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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 Australia were reviewed by the Committee on 15 July 2021. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 30 August 2021. The Secretariat's draft report was prepared for the Committee by Ben Westmore and Christine Lewis under the supervision of Patrick Lenain. It benefitted from contributions at various stages by Laurence Boone, Alvaro Pereira, Isabell Koske, David Bradbury, Bert Brys, Scott Cameron, James Mancini, Julio Bacio Terracino, Dennis Dlugosch, Muge Adalet McGowan, Dan Andrews, Jane Ellis, Enrico Botta, Rob Patalano, Catriona Marshall, Chiara Monticone, Anna Dawson, Caroline Roulet, Serdar Celik, Miles Larbey, Leigh Wolfrom, Mamiko Yokoi-Arai, Iota Nassr, Jonathan Hambur (Australian Treasury) and David Hansell (Australian Treasury). Statistical research assistance was provided by Damien Azzopardi, and editorial assistance by Stephanie Henry and Karimatou Diallo. The previous Survey of Australia was issued in December 2018. Information about the latest as well as previous Surveys and more information about how Surveys are prepared is available at http://www.oecd.org/eco/surveys.

Table of contents

Foreword 3

Executive Summary 9

1 Key policy insights 14
The initial pandemic response was well coordinated 16
The macroeconomy rebounded strongly, but has weakened amid new restrictions 18
Monetary and financial policies have provided a buffer against the shock 24
Achieving monetary policy objectives 27
Fiscal policy has responded with unprecedented force 28
Supporting the recovery while ensuring fiscal sustainability 31
Regulatory and institutional reforms are needed for a sustained recovery 46
Reforming regulatory and administrative procedures 50
Faster decarbonisation can bring significant economic benefits 59
Further reducing greenhouse gas emissions from high levels 59

2 The role of the financial sector in supporting a sustainable and inclusive recovery 74
Key trends in Australia's financial sector 75
The financial sector has played a critical role in the COVID-19 crisis response 79
Shoring up liquidity 82
Flattening the insolvencies curve 84
Maintaining financial stability 87
Channelling finance to viable and productive firms 92
Improving access to credit 94
Broadening sources of finance beyond banks 102
Supporting the green transition 108
Enhancing risk disclosure 109
Funding the green transition 112
Maintaining well-functioning insurance markets amid more frequent climate-related natural disasters 114
Strengthening households' resilience and mitigating inequality 115
Ensuring consumer credit protection is appropriate 115
Narrowing gaps in financial literacy and inclusion 118
References 125
Annex 2.A. The Royal Commission into misconduct in the financial services industry 132

Tables

Table 1. Macroeconomic projections 10
Table 1.1. Macroeconomic indicators and projections 23
Table 1.2. Possible further shocks to the economy 24
Table 1.3. Monetary policy support since the onset of the pandemic 25
Table 1.4. Fiscal policy support since the onset of the pandemic 29
Table 1.5. Illustrative fiscal impact of selected reforms 41

Table 1.6. The tax burden is increasingly falling on personal incomes 42
Table 1.7. Past OECD recommendations on fiscal policy 45
Table 1.8. Illustrative GDP impact of selected recommendations 52
Table 1.9. Past OECD recommendations on ensuring a competitive and innovative business environment 58
Table 1.10. Past OECD recommendations on promoting environmental sustainability 66
Table 1.11. Key Policy Insights recommendations 67
Table 2.1. Most superannuation assets are managed by industry funds 76
Table 2.2. Timeline of inquiries into the financial services industry 79
Table 2.3. Overview of policies in response to COVID-19 relying on the financial sector 80
Table 2.4. The authorities have used a range of policies to reduce financial stability risks 91
Table 2.5. Risk weights are high for SME loans unless secured by residential property 95
Table 2.6. Examples of government venture capital initiatives 107
Table 2.7. Recommendations to ensure the financial sector supports a sustainable and inclusive recovery 123

Annex Table 2.A.1. Recommendations from the royal commission relating to the banking sector 132

Figures

Figure 1. The virus was suppressed for a period but cases have risen in recent months 10
Figure 2. The initial downturn was relatively mild 10
Figure 3. Fiscal policy has been supportive 11
Figure 4. Faster progress in reducing carbon emissions is needed 12
Figure 1.1. GDP per capita had slowed pre-pandemic 15
Figure 1.2. A resurgence of the virus has been accompanied by a faster pace of vaccinations 16
Figure 1.3. Confidence has recently fallen back and there are divergent trends across sectors 19
Figure 1.4. The Asia-Pacific is the core bilateral trading region 20
Figure 1.5. The labour market shock was abrupt but employment rebounded after the initial lockdown 21
Figure 1.6. Lower wage workers experienced more adverse employment outcomes 22
Figure 1.7. Market interest rates have declined 26
Figure 1.8. Underlying inflation has undershot the target band for a prolonged period 27
Figure 1.9. Additional fiscal support was significant and front loaded 28
Figure 1.10. A multitude of policy measures were employed to fight the pandemic 29
Figure 1.11. Fiscal stability can be restored in the short-term 33
Figure 1.12. There are long-term fiscal pressures from ageing 34
Figure 1.13. Unemployment benefits remain very low by international standards 36
Figure 1.14. The tax base is skewed towards income taxation 42
Figure 1.15. The GST rate is low and there are significant exemptions 45
Figure 1.16. Productivity and real wages have stagnated 47
Figure 1.17. Small young firms were hard hit at the onset of the pandemic 47
Figure 1.18. Young firms have been the drivers of employment growth 48
Figure 1.19. Firm entry rates have slumped and those that do enter are larger 49
Figure 1.20. A higher share of young firms would considerably boost employment 49
Figure 1.21. The licensing system and regulatory complexity are ripe for reform 50
Figure 1.22. The pace of entrepreneurialism has been weakest in digitally intensive sectors 54
Figure 1.23. Australia ranks among peer countries in indicators of corruption 56
Figure 1.24. Australia is in line with other comparable countries on tax transparency 58
Figure 1.25. Emissions will need to decline faster to achieve net zero emissions by 2050 60
Figure 1.26. Progress in reducing net emissions has varied across sectors 61
Figure 1.27. Carbon emissions are priced lower than in most other countries 62
Figure 1.28. Green growth indicators 64
Figure 2.1. Australia's financial system has grown dramatically in recent decades 76
Figure 2.2. Around half of superannuation funds' assets are invested in equities 77
Figure 2.3. The banking system is relatively concentrated 78
Figure 2.4. Institutions in the Australian financial sector and their responsibilities 78
Figure 2.5. Stronger capital ratios supported banks' resilience 80
Figure 2.6. The Term Funding Facility provided a large amount of low-cost funding for banks 83
Figure 2.7. Most deferrals from the initial phase unwound at an orderly pace 84
Figure 2.8. There have been far fewer business insolvencies than usual 85
Figure 2.9. Australia's insolvency laws have become more friendly to entrepreneurship 86

Figure 2.10. Asset quality has only deteriorated modestly 88
Figure 2.11. Household debt and bank exposures to real estate are high 89
Figure 2.12. Macroprudential policies could be tightened further 91
Figure 2.13. Access to finance is a barrier for innovative firms and innovation 93
Figure 2.14. Obtaining finance has become more difficult 93
Figure 2.15. Lending is highly skewed towards households 94
Figure 2.16. The interest rate spread on SME loans is relatively wide 95
Figure 2.17. The major banks have remained entrenched 96
Figure 2.18. Open banking is being phased in 101
Figure 2.19. The stock market is sizeable and liquid 103
Figure 2.20. Public equity raising has been comparatively strong 103
Figure 2.21. Small IPOs are relatively common 105
Figure 2.22. Venture capital is low and has not recovered since the global financial crisis 106
Figure 2.23. Alternative finance is still in its infancy 108
Figure 2.24. Green bonds have grown rapidly 113
Figure 2.25. Overall levels of financial knowledge and inclusion compare well 118
Figure 2.26. Financial knowledge is strongly related to demographic characteristics 119
Figure 2.27. Financial literacy is a little above the OECD average with wide dispersion 120
Figure 2.28. Financial inclusion, knowledge and resilience are lower for Indigenous Australians 121

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Basic statistics of Australia, 2019

(Numbers in parentheses refer to the OECD average) [1]

