporate tax is the only level of taxation (Burman et al 2017). Further, many of the non-tax-advantaged holdings are never taxed due to carve-outs in United States estate tax laws, which allow accrued unrealised capital gains to be wiped out when an estate passes these assets to the inheritors. Taxing capital at the entity level helps alleviate these concerns.

The corporate base in the United States is relatively narrow, with the largest 2,000 corporates accounting for about 83 percent of the tax base and rising over time (SOI 2020). The corporate tax base has narrowed in part due to a two-track system that allows firms to choose either incorporating as a C Corporation—and subject to corporate tax—or as an S Corporation, subject to individual taxation as a pass-through business (Zidar and Zwick, 2020). Firms often choose the option that yields the lowest expected tax burden, and the S Corporation pass-through option is widely used (Furman, 2020; Priszano and Pearce, 2018). This two-track system also serves to introduce complexity to the US tax code and removing this two-track system for large corporations would simplify the system and broaden the corporate tax base, raising additional revenues (President's Advisory Panel on Federal Tax Reform, 2005).

United States companies have extensive overseas operations and foreign direct investments, earning large profits abroad. The 2017 Tax Cuts and Jobs Act (TCJA) introduced several changes to international business taxation in the United States (see Box 2.12). Until then, the United States operated a worldwide corporate tax system, taxing profits of US companies wherever they arose and taxing the profits of US-owned foreign companies when such profits were distributed or realised through a disposal of the shares in the foreign company. As part of the reforms introduced under the TCJA, the United States moved towards a territorial tax system. The TCJA introduced a tax on the global intangible low-taxed income (GILTI) of controlled foreign companies (CFCs) to ensure that the US shareholder was subject to a minimum level of tax on the total profits of its CFCs. At the same time, to protect the US domestic corporate tax base, the 2017 TCJA introduced the Base Erosion and Anti-Abuse Tax (BEAT) to ensure that the tax benefit resulting from payments between US companies and their foreign affiliates would be limited to a certain amount. At the same time, a lower tax rate was introduced for the foreign-derived intangible income (FDII).

Many of the TCJA provisions concerning global taxes could be updated to the benefit to United States businesses (Furman, 2020). The minimum tax rate for US Corporations on GILTI is currently 10.5% (resulting in a 13.125% rate for the US owner of the CFC after adjustments have been made for foreign tax credits) and is set to rise to 13.125 percent after 2025 (resulting in a 16.4% rate after adjustments for foreign tax credits). The US tax rate on GILTI is currently lower than the 15 percent minimum rate under the Global Minimum Tax agreed as part of Pillar Two of the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy agreed by more than 140 member jurisdictions of the OECD/G20 Inclusive Framework on BEPS. The GILTI also has a different scope and calculation mechanics to the Global Minimum Tax. In particular, GILTI aggregates all the income and taxes of all CFCs controlled by the same US Shareholder allowing profits from high-tax and low-tax jurisdictions to be blended together (i.e., global blending) for the purpose of the GILTI tax calculation. The Global Minimum Tax, on the other hand, adopts a jurisdictional approach, which ensures that the profits arising in each jurisdiction are separately tested and subject to the minimum rate at the jurisdictional level (i.e., jurisdiction blending). Therefore, US multinational corporations may face extra taxes from foreign countries where they do business in jurisdictions that adopt the Global Minimum Tax (OECD 2021). US administration proposals dated 11 March 2024 seek to address this problem by taking steps to bring the GILTI into line with the design of the Global Minimum Tax rules (US Treasury 2024c). Aligning US corporate minimum taxes with the Global Minimum Tax would ensure that US multinational corporations are not subject to additional minimum taxes in other jurisdictions and facilitate compliance with other international tax rules. OECD analysis suggests that Pillar Two typically raises corporate tax revenues for high-income countries (O'Reilly et al 2023). Further, among base-narrowing tax expenditures, the largest on the corporate tax code apply to earnings of controlled foreign companies (CFCs) and equipment depreciation (OMB 2023). Aligning the CFC rules with the Global Minimum Tax could narrow the tax expenditure in respect of large MNEs in a

way that also produces synergies in terms of compliance. Narrowing the tax expenditure related to equipment depreciation, however, may have implications for investment in tangibles assets by US companies.

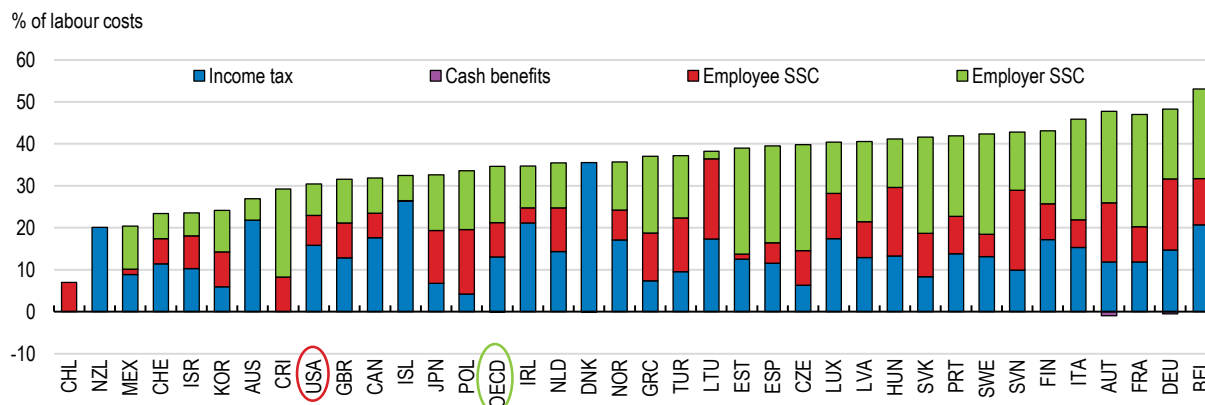
2.4.4. There is room to increase the taxation of individuals, particularly high-income and wealthy people