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million, 2019)	25.4		Population density per km² (2018)	3.2	(38.1)
Under 15 (%, 2019)	19.3	(17.9)	Life expectancy at birth (years, 2018)	82.7	(80.1)
Over 65 (%, 2019)	15.9	(17.1)	Men (2018)	80.7	(77.5)
International migrant stock (% of population, 2019)	30.0	(13.2)	Women (2018)	84.9	(82.8)
Latest 5-year average growth (%)	1.6	(0.6)	Latest federal election		May-2019
ECONOMY					
Gross domestic product (GDP)			Value added shares (%, 2019)		
In current prices (billion USD)	1 359.7		Agriculture, forestry and fishing	2.3	(2.7)
In current prices (billion AUD)	1 971.8		Industry including construction	27.1	(26.6)
Latest 5-year average real growth (%)	1.5	(0.7)	Services	70.6	(70.8)
Per capita (000 USD PPP, 2019)	53.5	(47.6)			
GENERAL GOVERNMENT Per cent of GDP					
Expenditure (2019)	35.5	(40.6)	Gross financial debt (2018)	43.5	(107.6)
Revenue (2019)	35.0	(37.5)	Net financial debt (2018)	-10.2	(67.9)
EXTERNAL ACCOUNTS					
Exchange rate (AUD per USD)	1.45		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	1.46		Crude materials, inedible, except fuels	38.8	
In per cent of GDP			Commodities and transactions, n.e.s.	22.9	
Exports of goods and services (2019)	24.1	(30.6)	Mineral fuels, lubricants and related materials	13.9	
Imports of goods and services (2019)	21.6	(30.0)	Main imports (% of total merchandise imports)		
Current account balance	2.5	(0.0)	Machinery and transport equipment	40.1	
Net international investment position (2019)	-45.8		Miscellaneous manufactured articles	15.6	
			Manufactured goods	11.4	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate (aged 15 and over, %)	66.4	(55.1)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	6.5	(7.1)
Men (OECD: 2019)	65.5	(65.6)	Youth (aged 15-24, %, OECD: 2019)	14.3	(11.8)
Women (OECD: 2019)	56.4	(49.9)	Long-term unemployed (1 year and over, %, 2018, OECD: 2019)	1.0	(1.4)
Participation rate (aged 15 and over, %, 2019)	66.0	(61.1)	Tertiary educational attainment (aged 25-64, %, 2019)	47.1	(38.0)
Average hours worked per year (2019)	1,712	(1,726)	Gross domestic expenditure on R&D (% of GDP, 2017, OECD: 2018)	1.9	(2.6)
ENVIRONMENT					
Total primary energy supply per capita (toe, 2019)	5.2	(3.9)	CO2 emissions from fuel combustion per capita (tonnes, 2019)	7.2	(8.3)
Renewables (%, 2019)	7.1	(10.8)	Water abstractions per capita (1 000 m³, 2019)	18.6	
Exposure to air pollution (more than 10 µg/m³ of PM 2.5, % of population, 2019)	0.0	(61.7)	Municipal waste per capita (tonnes, 2017, OECD: 2019)		
SOCIETY					
Income inequality (Gini coefficient, 2018, OECD: 2016)	0.325	(0.315)	Education outcomes (PISA score, 2018)		
Relative poverty rate (%, 2018, OECD: 2016)	12.4	(11.7)	Reading	503	(487)
Median disposable household income (000 USD PPP, 2018, OECD: 2016)	33.8	(22.8)	Mathematics	491	(489)
Public and private spending (% of GDP)			Science	503	(489)
Health care (2019)	9.3	(8.8)	Share of women in parliament (%)	30.5	(31.1)
Pensions (2017)	10.0	(8.6)	Net official development assistance (% of GNI, 2017)	0.2	(0.4)
Education (% of GNI, 2018)	5.0	(4.5)			

Note: The year is indicated in parenthesis if it deviates from the year in the main title of this table.
1. 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.

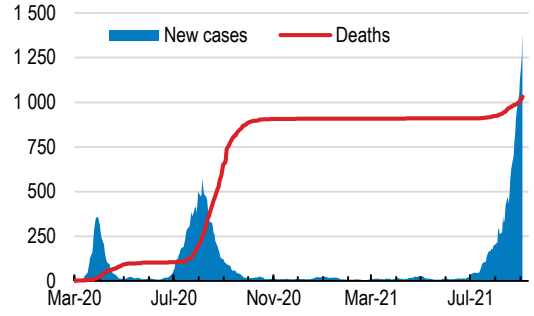
Executive Summary

Australia's zero-tolerance approach is shifting to virus containment.

At the onset of the pandemic, well-coordinated policies across different levels of government sought to suppress COVID-19 transmission. As a result, the rise in deaths from the virus was temporarily halted (Figure 1). Control of the public health situation facilitated the reopening of the economy. However, recent COVID-19 outbreaks have meant much of the country has returned to a strict lockdown. The vaccine rollout started slowly but has picked up pace in recent months as the country begins transitioning from zero-tolerance to a containment approach to the virus.

Figure 1. The virus was suppressed for a period but cases have risen in recent months

COVID-19 cases and cumulative deaths, 7-day average



Source: Refinitiv.

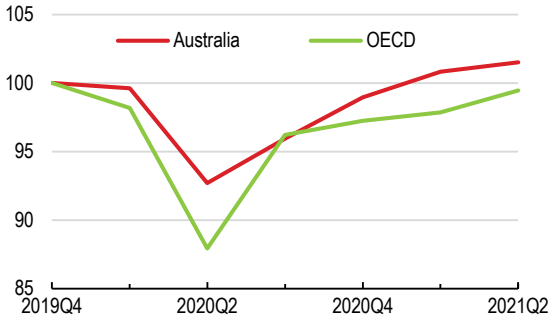
StatLink https://stat.link/9wbjdn

The downturn in 2020 was less significant than in the majority of other OECD countries (Figure 2)**.** Real GDP bounced back over the year to June 2021, to be above pre-pandemic levels. The unemployment rate fell to 4.6% in July 2021, after peaking at 7.4% in 2020. Nonetheless, high frequency indicators suggest that the current containment measures are having a significant negative impact on economic activity.

OECD projections envisage annual output growth of 4% in 2021 and 3.3% in 2022 (Table 1). The economy is expected to contract in the third quarter of 2021, before state-based restrictions can begin to be eased as higher vaccination rates are achieved. The ensuing recovery may be more gradual than in previous episodes, given it will occur in an environment of higher community transmission of COVID-19.

Figure 2. The initial downturn was relatively mild

Real GDP, index Q4 2019 = 100



Source: OECD Economic Outlook database

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Risks and uncertainties remain large. On the upside, a substantial quickening in the pace of vaccine rollout could enable an early relaxation of containment measures. Once the economy reopens, household consumption could also pick up surprisingly rapidly given a high stock of excess savings. In contrast, significant new COVID-19 outbreaks in other states may deepen the economic shock. Furthermore, problems with the vaccine rollout or vaccine hesitancy could delay reopening. A ratcheting up of diplomatic tensions with China could also further weaken trade activity.

Table 1. Macroeconomic projections

Annual growth, unless specified	2019	2020	2021	2022
Gross domestic product (GDP)	1.9	-2.5	4.0	3.3
Unemployment rate (% labour force)	5.2	6.5	5.4	4.9
Core inflation index	1.6	1.3	2.2	1.7
General government gross debt (% of GDP)	45.9	65.4	68.5	72.6

Source: OECD Economic Outlook 109 Database, projections revised as of 8 September 2021.

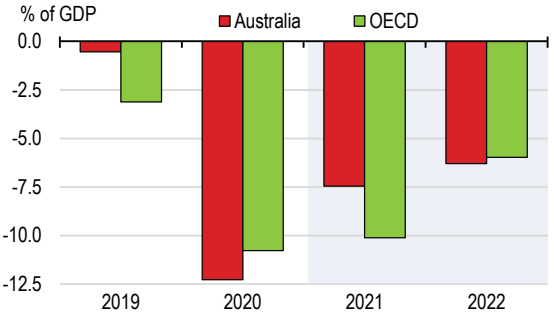
Macroeconomic policies must remain responsive to changing conditions

Macroeconomic policy support was delivered swiftly and with appropriate force at the onset of the pandemic. The immediate fiscal expansion was one of the largest in the OECD (Figure 3) and the Reserve Bank of Australia cut official rates and embraced an array of new policy tools, including purchases of government bonds. Legacies of the pandemic in the form of higher public debt and limited monetary policy space will present challenges for macroeconomic management going forward. While the institutional framework has

supported the strong economic response to the pandemic, there are some areas that could be improved. A review into the monetary policy framework should be undertaken and the fiscal framework buttressed. At the same time, tax reform can help make public finances more growth-friendly and sustainable.

Figure 3. Fiscal policy has been supportive

General government financial balance



Source: OECD Economic Outlook 109 Database, projections revised as of 8 September 2021.

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In the short-term, fiscal policy should continue to be highly responsive to developments in economic conditions, such as the impact of further COVID-19 containment measures. At the same time, there is scope for the RBA to further expand the asset purchasing programme and consider other less conventional monetary policy tools as needed. As the recovery becomes entrenched, the RBA should also remain cognisant of potential upside risks to inflation stemming from factors such as labour shortages.

Over the longer-term, fiscal spending pressures will grow. Under current policy settings, ageing related costs will cause public debt to rise to 2060. In addition, further investment in the social safety net is needed, not least to complement reforms that promote business and labour market dynamism. For example, the unemployment benefit rate should be raised further.

Tax reform is needed. Australia's heavy reliance on taxation of personal incomes adds to the vulnerability of public finances to an ageing population. Fortunately, there is a clear path for tax reforms that will provide a more sustainable tax base, enhance economic growth and promote other government priorities like improving housing affordability and reversing the trend toward rising income and intergenerational inequality common to many countries. The authorities should increase the Goods and Services Tax rate or broaden the base, offsetting any regressive effects through additional personal income tax cuts (especially for low and middle-income workers), reducing private pension tax breaks and reducing the capital gains tax discount. In addition, more state governments should replace stamp duty with a well-designed recurrent land tax.

The government entered the pandemic from a strong fiscal position. Its newly revised fiscal strategy is to support the economy until the recovery is well entrenched and the unemployment rate is back to pre-pandemic levels (5%) or lower and then to switch focus to stabilising and then reducing public debt in the medium-term. As this transition draws nearer, the government should provide a medium-term fiscal strategy with targets that are associated with specific timeframes or conditional on measurable economic outcomes.

Looking forward, the government's fiscal strategy should be regularly evaluated and monitored by an independent fiscal institution. The Parliamentary Budget Office (PBO) is a credible and independent institution that could fulfil this task within its current mandate. Through explicitly assigning such responsibilities to an independent fiscal institution, the authorities will be enhancing the transparency and accountability of fiscal policy.

Stronger productivity growth is needed for a sustainable recovery

The economy was exhibiting signs of structural headwinds when the pandemic hit. As in many OECD countries, productivity and wages growth had slowed notably. This partly reflected weaker business dynamism and labour market mobility. Small young firms were then hit particularly hard by the pandemic. Looking forward, prospects for this cohort of firms are particularly important given they have typically accounted disproportionately for job creation and investment in Australia.

Regulatory procedures are relatively complex and the licensing and permit system is cumbersome compared with other OECD countries. This can slow necessary resource

reallocation. The ongoing reforms to the occupational licensing system are welcome, a first step being the broadest possible adoption by the states of automatic mutual recognition of licenses across jurisdictions. Furthermore, broadly based reform to land use regulations are well overdue. As well as harmonising and simplifying the land zoning system at the state level, giving local authorities more fiscal autonomy can encourage them to allow the entry of new businesses or households.

The financial sector will continue to be of central importance to the recovery

Financial institutions provided an important buffer against the economic shock. To promote a sustained recovery, reforms that improve access of small young firms to credit and protect the financially vulnerable will be key.

The digital revolution in financial services can improve lenders' ability to assess credit risk in the absence of collateral or business history. This can facilitate new sources of finance for young businesses. Extending open banking to facilitate switching of providers could inject much-needed competition to the lending market and improve access to finance.

The Personal Property Securities Register provides a good foundation for supporting the use of intangible assets as collateral. This is especially important for young innovative enterprises. However, the register is considered difficult to use and lacks visibility. Streamlining the system, reducing compliance costs and making better use of available technology (including regtech) would help realise its potential.

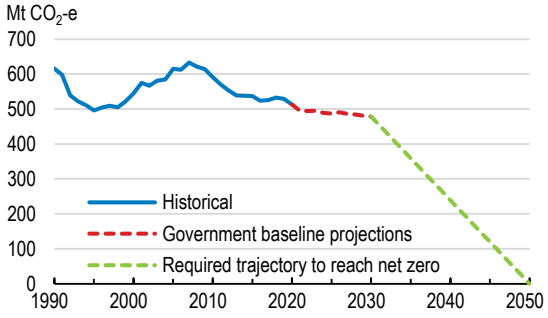
The financial sector also has a role to play in ensuring an inclusive recovery. The Royal Commission into misconduct in financial services highlighted a range of practices that led to mistreatment of vulnerable customers due to poorly designed incentives. The government should complete the implementation of the reforms arising from the Royal Commission.

Climate change policy needs to be strengthened

The Federal government is now aiming to achieve net zero carbon emissions as soon as possible and preferably by 2050. All states and territories have now committed to achieving net zero carbon emissions by 2050. However, emissions will need to decline at a significantly faster pace if this goal is to be met (Figure 4). The government's forthcoming Long-term Emissions Reduction Strategy is an opportunity to articulate a more co-ordinated, ambitious and stable climate-change policy that defines clear goals and corresponding policy actions to achieve their goal.

Figure 4. Faster progress in reducing carbon emissions is needed

Greenhouse gas emission projections



Source: DISER; OECD calculations.

StatLink https://stat.link/fvrdpc

The authorities are focused on the development of clean energy technologies as the path to lower emissions. Australia has world class public institutions for supporting renewable energy research and the commercialisation of low emissions projects. Yet, there has been a trend decline in environmental innovation over the past decade and stronger incentives for innovation and adoption of new low emission technologies are needed. While a national carbon price would be the most efficient means of achieving this, political considerations may instead require the scaling up of existing market-based instruments, such as the Safeguard Mechanism (a baseline-and-offset system for large emitters). This should be accompanied by policies that support the transition of workers out of fossil fuel generating industries.

The financial sector can also play a key role in the transition to a low carbon economy. Creating a roadmap for improving the consistency, comparability and quality of reporting of climate-related risks by listed companies and financial institutions would improve capital allocation and support investment in emission abatement projects.

MAIN FINDINGS	KEY RECOMMENDATIONS
Ensuring a sustained recovery in output and jobs	
International borders remain closed, negatively impacting education exports and bilateral tourism. Labour shortages are arising in some sectors traditionally reliant on foreign workers and there are many Australian citizens stuck abroad because of hotel quarantine caps.	Ensure all eligible adults are able to receive COVID-19 vaccination and open international borders at the earliest possible date.
The substantial fiscal response at the onset of the pandemic was enabled by the country's strong starting fiscal position. The stimulus measures were front loaded and temporary. Additional targeted measures were announced with the reimposition of containment measures in some states.	Restore fiscal sustainability in a gradual manner and adopt a more expansionary stance of fiscal policy if further containment measures have a significant negative impact on economic growth.
Fiscal policy is now being conducted in an environment of higher public debt, with fiscal costs from ageing in prospect. The independent fiscal authority (the Parliamentary Budget Office) fulfils a narrower role than counterparts in many other OECD countries.	Task an independent fiscal institution, such as the Parliamentary Budget Office, with both formal evaluation and monitoring of the government's fiscal strategy. Implement a medium-term fiscal strategy with targets that are associated with specific timeframes or conditional on measurable economic outcomes.
Young and low-wage workers experienced the greatest job losses through the pandemic. The unemployment benefit replacement rate remains close to the lowest in the OECD and below estimates of the relative poverty line. This partly reflects prior indexation to consumer price inflation.	Further increase the unemployment benefit rate and consider indexing the rate to wage inflation.
Australia's tax mix remains tilted towards income taxes. With an ageing population over the next 40 years, revenue streams will come under significant pressure under current policy settings. In addition, some inefficiencies and distortions in the tax system remain.	Further shift the tax mix away from income taxes (especially personal income tax) and inefficient taxes (including real-estate stamp duty) and towards the Goods and Services Tax and recurrent land taxes.
The Reserve Bank of Australia has added new instruments to its toolkit. In particular, a government bond purchasing programme, which could be expanded if needed. The central bank's preferred measures of underlying inflation have undershot the target since 2015.	As in other OECD countries, undertake a review into the monetary policy framework that is broad in scope, transparent and involves consultation with a wide variety of relevant stakeholders. Keep monetary policy expansionary, but stand ready to tighten policy if underlying inflation risks sustainably rising above the target or inflation expectations risk becoming de-anchored.
Raising productivity growth to boost future living standards	
About one fifth of Australian workers require a license to perform their work. Most need distinct licenses in each Australian state and territory. This unnecessarily raises economic costs, including by slowing resource reallocation.	Legislate automatic mutual recognition of occupational licenses.
Land needs to be repurposed to take into account structural changes, not least those induced by the pandemic. However, there is limited incentive for local authorities in desirable locations to attract new businesses or expand dwelling supply.	Allow local authorities to raise more of their own-source revenue, at the same time as reallocating the minimum Financial Assistance Grant from wealthier local authorities to those in more disadvantaged areas.
Ensuring the financial sector supports a sustainable and inclusive economic recovery	
The register of security interests over personal property (Personal Property Securities Register) is considered difficult to use and lacks visibility.	Overhaul the Personal Property Securities Register then increase awareness among small businesses and lenders.
Comprehensive credit reporting and the new consumer data right in banking can help improve competition in lending for start-ups and smaller businesses by allowing borrowers to share information with other service providers.	Extend open banking to facilitate switching of providers and other actions ("write access") with appropriate protections.
Disclosure of climate-related risks by listed companies and financial institutions has increased but progress is uneven and there are still large data gaps.	Create a roadmap for improving the consistency, comparability and quality of reporting of climate-related risks by listed companies and financial institutions.
A Royal Commission found serious misconduct in the financial sector. The Government has implemented a significant number of the Commission's recommendations, but some reforms remain outstanding.	Complete the implementation of the reforms arising from the Royal Commission into the financial sector.
Reducing greenhouse gas emissions in a cost efficient way	
All states and territories have now committed to achieving net zero carbon emissions by 2050. National carbon emissions need to decline on a significantly steeper trajectory if this goal is to be met.	Develop a national, integrated Long-term Emissions Reduction Strategy that defines clear goals and corresponding policy settings for the path to achieving net zero emissions as soon as possible and preferably by 2050. Scale up the Safeguard Mechanism that exists as part of the government's Emissions Reduction Fund to appropriately price carbon emissions across sectors.