Individuals in the United States are taxed on their wage and nonwage income, and a separate payroll tax on wage income funds the Social Security and Medicare programs (see Box 2.9). The individual tax code levies taxes on income, including wage compensation, capital income including dividends, realised capital gains and interest, business profits on private “pass-through” businesses, rental income, most pensions, and income from trusts (JCT 2019). The individual tax code allows some exclusions and gross income does not include some income categories, including employer contributions to employer-provided health insurance. Married couples typically file jointly, while unmarried individuals typically file their own tax return. Tax rates, brackets, and other details are found in Box 2.12. Taxes on individual income, including income tax, are substantially lower than the OECD average and most EU countries, although similar to levels in Australia and Canada (Figure 2.27). The tax code has been revised several times in the past decades, often in a regressive fashion (Figure 2.28; Gale and Orzag, 2004; Gale, 2019). The expiry of TCJA individual tax changes in 2025 creates the opportunity to reform the individual tax code. The individual tax code should be revised to curtail the use of tax expenditures, widen the base, and limit deductions.

One of the largest tax expenditures – an income source taxed at a lower rate than regular income – in the individual tax code falls on long-term capital gains and qualified dividends (Tax Policy Center 2023). Currently, these income sources are taxed at no greater than a 23.8% rate, even as regular income can be taxed up to a 37% marginal rate. Increasing tax rates on qualified dividends and long-term capital gains and ending the stepped-up basis on long-term capital gains will help equalise taxation across the income distribution and reduce the incentive to retain capital gains, as suggested in past Economic Surveys of the United States as well as by other institutions (OECD 2022). Qualified dividends and long-term capital gains from equities are also subject to the corporate tax. An increase of 5 percentage points in the rate on qualified dividends and long-term capital gains – on top of a 7-percentage point corporate income tax rate increase – should lead to a tax rate on these income sources close to the top marginal rate for regular individual income (Clausing and Sarin, 2023; CBO 2023b; US Treasury 2023). Further, capital gains are taxed only when realised (usually at sale) and the tax is levied on the difference between the market value and the costs basis (the amount that the asset was bought for). However, when an appreciated asset is bequeathed through inheritance – with capital gains yet to be realised – then the current tax law allows the cost basis to be “stepped up” to the current market value, effectively eliminating that tax from being collected. The current tax code, thereby, helps increase wealth inequality and intergenerational inequalities, as wealthy families can pass down assets never subject to income tax, while less-wealthy individuals pay income tax on realised capital gains as they spend down their assets during retirement.

Figure 2.27. Income tax plus employee and employer social security contributions

Average tax wedge, single individual without children at the income level of the average worker, 2022



Source: OECD Tax wedge decomposition database.

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The United States estate tax base has slowly been eroded by successive tax changes to the amount of assets that are exempt from estate taxation. In 2001, individuals were exempt on the first USD 0.7 million in assets, and more than 2% of deaths in the United States yielded a taxable estate (Penn Wharton Budget Model, 2022). By 2020, individuals were exempt on the first USD 11.4 million in assets, and only 0.04% of deaths resulted in an estate tax filing. At the same time, increases in wealth and changes in demographics should have led to an increase in taxable estates and tax revenue (Penn Wharton Budget Model, 2022). Reverting the estate tax exemption amount to USD 3.5 million (the 2009 exemption level) would raise considerable revenue (Clausing and Sarin, 2023; Zidar and Zwick, 2020). By allowing the expanded exemption amount in the TCJA to expire, the amount exempt from estate taxation would drop to USD 5.5 million (in 2017 USD) per individual.

High-income owners of private pass-through businesses have been subject to lower and uneven tax rates for investments and profits, where profits from these businesses are often a mix of labor and capital income (Smith Yagan Zidar Zwick 2019). Owners of these businesses have an obligation to pay themselves a reasonable wage, which is taxed for Social Security contributions; the remaining profits do not face the payroll tax for Social Security contributions, and there are no specific guidelines to determine what a reasonable wage is in this context. Further, a net investment income tax (NIIT) has been levied on high-income filers to help pay for public health care, but, the definition of investment income omits profits from a business that the filer actively operates. The current rules also allow the amount of contributions to the Social Security system to be influenced by the choice of business organisation (S Corporations, LLC, or partnership), with sole proprietors and general partners paying more taxes on business earnings, S Corporation owner-employees paying less, and limited partners often paying no tax to the Social Security system. Broadening the base of the NIIT tax to ensure that all pass-through business income of high-income taxpayers that is not subject to Social Security tax contributions is subject to the NIIT would promote efficient and equitable tax behavior (US Treasury 2023; Clausing and Sarin, 2023; CBO 2023b).

Box 2.12. Tax changes in the 2017 Tax Cuts and Jobs Act (TCJA) and 2025 expiration

The Tax Cuts and Jobs Act (TCJA) of 2017 introduced changes to the corporate, individual, and estate tax code. On the corporate side, the TCJA cut the corporate rate from 35% to 21% and introduced a series of reforms to re-shore corporate profits. The TCJA introduced a tax on the global intangible low-taxed income (GILTI) of controlled foreign companies (CFCs) to ensure that the United States shareholder was subject to a minimum level of tax on the total profits of its CFCs. At the same time, to protect the United States domestic corporate tax base, the 2017 TCJA introduced the Base Erosion and Anti-Abuse Tax (BEAT) to ensure that the tax benefit resulting from payments between US companies and their foreign affiliates would be limited to a certain amount. On the other hand, a lower tax rate was introduced for the foreign-derived intangible income (FDII).

For individuals, the TCJA included a broad-based decrease in marginal tax rates for most families (table) and increased the amount of income exempt from income tax through an increase in the standard deduction. For families with children, the Child Tax Credit (CTC) was increased.