1 Key policy insights

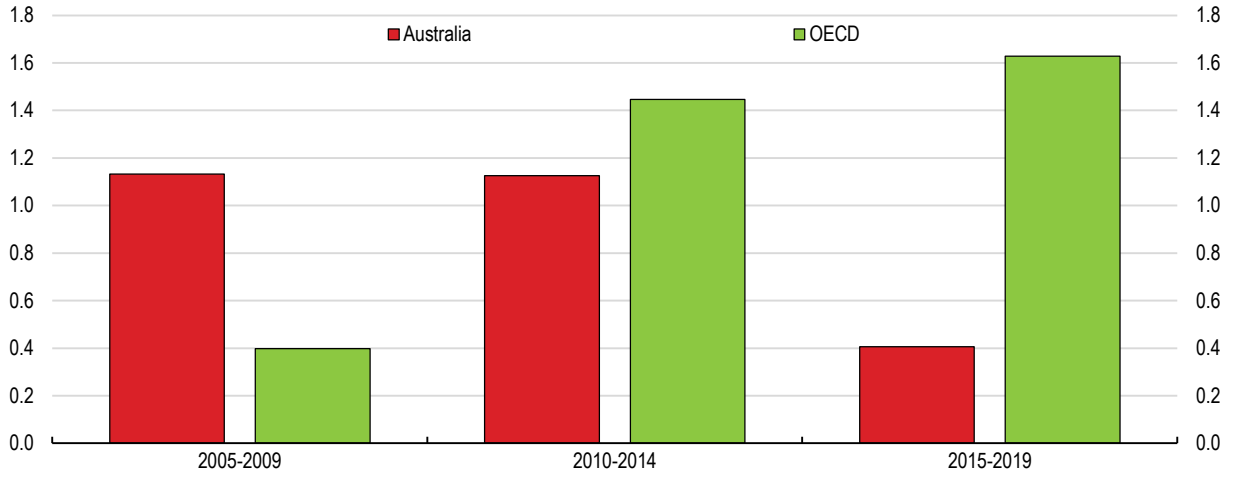
The pandemic recession in 2020 was milder than in most other OECD countries, but recent outbreaks of the Delta variant of COVID-19 have put much of the country in a strict lockdown. As a result, economic activity will contract, with a gradual reopening of the economy only occurring once vaccination rates have risen significantly. As the economy recovers, public policy must focus on setting the conditions for another prolonged period of strong and well-distributed growth in living standards. Recent efforts to reduce regulatory and administrative barriers for young high potential firms should continue. At the same time, the resilience of the economy to future economic shocks can be supported by rethinking institutional frameworks related to fiscal and monetary policy and ensuring the social safety net is adequate. Australia is uniquely vulnerable to climate change, but it is also uniquely placed to benefit economically from global decarbonisation. Domestic greenhouse gas emissions will need to decline on a significantly faster pace if the country is to achieve net zero emissions by 2050.

While the pandemic broke Australia's enviable run of 28 years of uninterrupted economic growth, the recession in 2020 was milder than in most other OECD countries. In addition to the public health measures, this owed to the swift and appropriate economic policy response. Fiscal policy played a particularly important role in stabilising the economy and the living standards of the population. Yet, the current outbreak, and associated containment measures in some states, pose additional challenges for the national economy.

The pandemic also arrived at a time when the economy had been experiencing structural headwinds. After outperforming OECD countries through the financial crisis and in the immediate aftermath, GDP per capita growth had been slowing in the years before the pandemic (Figure 1.1). This partly reflected weakening productivity growth that had translated into disappointing wage outcomes for workers. At the same time, the stress of climate change on the physical environment had become more visible. Australia is the driest inhabited continent on the planet and catastrophic bushfires had been raging for months before the onset of the pandemic, with more than three billion of Australia's native animals – mammals, birds, reptiles and frogs – killed, injured or impacted (van Eeden et. al., 2020).

Figure 1.1. GDP per capita had slowed pre-pandemic

GDP per capita, average annual growth (%)



Source: OECD Productivity Statistics.

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The key messages of this *Economic Survey* are:

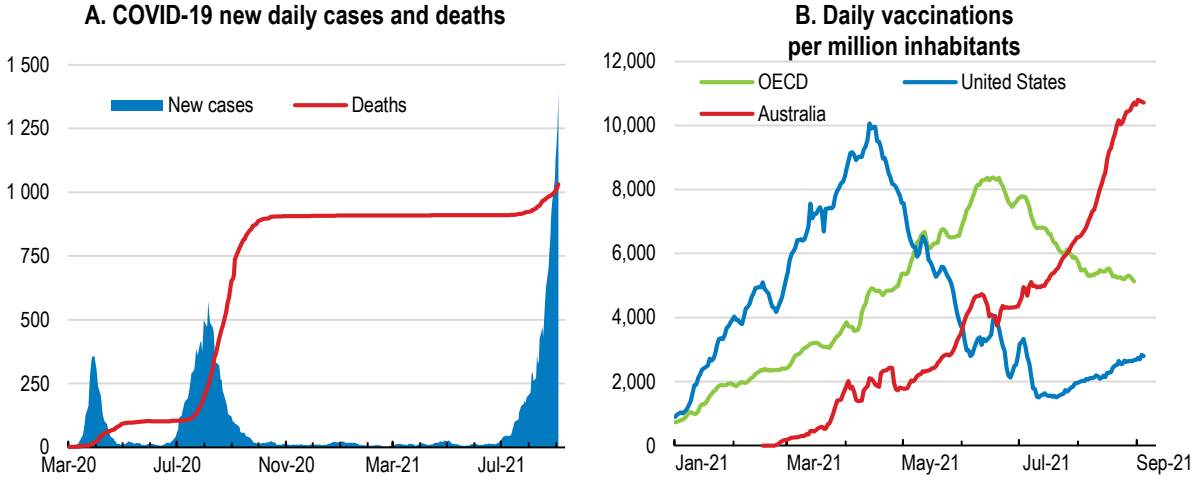
- Once the economy reopens, the focus must turn to reforms that will lay the foundations for another prolonged period of strong and well-distributed growth in living standards. Recent efforts to reduce regulatory, administrative and financial barriers for young high potential firms should continue.
- Legacies of the pandemic will remain, in the form of higher public debt, less monetary policy space and labour market scarring in particular cohorts. Rethinking institutional frameworks related to fiscal and monetary policy, ensuring the social safety net is adequate and that the financial sector supports household financial resilience will better prepare the economy for future shocks.
- Australia is uniquely vulnerable to climate change, but it is also uniquely placed to benefit economically from global decarbonisation due to a large (and windy) land mass, high solar radiation, plentiful ocean access and strong human capital to form the basis of innovation in carbon abatement technologies. A coherent and coordinated national strategy that defines clear goals and corresponding policy settings for the path to achieving net zero emissions as soon as possible and preferably by 2050 is needed. The financial sector can play a key role in achieving these aims.

The initial pandemic response was well coordinated

Australia's first cases of COVID-19 appeared in late-January 2020, with an acceleration in cases from early March (Figure 1.2, Panel A). Although strict confinement measures were not introduced until late-March 2020, they had a significant impact once in place: the number of daily new cases had peaked within two weeks and fell sharply thereafter.

The eventual reopening of economic activity in May 2020 was successful in most states and territories. Nevertheless, a significant rise in cases in Victoria (which accounts for almost one quarter of the national economy) in July 2020 led to a strict lockdown in the state that included school closures and lasted for over three months. The number of COVID-19 related deaths subsequently rose, but remained limited by international standards. Once that outbreak was brought under control, Australians in all states experienced around six months of very few COVID-19 cases, with localised outbreaks effectively curtailed. However, in June 2021, an outbreak of the more-transmissable Delta variant of COVID-19 in New South Wales soon spread to other parts of the country. Strict lockdowns were subsequently implemented in several states, including the largest ones - New South Wales and Victoria. In the past few weeks, the number of COVID-19 patients in hospital intensive care units in New South Wales has begun to rise rapidly.

Figure 1.2. A resurgence of the virus has been accompanied by a faster pace of vaccinations



Source: Refinitiv; and CEIC.

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The early stages of the pandemic were characterised by coherent decision making and communication across levels of government. This was facilitated by the introduction of a primary decision-making body, the "National Cabinet" that comprised the Prime Minister and the Premiers and Chief Ministers of each state and territory (Box 1.1). The government also moved early to restrict access to remote communities. This was important given the heightened mortality risk for Indigenous Australians due to existing health and socioeconomic inequities (Yashadhana et. al., 2020). An advisory group was established for developing the health response for Indigenous Australians and funding was dedicated to improve health service delivery, testing, quarantine and communication for those in remote communities.

Box 1.1. Australia's National Cabinet

On 13 March, it was announced that the National Cabinet would be formed in response to the onset of the COVID-19 pandemic. It comprised the Prime Minister and the leaders of each state and territory and was characterised by direct and frequent interactions between leaders, resulting in strong policy coordination. Decisions through the pandemic were guided by expert advice and evidence, with the Chief Medical Officer and top scientists regularly included in meetings. Decisions also benefited from the "Rapid Research Information Forum" that was established by the government to provide evidence-based advice on topics such as the seasonality of COVID-19, the transmission of the disease from surfaces and the most promising vaccines.

The National Cabinet enjoyed strong public support, with 89% of polled Australians in favour of retaining the institution after the pandemic (Guinness et. al., 2020). In late May 2020, it was decided that the National Cabinet would replace the previous Council of Australian Governments which had long been criticised as overly bureaucratic with an agenda that was too tightly controlled by the federal government. On 29 May 2020, the National Cabinet agreed to the formation of the National Federation Reform Council, comprised of the leaders and treasurers across the Commonwealth and states and territories and the President of the Australian Local Government Association to focus on priority national federation issues.

Through 2020, the stated priority of the National Cabinet was job creation and the economic recovery. In 2021, the focus turned to coordinating vaccinations and the transition to virus containment.

Another notable feature of Australia's initial response was the speed with which regulations were temporarily changed to ensure the smooth functioning of the health system and the economy. Professional requirements were adjusted to allow nurses to re-enter the workforce, telehealth services were facilitated by permitting paperless transfer of prescriptions and international standards for hand sanitiser were quickly adopted. Several states allowed shops to extend trading hours to reduce the concentration of customers and delivery trucks were permitted to travel outside normal hours to re-stock shops amid panic-buying. Businesses were also provided protection through temporary adjustments to insolvency regulations and the use of electronic signatures and online shareholder meetings was allowed (McDonald, 2020). Labour market regulations were temporarily relaxed to allow greater flexibility in terms of working hours, tasks and leave entitlements.

Australia's island borders also helped contain the virus. As cases began to rise in March 2020, the government closed international borders to non-citizens. By end-March, all returning travellers were required to quarantine at government-mandated hotel facilities for two weeks. This may have helped reduce COVID-19 transmission from abroad, but has not been without problems. International quarantine is typically a federal government responsibility, but the COVID-19 hotel quarantine system is managed by the states. While overall the system has worked as intended, there have been a few instance of unsuitable hotels and poor training of staff leading to facilities becoming seeding grounds, where staff contracted the disease before spreading it into the local community. This was the source of the second outbreak of infection in Victoria. Limited capacity in hotel quarantine facilities also meant strict caps on international arrivals. In response to the emergence of the Delta variant of COVID-19 and pressure on quarantine facilities, the National Cabinet halved the cap on international air passenger arrivals in mid-July. By later in the month, there was around 40,000 Australians abroad who were registered as wanting to return home but unable to do so. In late August, the cap for international arrivals into New South Wales was halved again.

In July 2021, the National Cabinet agreed a National Plan to transition Australia's National COVID Response from pre-vaccination settings, focusing on continued suppression of community transmission, to post-vaccination settings focused on prevention of serious illness, hospitalisation and fatality, and the public health management of other infectious diseases. Each phase of the plan will be triggered by the achievement of vaccination rate thresholds, meaning that the speed with which the plan is implemented will largely depend on widespread availability and community take-up of vaccines. Once 70-80% of the adult population are fully vaccinated, the plan envisages a relaxation of the stringency of containment measures and a staged reopening of international borders. These targets have taken on added importance since the current strict lockdowns were implemented in several states. With an acceptance by leaders in these jurisdictions that the increased transmissibility of the Delta variant means near-zero case numbers is no longer feasible, reduced stringency of lockdowns has been conditioned on these vaccination thresholds being met.

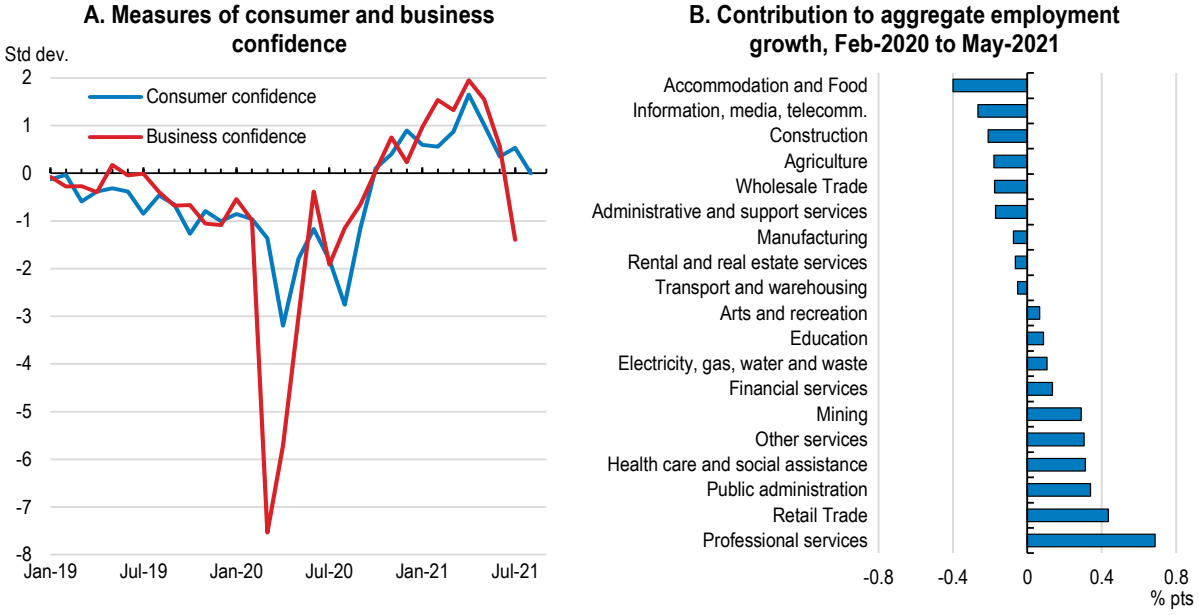
The vaccine campaign started slowly (Figure 1.2, Panel B). This reflected slow community take-up due to low case numbers, but also challenges with vaccine availability (including through accessing supply from other countries) and coordinating the administration of vaccines through general practitioners. As in many other OECD countries, there have been changes to health advice related to using certain vaccines. Pfizer is now the recommended vaccine for those under the age of 60, but the vaccine only began to be available in large volumes in Australia in recent months. Vaccination rates have recently ramped up in response to increased vaccine supply and the recent COVID-19 outbreaks. Nevertheless, the proportion of the adult population who are fully vaccinated is still well below the 70-80% threshold in all states and territories.