Table 2.3. Tax brackets for taxable income prior to and after passage of TCJA

Tax brackets for married filing jointly tax status

| Under previous law | | Under TCJA | |
|---------------------|------------------------|---------------------|------------------------|
| Rate | Taxable income bracket | Rate | Taxable income bracket |
| 10% | \$0–\$19,050 | 10% | \$0–\$19,050 |
| 15% | \$19,050–\$77,400 | 12% | \$19,050–\$77,400 |
| 25% | \$77,400–\$156,150 | 22% | \$77,400–\$165,000 |
| 28% | \$156,150–\$237,950 | 24% | \$165,000–\$315,000 |
| 33% | \$237,950–\$424,950 | 32% | \$315,000–\$400,000 |
| 35% | \$424,950–\$480,050 | 35% | \$400,000–\$600,000 |
| 39% | \$480,050 and up | 37% | \$600,000 and up |
| Standard deduction: | \$12,000 | Standard deduction: | \$24,000 |

Note: Tax brackets vary by filing status (married filing jointly, married filing separately, head of household, single). This table shows brackets for married filing jointly only. Standard deduction is the amount of untaxed income—at a rate of 0%—allowed under tax law.

Source: CRS (2019)

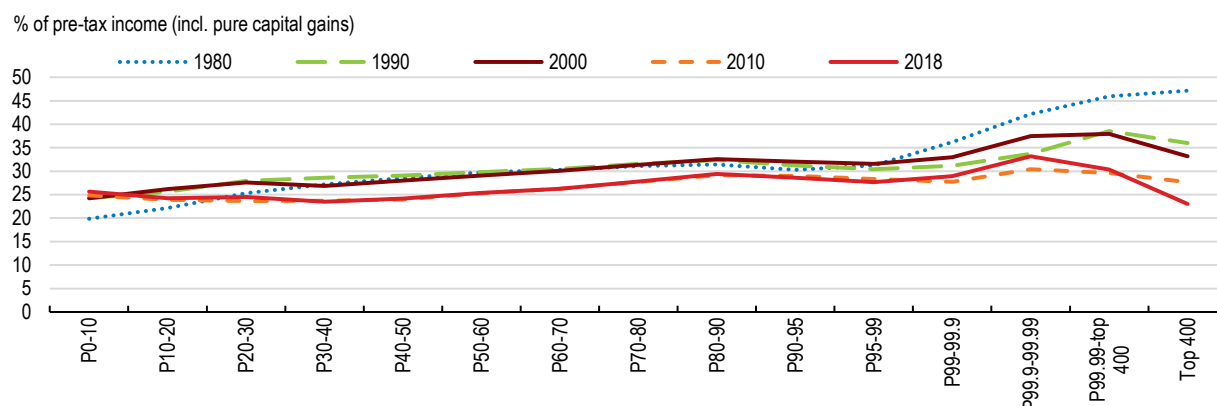
The TCJA, though, also included many provisions that lowered rates for higher-income families through lower tax rates on private business and other capital income. The top marginal rate on profits from pass-through businesses (S corporations, partnerships, and LLCs) could be lowered from the personal marginal rate to closer to the TCJA corporate tax rate via a new 199A deduction. Other provisions limited tax exemptions, with a cap on mortgage interest (for mortgage amounts greater than USD 750,000) and SALT deductions (capped at USD 10,000 per return).

The amount of assets exempt from estate taxation was doubled; previously, the first USD 5.5 million in individual assets were allowed to be exempt from the estate tax while the TCJA doubled that amount to USD 11 million.

Most of the individual and estate tax changes in the 2017 TCJA are scheduled to expire at the end of 2025. The TCJA was passed under special reconciliation rules in the Senate, with a budgetary cost of nearly USD 2 trillion in the ten-year budget window. But passing it in the Senate under reconciliation means that budgetary cost must be recouped in the subsequent ten-year window, hence the sunseting of the individual and estate tax provisions.

Figure 2.28. Average tax rates by income group describe a series of regressive tax changes in the United States between 1980 and 2018

Average tax rates by pre-tax income groups (selected years)



Note: Includes all taxes paid, not just federal.

Source: Saez and Zucman (2020).

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Legislated tax changes due to TCJA measures expiring would raise revenues and reverse some measures that favoured wealthier households

The 2017 Tax Cuts and Jobs Act (TCJA) included a series of temporary tax changes to the individual income tax code and estate tax code that are scheduled to expire at the end of 2025 (see Box 2.12). The expiration of these provisions will mean a tax increase for most families in the United States, but extending some key TCJA provisions can help ease this change for many lower and middle income families, while many of the expiring provisions will help re-broaden the tax base and provide more tax revenue to the federal government to help fiscal consolidation.

Marginal individual tax rates are legislated to revert back to 2017 pre-TCJA levels at the end of 2025 and would add more than USD 2 trillion to revenues over the next 10 years (CRFB 2023a). These scheduled marginal tax rate increases could pressure on lower- and middle-income families. Extending and augmenting two TCJA policies—an enhanced standard deduction and Child Tax Credit—can help ease this pressure. The TCJA increased the amount of income exempt from income tax—the standard deduction—and increasing that amount by USD 2,000 would help ease the re-introduction of higher rates as the TCJA expires. The Child Tax Credit was also expanded in the TCJA and expanding it further through making it fully refundable and indexed to inflation would help families with children. Expanded refundability would help families with lower income or more children, and the CTC would still phase out at higher income levels. Both policies would help fulfil a priority of the 2022 OECD survey: helping the middle class, especially with childcare costs (OECD 2022). Providing this relief to lower and middle-class families in this way would help ease budgetary pressures relative to an alternative of allowing marginal rates to increase only for families earning above USD 400,000. This would lead to only 20% of the gain in tax revenue, as wealthier families would also benefit from the lower tax rates up to the proposed threshold (CRFB 2023a; Clausing and Sarin, 2023).

The TCJA introduced caps on the deductibility of mortgage interest and state and local taxes (SALT) and extending those caps at the end of 2025 would help reduce regressive tax expenditure distortions to the tax code, a priority in past United States Surveys (OECD, 2022a). But, allowing many of the other TCJA provisions to expire would undo much of the regressivity in the TCJA. The TCJA tax changes to pass-

through business profits and the estate tax sunset mainly benefitted the wealthiest families: the majority of the income of the top earning families is derived from pass-through businesses, while for families in bottom 90% of the income distribution pass through business income is a very small share of total income (Zidar and Zwick, 2020; Bricker et al 2020; Clausing and Sarin, 2023). The 199A deduction was introduced in the TCJA to allow owners of pass-through businesses to receive a similar tax cut to the TCJA corporate tax rate. The TCJA also introduced an increase in the amount of assets that are exempt from the estate tax, another regressive tax policy change that is scheduled to sunset in 2025. Prior to 2017, the first USD 5.5 million in individual assets were allowed to be exempt from the estate tax; the TCJA doubled that amount to USD 11 million. Overall, extending the CTC, expanding standard deduction and the Child Tax Credit, together with caps to tax expenditures as described above is revenue-enhancing by about 0.5% of GDP relative to current policies, raising additional revenues (CRFB, 2023a; CBO 2024).

2.4.5. Increased funding for tax administration would increase revenues and be cost-effective

There appears to be significant scope to improve revenue collection. The amount of taxes owed to the US Treasury is estimated to be USD 625 billion dollars less than the amount collected, a gap of more than 2% of GDP (US Treasury 2024, Internal Revenue Service, 2024; Internal Revenue Service, 2023). The gap between the amount of tax collected and the amount owed can be reduced by strengthening tax compliance, but funding for the Internal Revenue Service (IRS) – a department of the US Treasury, and the central tax administrator in the United States – was cut tax by nearly 20% in the 10 years leading up to the 2022 Inflation Reduction Act (IRA) and funding for tax compliance was cut by nearly 30% (Sarin and Summers, 2019), and was under-resourced in staff relative to other OECD countries prior to and during the pandemic (OECD United States Survey, 2022; OECD 2022c). The IRA included funding for tax compliance and for improved customer service (Clausing and Sarin, 2023). However, this funding is earmarked only until the year 2031. The original amount was cut back as part of the Fiscal Responsibility Act, one year after the IRA passed.

Each year, individuals in the United States self-report total income to the IRS and use the tax code to determine how much total taxes are owed on that income. Estimated tax payments are typically withheld from earnings, though not necessarily from income derived from assets, including pass-through businesses. Most forms of income self-reported to the IRS can be verified by linkages to informational data filed by employers, financial institutions, Social Security Administration, and other entities. Up to 95% of this so-called “third party verified” income is correctly reported to the IRS. But other forms of income – for example, from assets sales and pass-through businesses – have tax compliance rates of only close to 50% (Clausing and Sarin, 2023). These forms of income are most commonly realised by high income and wealthy families (Bricker et al 2020), and up to 30% of the measured tax gap is attributable to families in the top 1% of the income distribution (Sarin, Summers, and Kupferberg, 2020). Improving tax compliance would therefore not only raise additional revenue without changing the tax system; it would also strengthen equity by treating complying and non-complying taxpayers more equally and by raising more revenue from wealthier households.

Extending the additional IRS funding beyond 2031 could boost tax revenue by USD 18 billion to USD 85 billion per fiscal year (CBO 2023c; US Treasury 2024, Internal Revenue Service, 2024) beyond 2031, and adding the funding rescinded in the Fiscal Responsibility Act could boost tax revenue by USD 10 billion to USD 26 billion per year (Clausing and Sarin, 2023). Enhancing tax administration was already a key recommendation of the 2022 Economic Survey of the United States (OECD 2022).

2.4.6. Consumption and property taxes are typically at the local level

Unlike most OECD countries, the United States does not use a national sales or value-added tax (VAT). Consumption taxes in the United States are imposed at the state- and local-level as a retail sales tax,

where a portion of the price is collected by retailers and turned over to the local government. These sales taxes represent a much smaller share of total taxes than the OECD average (OECD 2022; Figure 2.21). A federal consumption tax imposed in the United States could raise significant revenue; a 5% VAT could raise between \$2-\$3 trillion in tax revenue over the next ten years (CBO 2023b). These taxes can be designed to be approximately distributionally neutral across the income distribution depending on the base of taxable items changes. VATs are regressive when measured as a percentage of current income, but can be slightly progressive when measured as a percentage of expenditure (OECD and Korea Institute of Public Finance, 2023). A VAT in the United States could be used as a supplement to the current income tax system to raise revenue to fund spending at the federal level, especially if the politics of raising marginal income tax rates could not be overcome (Strain and Viard, 2013).

However, adding a VAT to the United States would be a major challenge politically (Gale, 2020) and a major change to the tax system, which limits its use as a near-term policy lever in any proposed fiscal adjustment. In the case of Canada, the VAT was introduced in the 1986 federal budget and implemented five years later in 1991 (Thirsk, 1987; Gale, 2020). But the prospects for introducing a VAT in the longer-term could be more viable as the United States confronts the growing revenue and spending mismatch at the federal level (Gale 2020, Strain and Viard, 2013).

Property taxes are also generally collected at the state and local levels in the United States, and these taxes often fund local public education and other local amenities. Relative to other OECD countries, the United States collects more property taxes as a share of GDP than most. Most property taxes in the United States are recurrent and collected either annually or periodically throughout the year, with a smaller share coming from taxes on transactions (OECD 2022b). Typically, home improvements need to be approved by the local zoning or building authority; the value of improved properties is typically updated on a regular basis and the value is captured for the purposes of taxation, overcoming challenges faced in other countries. Property taxes are also collected from businesses at the state and local level, which can introduce frictions when property taxes are reduced selectively to attract investment and subsidise existing employers.