Looking forward, the authorities should target all eligible adults being able to receive COVID-19 vaccination by end-2021. Ensuring Indigenous Australians who live in remote communities have easy access to vaccines and accurate medical advice should be a focus. Once the defined vaccination thresholds are achieved and international agreement is reached related to a vaccine passport, the reopening of international borders will support the economic recovery through enabling foreign student arrivals, bilateral tourism and population growth stemming from net immigration. As border and other restrictions are eased, testing, tracing and isolation systems of state governments will need to be reviewed to ensure that they are adequately prepared for the new arrangements. The capacity of state health systems to cope once restrictions are eased will also need to be a focus, ensuring that they can provide high quality and timely care to individuals who contract COVID-19 as well as those requiring hospital care for other conditions.

The macroeconomy rebounded strongly, but has weakened amid new restrictions

The economy bounced back rapidly through the second half of 2020, with the easing of restrictions and strong income growth. The robust recovery continued through the first half of 2021, as rising commodity and asset prices, low COVID-19 case numbers and limited negative economic impacts from the withdrawal of fiscal stimulus pushed consumer and business confidence higher (Figure 1.3, Panel A). Even so, there remained significant divergence between sectors (Figure 1.3, Panel B). This partly reflected changing consumption patterns through the pandemic: by June 2021, household expenditure on goods had rebounded 6.3% above pre-pandemic levels while spending on services remained around 4% below. In response to the recent COVID-19 outbreaks and stricter restrictions, measures of confidence have fallen sharply. Once again, the economic impacts are likely to disproportionately fall on some face-to-face services sectors such as hospitality.

Figure 1.3. Confidence has recently fallen back and there are divergent trends across sectors



Note: In Panel A, the measures are normalised over the period since 1997.
Source: Refinitiv.

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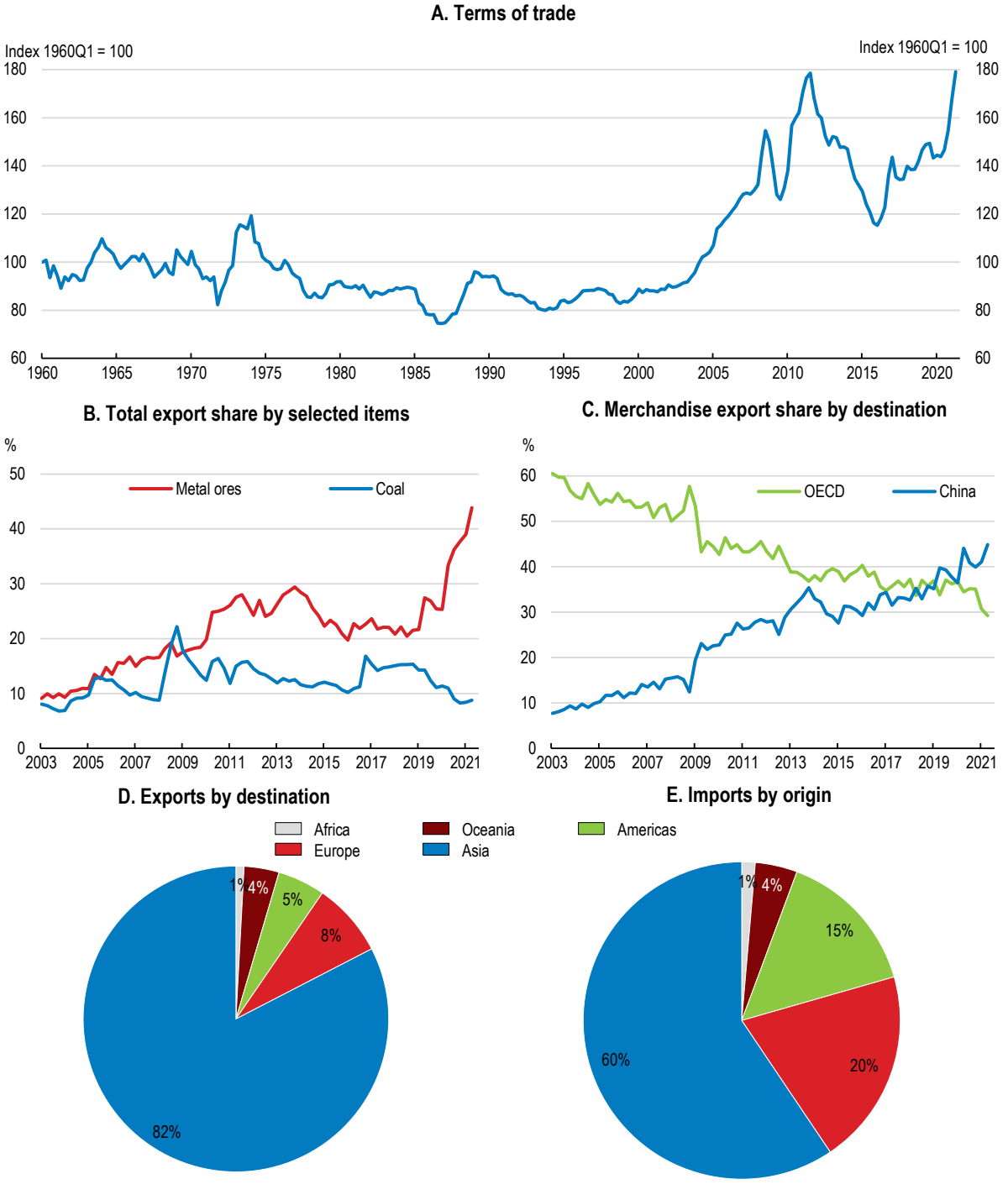
Private investment activity also bounced back sharply through the year to June 2021. The recovery in confidence through 2020 and early 2021, along with government tax incentives, translated into particularly strong business machinery and equipment spending. Since then, available indicators suggest a moderation in firm's capital expenditure. Investment in detached housing also bounced back strongly once the initial restrictions were eased, supported by both federal and state government policy measures, low interest rates and pent-up demand. In contrast, approvals for high-density housing construction remained weak, partly reflecting low population growth, including through a reduction in international students. House prices rose strongly through the first half of 2021, contributing to concerns around housing affordability that have added to a structural trend of growing wealth inequality between older and young Australians (Wood et al., 2019). While indicators of rents on houses have risen over the past year, apartment rents have declined.

Export volumes have remained somewhat subdued since the onset of the pandemic. In particular, international border closures have depressed education exports. The decline in these exports subtracted roughly ½ per cent from GDP over the first half of 2020 (RBA, 2021). The economic effects of fewer foreign tourists has been somewhat offset by Australian residents spending more domestically (ibid), as Australia has been a net importer of tourism in recent years. In the first half of 2021, resource exports were constrained by supply disruptions. Nevertheless, there was a discernable recovery in nominal export values, with rising iron ore prices pushing the terms of trade to its highest level in history in June 2021 (Figure 1.4, Panels A and B). This reflected strong Chinese steel production combined with supply constraints in Brazilian mines.

The Asia-Pacific region is critical for Australian trade, accounting for over 80% of exports (Figure 1.4, Panels D and E). Over the past two decades, the share of Australia's merchandise exports destined for China has increased from 10% to around 40% and now surpasses Australia's total merchandise exports to all OECD countries combined (Figure 1.4, Panel C). In recent years, escalating trade tensions have resulted in China placing import restrictions on certain Australian commodities, including coal, barley, wine, beef and cotton. For some of these products, exporters have been successful at pivoting to other markets. For instance, coal exports to India, Brazil and Indonesia have picked up.

Australia's strengthened trade relationship with a rapidly-industrialising China has brought benefits for business, household and government incomes over recent decades. Nonetheless, the increased concentration of export flows makes Australia more vulnerable to a future shock in the Chinese economy or import restrictions being imposed on additional commodities, such as iron ore.

Figure 1.4. The Asia-Pacific is the core bilateral trading region



Note: In Panel B and Panel C, export shares are in nominal terms. In Panel B, "Metal ores" includes metalliferous ores and scrap and "Coal" includes coal, coke and briquettes.
Source: ABS; and OECD International Trade by Commodity Statistics database.