2.4.7. Raising climate taxes would raise revenues and contribute to climate goals

Taxing or pricing of emissions can help to raise revenues in an efficient way and contribute to achieve climate and other environmental goals by creating incentives to shift away from harmful modes of production or consumption. As noted in Chapter 1, despite recent progress and major policy initiatives, the United States is not on track to meet its climate goals and pricing and taxation of emissions is low. The United States used tax policy to meet climate goals in the 2022 Inflation Reduction Act (IRA), which authorised tax credits and direct spending in an effort to mitigate emissions and finance electrification.

A carbon tax could enhance the effectiveness of the current IRA (Bistline et al 2024; Climate section). The price set in a carbon tax can induce firms to mitigate, when the price of mitigation is less than the price of the tax. Setting a carbon tax initially at USD 15 per ton of CO₂ in 2025 and increasing up to \$65 per ton in 2035 could lead to total emissions declines of more than 50% by 2035 on top of the emissions reductions already in train due to the IRA (Bistline et al 2024). As noted in Chapter 1, the IRA tax credits have already provided benefits to many communities that would be affected by this tax. This carbon tax could raise nearly USD 600 billion in revenue over this time period, too, a bit lower than estimates of a USD 25 per ton tax in CBO (2023b) or the carbon taxes in IMF (2024b). Such a tax could serve as a bridge to larger emissions reductions as permitting and coordination issues, which may hinder some IRA emissions goals, get worked out (Rhodium Group, 2024).

The United States federal government has imposed an excise tax on motor fuels since 1932 and the revenue helps support the Highway Trust Fund to finance the interstate highways system (CBO 2023c). The current tax is 18.4 cents per gallon of gasoline (24.4 cents per gallon on diesel fuel), and the level of the tax has not increased in nominal or real terms since 1993. The tax levy is lower than in most countries, and often does not raise enough revenue to pay the required maintenance and repairs in recent years. An increase by 15 cents per gallon would be less than the real increase since 1993, but would help induce more climate-friendly choices by US consumers (CBO 2023c). States and localities also tax motor fuels, though at varying rates. In total, the carbon tax and higher excise duties would raise about 0.4 percent of GDP in additional federal revenue. Though carbon pricing can serve to erode some of the existing tax base in motor fuels, recent estimates point to a positive net revenue impact from imposing even a low carbon price in the United States (de Mooij and Gaspar, 2023).

Carbon taxes and fuel taxes can raise issues of fairness, as they may disproportionately impact lower-income and rural households that are more dependent on driving, live in poorer-quality homes and have less income to absorb higher costs. Potential federal government subsidies for households in the bottom 50% of the income distribution could be used to offset the negative effects on these groups, costing about 30% of the expected increase in carbon tax revenue (de Mooij and Gaspar, 2023). Vehicle ownership is common in the US, with about 86% of US households owning a vehicle, though ownership is less likely for lower income households (Aladangady, et al 2022). Offsets can be designed so that they lead to a non-regressive tax (Bento et al 2009). Overall, the amount of revenue raised by such taxes depends on the extent of these government responses (de Mooij and Gaspar, 2023).

2.4.8. A comprehensive package of spending and tax reforms would help to put debt onto a more prudent path

The gradual fiscal adjustment required to broadly stabilise the debt ratio over the long term requires a reduction in the primary balance by about 3.5 percentage points of GDP over the medium term, taken here to be five years (Figure 2.29). This could be achieved by in a number of different ways using different combinations of spending restraint and revenue measures: this is ultimately a major political and social choice for the United States. Drawing on the analysis in this chapter, this Survey proposes an illustrative package of reforms to spending and tax in Table 2.4, which would achieve the necessary adjustment based on recognising social objectives and trade-offs. Reflecting the limited scope to reduce mandatory spending, the package would focus one-third on spending reductions and two-thirds on taxes.

The recommendations are consistent with fiscal adjustment hierarchies identified in Cournède et al. (2014), where corporate taxes, personal taxes, subsidies, and environmental taxes are the preferred candidates for fiscal adjustment in the United States. Further, most of the tax recommendations would make the federal tax system more progressive, which should lead to lower after-tax inequality. Given the scale of the required adjustment, any package is likely to need to draw on multiple instruments to avoid excessively large changes in specific elements. More tax and spending adjustments would be needed to accommodate situations where future spending on defence and climate is higher than anticipated.

While the consolidation should be implemented steadily over a number of years to limit the impact on the economy, the consolidation should begin quickly to increase the fiscal credibility; the consolidation should be front-loaded given the current underlying strength of the economy and lingering inflationary pressures. Changes to corporate tax, personal tax, and estate tax are key instruments and could be phased in earlier in the adjustment. The expiration of many of the personal and estate tax changes under the Tax Cuts and Jobs Act at the end of the 2025 calendar year provides an opportunity to revisit the tax code prior to that date. Changes to the tax treatment of high value employer-provided health plans could be phased in subsequently, allowing time to build downward pressure in the health care market. Funding to shore up Social Security could then be phased in, along with a carbon tax. On the expenditure side, spending restraint should be the immediate priority, while longer term reforms are put in place to lower health and

social security spending on a permanent basis. Health spending restraint in the plan helps keep longer-term health and ageing costs down.

Under this fiscal adjustment plan, the primary balance deficit begins at about 3 percent of GDP and eases to a 0.3 of GDP primary surplus in 2030, with the overall deficit about 2.5% of GDP. Increased ageing costs in the future then gradually bring the primary surplus back to primary deficit in the subsequent years. Future borrowing costs under this fiscal adjustment are lower than in the baseline tax and spending scenario, allowing primary deficits in these future years to increase the debt ratio at a slower pace. At longer time horizons, though, confidence in the forecasts of prevailing interest rates and economic growth is lower, though their dynamics can exert growing influence on the forecasted debt path at these longer time horizons.

Under this fiscal consolidation plan, the government revenue and spending as a share of GDP United States remains relatively low compared to other OECD countries. In 2022, three OECD countries had lower tax revenue as a share of GDP (Mexico, Ireland, and Costa Rica in Figure 2.19) and under the added revenues of a hypothetical fiscal consolidation in Table 2.4, five countries would have lower tax revenues as a share of GDP than the United States. On the spending side, seven OECD countries had lower general government spending than the United States in 2022 (in Figure 2.19), while five would have lower general government spending if the United States cut spending as in Table 2.4. If the United States used only spending cuts to accomplish the fiscal consolidation, there would be only two countries with lower spending as share of GDP.

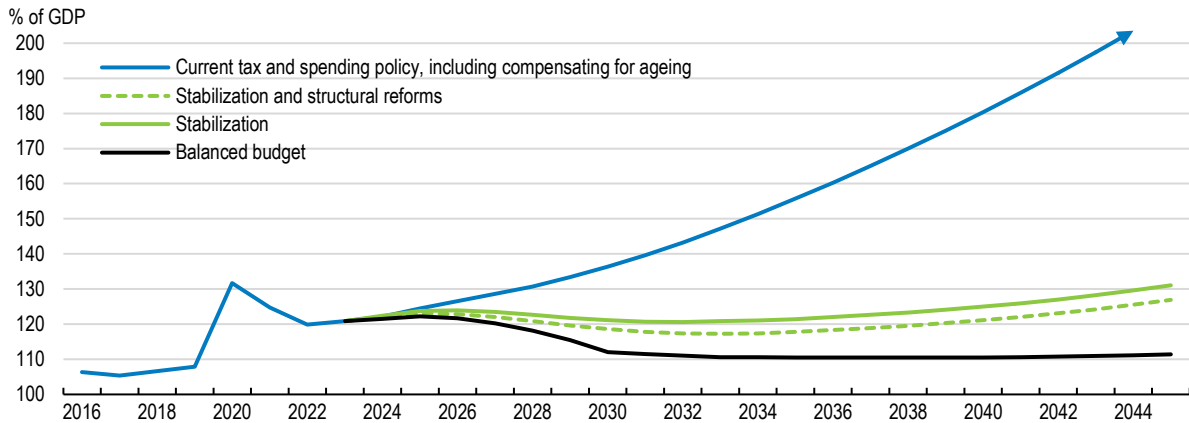
Past experience indicates that both spending and revenue changes should contribute to improvements in the primary balance (OECD 2023c). Though the fiscal consolidation is ultimately a political and social choice, some practical limits exist for spending reductions in the United States. Discretionary spending, which is annually appropriated, represents about 6 percent of GDP in 2030 (Figure 2.16), about half of which is defence spending. A fiscal consolidation of 3 percent of GDP that focused entirely on spending, and which excluded defence and mandatory spending—including Social Security, Medicare or Medicaid—would need to cut nearly all non-defence discretionary spending.

Similarly, constraining the United States to balance the budget over five years—so that outlays including net interest do not exceed revenues—would require a larger fiscal consolidation which would almost certainly require cuts to Social Security, Medicare or Medicaid (Committee for a Responsible Federal Budget, 2023c). Such a fiscal consolidation would return the debt ratio back to levels from the late 2010s, though negative growth effects—unmodeled in Figure 2.29—may undo some of this decrease. Stabilisation of the debt ratio currently requires a smaller primary deficit that the United States currently runs (Figure 2.11) but does not require balanced spending and revenues.

Some of government spending is productive investments which help current and future economic growth. The United States general government public investment is a bit below the OECD average (Figure 2.30), and spending cuts that involve cuts to investment can have longer-term negative impacts on growth. Any fiscal consolidation should ensure that efficient public investment is maintained.

Figure 2.29. Proposed fiscal adjustment can decrease debt ratio in longer run

Adding proposed structural reform from Chapter 1 boosts growth and further decreases the projected debt ratio



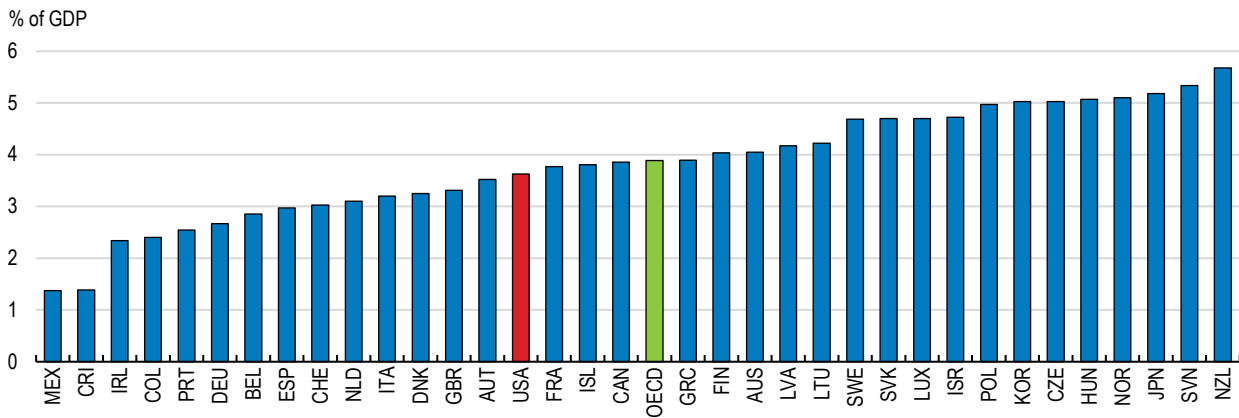
Note: Gross debt ratio, projections based on Box 2.2 and 2.3 and on Table 2.4 fiscal consolidation. Structural reform scenarios is described in Chapter 1. Balanced budget scenario assumes a gradual fiscal consolidation so that the overall federal revenues and spending—including net interest payments—are equal.