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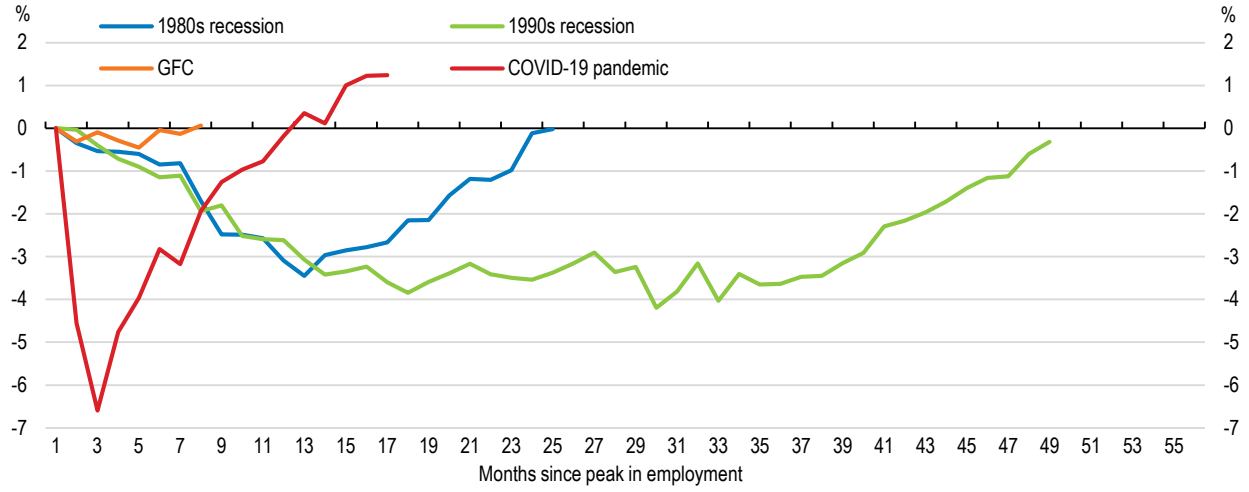
The immediate labour market impacts of the initial downturn were more abrupt than in earlier recessions, but the subsequent recovery was also more rapid (Figure 1.5). Total hours worked had fully recovered by early 2021. The unemployment rate fell from its peak of 7.4% in mid-2020 to 4.6% in July 2021. As the labour market recovered, the composition of employment growth gradually shifted from part-time to full-time work and pockets of labour shortages began to emerge. This was especially the case in sectors that have traditionally relied on foreign or interstate labour such as agriculture and mining. Even so, the long-term unemployment rate remained elevated (Figure 1.6, Panel A), with particular cohorts of displaced workers still struggling to reintegrate into the labour market. Higher frequency data suggest that the current strict lockdowns are having notable effects on the labour market: payroll jobs fell 3.7% between the first and last week of July and wages fell 5.7%.

Figure 1.5. The labour market shock was abrupt but employment rebounded after the initial lockdown

Employment, percentage change from pre-downturn employment peak



Source: Australian Bureau of Statistics

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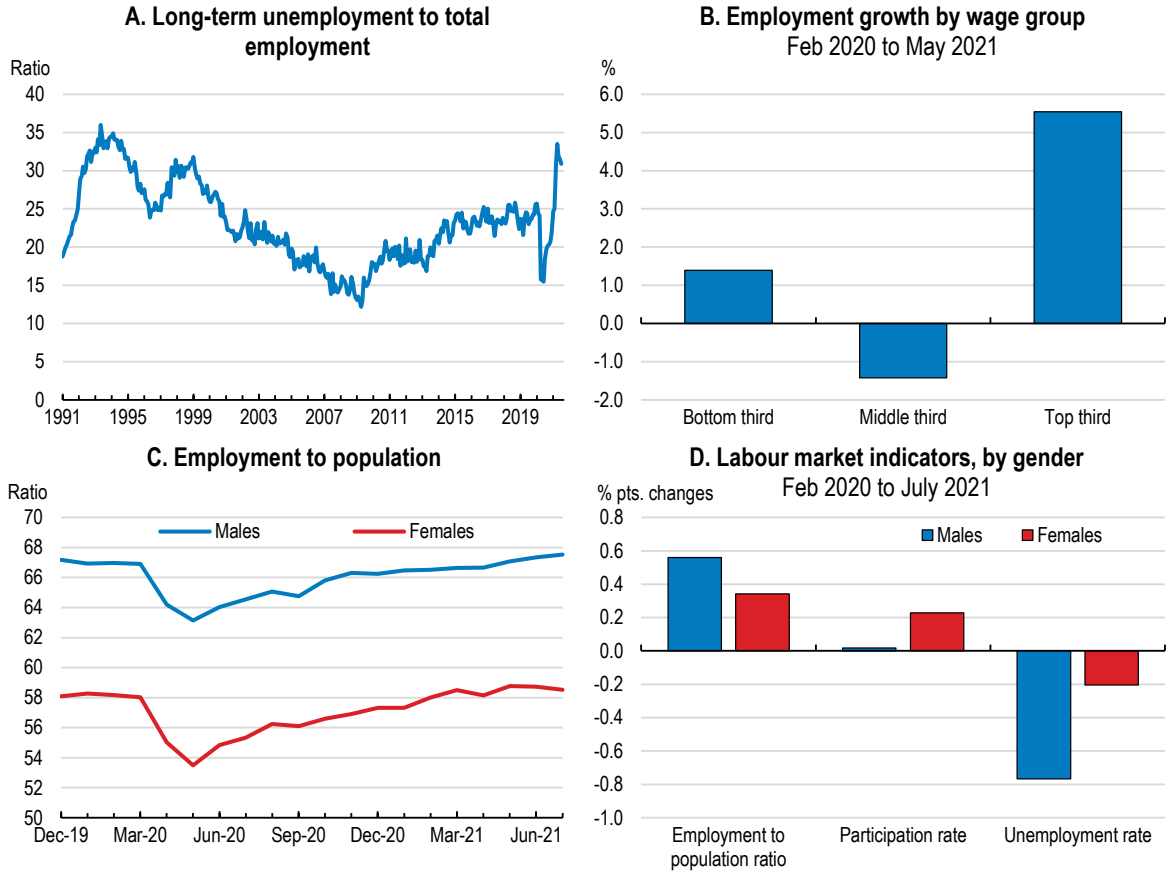
As in many other OECD countries, job losses in the early stages of the pandemic were particularly severe in labour intensive, face-to-face services which tend to employ a large share of young and lower-wage workers (Figure 1.6, Panel B). In contrast to older cohorts, employment of the 15-24 and 25-34 age groups remained below pre-pandemic levels in July 2021. The larger labour market impact on young and lower-wage workers risks amplifying existing divides. In addition to rising intergenerational inequality, aggregate measures of income and wealth inequality have edged up over recent decades (Productivity Commission, 2018).

The employment shock at the onset of the pandemic was slightly larger for women than for men, though the subsequent labour market recovery was observed across both genders (Figure 1.6, Panels C and D). There remains an eight percentage point gap in the employment to population ratios between the genders, which is around the gap in the average OECD country. Australia's gender participation gap is also around the average across the OECD, having narrowed in recent years partly due to rising participation of older women. However, Australian women are more likely to work part-time than in other countries. This is especially the case for women with children (OECD, 2018b; Wood et al. 2020).

As discussed in the 2018 *OECD Australia Economic Survey*, an ongoing challenge for promoting female labour participation is ensuring that the tax and benefit system does not disincentivise those women wanting to increase work hours. Australia's system of means-tested benefits ensures that payments are well targeted and fiscal costs are contained, but high effective marginal tax rates generated by steep benefit tapering may dissuade some women from working more. Higher incomes upon entering employment would also encourage greater female participation: the gap in earnings per hour worked between men and women was around 10% in 2020. A significant portion of this gap cannot be explained by gender differences in factors such as job category and industry, career interruptions, age and tenure (KPMG, 2019).

An additional barrier to greater female workforce participation has been relatively high net childcare costs. While limited childcare availability constrains access for some parents (Australian Institute of Family Studies, 2021), surveys suggest that childcare cost is the more significant factor holding back parents from undertaking more paid work (Wood et al., 2020). In July 2018, the government replaced two childcare support measures with a means-tested Child Care Subsidy. Subsequently, out-of-pocket child care expenses for families declined by 18% (Commonweatlh Government, 2021a). As part of the 2021-22 Federal Budget, the subsidy was increased for families with two or more children aged five and under. The annual cap on the subsidy, applying to families with incomes over AUD189,390, will also be removed (see Table 1.4). Ongoing income tax cuts under the government's *Personal Income Tax Plan* should also generally reduce marginal effective tax rates.