Source: OECD calculations.

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Figure 2.30. Public investment should be maintained

2023



Note: Public investment (variable IG) as a share of GDP.

Source: OECD Analytical Database

StatLink <https://stat.link/t9piq8>

Box 2.13. Illustrative fiscal impact of selected reforms

The required fiscal adjustment could be achieved in a range of ways, but the illustrative package of measures below is designed to achieve favourable trade-offs between growth and other objectives.

The package takes into account the cost of additional spending on childcare policies and parental leave, as well as extending the Child Tax Credit. These require additional revenue and spending restraint in other areas to meet the required adjustment. The estimated impact of different policy changes is based

on existing studies and estimates. These represent steady-state effects and generally do not take into account dynamic effects on the economy. There is significant uncertainty around these estimates.

The scale of the modelled measures could be changed and alternative measures pursued. For example, raising consumption taxes or introducing a Federal VAT system could reduce the need to find revenues in other areas.

Table 2.4. Illustrative tax revenue and expenditure changes to put debt on a prudent path

| Recommendations | Scenario | Impact on fiscal balance (annual, % of GDP) | Source |
|--|---|---|--|
| Total net revenue | | 2.7 | |
| Increase corporate tax revenue, simplify corporate taxes | Revert half of the corporate tax rate change in the TCJA, align US corporate minimum taxes with the Global Minimum Tax. | 0.5 | Clausing and Sarin (2023), CBO (2023c) |
| Reduce tax expenditures in individual tax code and increase estate tax exemption amounts. | Increase individual rate on qualified dividends and capital gains, revert estate tax exemption to 2009 level | 0.3 | Clausing and Sarin (2023), CBO (2023b) |
| Expiration of TCJA in 2025 | Marginal rates to revert to 2017 levels, suite of business and capital tax changes sunset, extend SALT and mortgage interest caps. | 0.8 | CRFB (2023) |
| At 2025 expiration, parts of TCJA can be retained to help lower and middle income families | Extend Child Tax Credit, expand refundability and index for inflation; retain changes and then increase standard deduction | -0.4 | CRFB (2023) |
| Increase funding for Social Security | Uncap OASDI payroll tax, add 1 percentage points to the payroll tax. | 0.8 | CBO (2023b) |
| Change in tax treatment of high value employer-proved health plans. | Payments to employer-provided health plans above median cost are no longer excluded from the income tax system. | 0.3 | CBO (2023b) |
| Other sources of revenue, including to help fund the climate transition. | Include greenhouse gas tax, gasoline tax, funding for IRS | 0.4 | Bistline et al (2024), CBO (2023c) |
| Total net spending | | 1.0 | |
| Reduce costs on public health spending | Reduce costs on public health spending, index federal health benefits to chained CPI, increase Medicare part B premiums | 0.4 | CBO (2023b), CBO (2023c) |
| Other health efficiencies | Additional Medicare Advantage administration, additional drug price negotiation savings, other savings from shift to value-based federal health, increased health market competition. | 0.3 | Lieberman et al (2018), OECD, 2022a), CBO (2022) |
| Reduce costs for Social Security | Index Social Security benefits to chained CPI, partially index retirement age to life expectancy. | 0.4 | CBO (2023b), CBO (2023c) |
| Restrain discretionary spending | After 2025, follow through with the intent of the Fiscal Responsibility Act spending restraint | 0.2 | CBO (2024) |
| Social policies | Paid parental leave, child care subsidies | -0.2 | Chapter 1 of this <i>Economic Survey</i> |
| Total net gain | | 3.7 | |

Note: Relative to current fiscal policies. Revenue and spending estimates are scored individually and interactions between scenarios may change when cumulated.

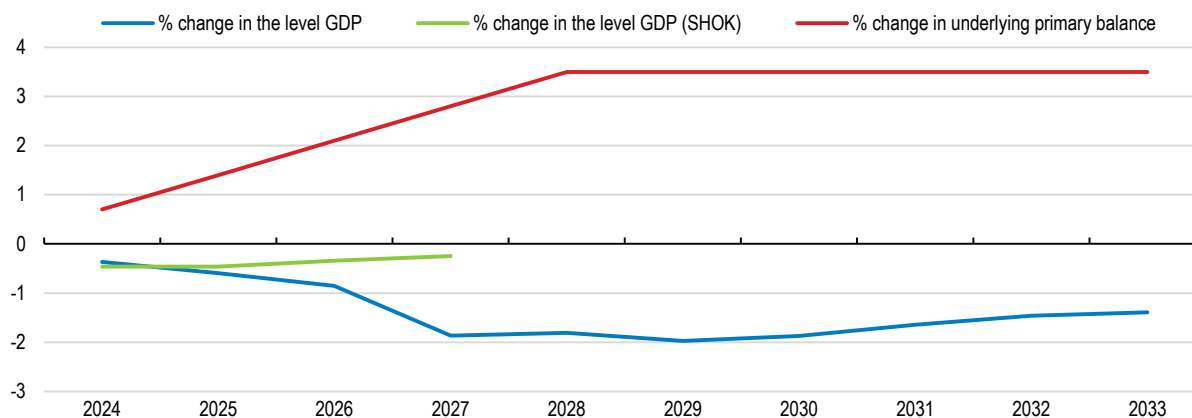
The illustrative package would be implemented over the next five years, with tax measure adjustments that are easier to implement in the earlier years and more difficult spending adjustments prominent in later years. Two models can help gauge the impact of this fiscal adjustment. In background analysis using the Bloomberg SHOK Model, the fiscal adjustment would have relatively modest effects on short-term growth and demand, with the level of GDP being reduced by 0.35-0.5% of GDP after two years, relative to a baseline without fiscal adjustment, but dissipating afterward so that the level of GDP is 0.25-0.30% lower after the fourth year (Figure 2.31). The model assumes that negative growth effects would be partially

offset by monetary policy rate cuts (Rush, et al 2021). Lowering government borrowing reduces interest rates in the United States and globally, helping to support growth.

In a more granular analysis using the National Institute Global Econometric Model (NiGEM), the fiscal adjustment would have larger but still relatively modest effects on short-term growth and demand and would reduce the level of GDP by about 1.5% by 2033, relative to a baseline without fiscal adjustment (Figure 2.31). The fiscal adjustment would also induce lower interest rates, as monetary policy makers reacted. This adjustment would have global spillovers, as the decline in US debt places downward pressure on real long-term interest rates around the world, which decline on average by 0.4 percentage points in the median country between 2024 and 2033. This has a positive impact on domestic demand in other countries, outweighing the impact of weaker external demand from the United States, with the global GDP level raised by 0.4% on average over 2024-33 relative to baseline. The estimated effect on the US economy may be overstated. Embedded in the model is a long-run relationship between the cost of capital and growth. However, recent research suggests that the tax sensitivity of business investment may have declined in recent years (Hanappi et al, 2023), implying that the negative growth effects could be smaller than in the simulation. While the TCJA corporate tax cut appears to have increased business investment, it has also contributed to the fiscal deficit. The gains were not shared across most US families, with the tax cut delivering no discernible earnings benefit for those outside of the highest 10% in the income distribution (Kennedy et al, 2022). Further, the reduction in GDP implied in this model is more than offset by the increases implied by the structural reforms recommended in Chapter 1, which boost the GDP level by 3%.


Figure 2.31. Adverse effects of the fiscal adjustment on real GDP growth depends on assumptions about corporate tax pass-through to business investment

Effects of an increase in the primary balance of 0.35% per year over five years, deviations from NiGEM baseline.



Note: The blue line assumes a fiscal consolidation of 3.5 percentage points over 5 years. Growth effects from this consolidation differ in the NiGEM and SHOK models due to different assumptions about the impact of an increase in the corporate tax rate. The blue line is the growth estimate from the NiGEM model, the green line uses the Bloomberg SHOK model to in a four-year fiscal consolidation.

Source: OECD, Bloomberg SHOK model.

StatLink  <https://stat.link/3fkqw8>

2.5. Policy recommendations for managing long-term fiscal pressures

| MAIN FINDINGS | RECOMMENDATIONS (Key recommendations in bold) |
|--|--|
| Buttressing the fiscal framework | |
| The federal budgeting process is complex, while lacking effective budget constraints. The debt ceiling – a statutory limit set by Congress – has led to brinkmanship and creates unnecessary risk. | Adopt a simple medium-term debt ratio target proposed by the President and approved by Congress to increase accountability. Abolish the debt ceiling. |
| The 10-year budget window with offsets in the subsequent 10-year window has encouraged gaming of the system with permanent tax changes implemented on a 'temporary' basis. | Score tax or spending policies that last longer than two years as a permanent policy change in projections by OMB, CBO, JCT. |
| Putting the public finances on a more prudent path | |
| There is a large structural deficit and public debt is high compared to most OECD countries, driven by a growing misalignment between rising spending and tax revenues. | Undertake a package of tax measures and targeted spending restraint to put the debt ratio on a more prudent path, while protecting growth and lower income households. |
| Managing spending pressures | |
| Health expenditures per capita are the highest in the OECD, though public programs have done a better job than private programs at restraining health costs. | Reduce costs of federal health insurance, including by moving more strongly away from fee-for-service remuneration to value-based care and reducing favourable tax treatment of employer-provided health plans. Expand the number of drugs subject to price negotiation by Medicare. |
| Raising revenues in an efficient and fair way | |
| Tax changes over the past decades have narrowed the tax base, made the tax system less progressive, and reduced taxation of capital. Corporate tax revenue has decreased as a share of GDP. | Introduce a broad package of tax reforms, including actions to reduce tax expenditures, broaden the tax base, increase rates and develop new revenue sources. Improve enforcement of the tax system by investing in tax administration. Expand the base of the net investment income tax (NIIT), increase the rate on qualified dividends and long-term capital gains, and remove the stepped-up basis for inherited equities. Increase the statutory corporate tax. Align US corporate minimum taxes with the Global Minimum Tax. |
| The individual tax changes in the TCJA are scheduled to sunset at the end of 2025, resulting in the expiration of a broadly regressive tax policy change. | Retain the expanded standard deduction and expanded Child Tax Credit. Allow the estate tax, pass-through business tax rate cut, and other regressive parts of the TCJA to expire. |
| Environmental taxes are relatively low and carbon pricing is limited. | Increase the federal excise tax on gasoline and diesel. |
| Social Security trust funds are projected to fully cover benefits only to 2035, then reverting to a solely pay-as-you-go system with possible benefit cuts for beneficiaries. | Reduce spending by limiting benefits for wealthy households, partially indexing retirement age to life expectancy and indexing benefits to chained CPI. Raise the payroll tax for Social Security contributions. Remove the ceiling on maximum payroll tax contributions. |

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UNITED STATES

The United States economy has continued to expand at a solid pace and price pressures have eased somewhat. However, a sustained fiscal deficit has contributed to raising public debt as a share of GDP to its highest level since World War II, with a further substantial increase in prospect over coming decades as the population ages. To put the public finances on a more sustainable path, a multi-year fiscal adjustment should be enacted that achieves savings on pensions and healthcare and raises taxation, including on capital incomes. A more medium-term oriented and less complicated federal budgeting process would support this. At the same time, economic growth would benefit from productivity enhancing reforms that promote competition, including through maintaining international trade openness and reinforcing relevant skills in the workforce. Efforts to reduce greenhouse gas emissions have accelerated, but further policy measures will be needed to achieve emission reduction targets. Policy options include a package of broad-based carbon pricing, taxes and sectoral policies. As the climate transition further progresses, additional measures will be needed to support displaced workers from fossil fuel industries and for climate adaptation.

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