Figure 1.6. Lower wage workers experienced more adverse employment outcomes



Note: In Panel B, measures are calculated at the industry-level, with industries placed in the wage distribution depending on average weekly earnings.
Source: ABS; OECD calculations.

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Underlying inflationary pressures remain subdued. Policy measures and, to a lesser extent, the impacts of the pandemic, caused substantial volatility in prices through 2020. While much of this impact has now passed, it is possible that the reintroduction of domestic containment measures may result in additional government policies or behavioural changes that have strong temporary influences on consumer prices. Consistent with spare capacity in most sectors, wage growth remains modest, despite the reversal of some temporary wage cuts in the second half of 2020.

Looking forward, GDP is projected to grow by 4% in 2021 and 3.3% in 2022 (Table 1.1). It is assumed that strict containment measures remain in place in New South Wales and Victoria until midway through the fourth quarter of 2021. The economy will recover thereafter as restrictions can be eased with the achievement of higher vaccination rates. In contrast with previous lockdown episodes, this reopening will occur despite continued community transmission of COVID-19. Consumers may be more hesitant to revert to pre-pandemic consumption patterns in this environment. Closed international borders will continue to weigh on export volumes into 2022. The unemployment rate is anticipated to rise in the second half 2021, though the labour market impacts of restrictions will be more visible in measures of hours worked. As the economy recovers, labour market conditions will improve and spare capacity be absorbed. Wage and price pressures will subsequently build, though they are expected to remain well contained.

Table 1.1. Macroeconomic indicators and projections

	2017	2018	2019	2020	2021	2022
Australia	Current prices AUD billion	Percentage changes, volume				
GDP at market prices	1 806.8	2.9	1.9	-2.5	4.0	3.3
Private consumption	1 020.3	2.5	1.2	-5.8	4.1	3.8
Government consumption	336.1	4.3	5.7	7.0	4.3	4.8
Gross fixed capital formation	437.2	2.3	-2.6	-3.1	7.9	4.3
Final domestic demand	1 793.6	2.8	1.1	-2.6	5.0	4.1
Stockbuilding[1]	4.1	0.1	-0.3	-0.2	1.1	-0.1
Total domestic demand	1 797.7	2.9	0.8	-2.8	6.1	4.0
Exports of goods and services	387.0	5.1	3.1	-9.9	-2.2	3.1
Imports of goods and services	377.9	4.2	-1.3	-13.2	8.8	7.0
Net exports[1]	9.1	0.2	1.0	0.4	-2.1	-0.5
Memorandum items						
GDP deflator	_	2.3	3.3	1.0	5.2	2.1
Consumer price index	_	1.9	1.6	0.9	2.3	1.8
Core inflation index[2]	_	1.7	1.6	1.3	2.2	1.7
Unemployment rate (% of labour force)	_	5.3	5.2	6.5	5.4	4.9
Household saving ratio, net (% of disposable income)	_	4.2	5.0	15.5	12.5	10.3
General government financial balance (% of GDP)	_	-0.1	-0.5	-12.3	-7.5	-6.3
General government gross debt (% of GDP)	_	43.5	45.9	65.4	68.5	72.6
Current account balance (% of GDP)	_	-2.1	0.6	2.7	4.1	3.3

1. Contributions to changes in real GDP, actual amount in the first column.
2. Consumer price index excluding food and energy.

Source: OECD Economic Outlook 109 Database, projections revised as of 08 September 2021.

There are substantial risks to the projections at present, both to the upside and downside. A substantial quickening in the pace of vaccine rollout could enable the relaxation of current containment measures earlier than anticipated. Furthermore, once the economy reopens, household consumption could pick up suprisingly rapidly given a high stock of excess savings. In contrast, problems with the vaccine rollout or vaccine hesitancy within particular cohorts of the population could delay reopening. In addition, significant

new COVID-19 outbreaks in those states that currently have limited restrictions could deepen the economic shock as containment measures are imposed. There are structural impacts of the pandemic whose scale is uncertain, including the accelerated shift to online retail and the possibility of lower commuting and travel. Slower inward migration may also constrain supply in certain parts of the economy by more than anticipated. Resolving trade tensions with China would boost export growth, but there is also the potential for diplomatic relations to further deteriorate.

Table 1.2. Possible further shocks to the economy

Shock	Likely impact	Policy response options
Carbon border adjustments introduced by some major trading partners.	The imposition of a mechanism to place a carbon price on imports from less climate-ambitious countries could have significant impacts across trade-exposed sectors.	Define a climate strategy with clear goals and corresponding policy settings for the path to achieving net zero emissions by 2050.
A decline in fossil fuel demand in major export markets, potentially due to changes in domestic climate change policy in these markets.	A substantial fall in demand for Australian fossil fuels would have a large impact on the mining sector and related industries. For example, about three quarters of Australia's thermal coal exports are sent to China, Japan and South Korea – countries that have all set a target date for achieving net zero carbon emissions.	Provide macroeconomic policy support. Undertake structural reforms that promote cross-sector resource reallocation.
Further ramping up of trade tensions with key export partners.	The further imposition of trade restrictions by China, in areas such as iron ore and education, would substantially dent the pace of economic recovery.	Explore the potential for trade diversion to other export markets. Provide targeted support to the impacted industries as they transition to new markets.
A large and catastrophic natural disaster linked to climate change and other environmental degradation.	Prolonged drought and extreme weather events could materially lower economic activity in certain sectors and may have significant costs in terms of property damage, the health and wellbeing of the population.	Participate actively in multilateral efforts to curb emissions and lower the rise in temperatures. Undertake pre-emptive crisis and response scenarios. If such an event occurs, provide targeted fiscal support. Coordinate effectively between levels of government to swiftly establish a coherent government policy response.

Monetary and financial policies have provided a buffer against the shock

The Reserve Bank of Australia (RBA) acted swiftly at the onset of the crisis, easing existing monetary policy settings and expanding the suite of policy instruments in use (Table 1.3). New measures included a target for the yield on the 3-year Australian Government bond and a three-year fixed-rate funding facility for authorised deposit-taking institutions. The RBA also commenced a programme of purchasing government bonds in the 5 to 10 year maturity range in November 2020, which was extended in February 2021. This followed earlier bond purchases to address market dysfunction and to support the 3-year bond target. In July 2021, the RBA announced a slight tapering of the programme from September 2021, reducing the pace of bond purchases from AUD5bn to AUD4bn per week.

Forward guidance on the future path of monetary policy has also been an important element of the RBA's pandemic response, with actual inflation outcomes rather than forecasts emphasised as a key determinant of when policy normalisation will begin. Employment dynamics have been given a more prominent role in the guidance, with the Board noting that a return of actual inflation to target will require a tightening of the labour market that generates a material pick up in wages growth. According to the most recent forward guidance, the Board does not expect that the conditions for an increase in the cash rate will be met before 2024.

In response to the current weakness in economic activity, there is scope for the RBA to further expand the asset purchasing programme and consider other less conventional monetary policy tools, such as negative official interest rates. Looking further ahead, the eventual economic recovery may result in more widespread labour shortages given a slowdown in the growth of the working-age population. If this results in inflation picking up more sharply than expected, the RBA should be prepared to begin monetary policy normalisation earlier than it is currently foreshadowing.

Table 1.3. Monetary policy support since the onset of the pandemic

Date of announcement	Measure
3 March 2020	Official cash rate target lowered by 25 basis points to 0.50 per cent
19 March 2020	At an emergency meeting, a package of new measures were introduced, comprising: • Reduction in the official cash rate target to 0.25 per cent. • Introduced a target for the yield on 3-year Australian Government bonds of around 0.25 per cent, to be achieved through bond purchases in the secondary market. • Introduced a three-year funding facility of at least AUD90 billion to authorised deposit-taking institutions (ADIs) at a fixed rate of 0.25 per cent. ADIs were able to obtain initial funding of up to 3 per cent of their existing outstanding credit and have access to additional funding if they increased lending to business, especially to small and medium-sized businesses. • Exchange settlement balances at the Reserve Bank remunerated at 10 basis points, rather than zero. This was aimed at mitigating the cost to the banking system associated with a large foreshadowed increase in banks' settlement balances.
1 September 2020	Term Funding Facility increased and extended. ADIs were able to access additional funding, equivalent to 2 per cent of their outstanding credit, at a fixed rate of 25 basis points for three years. ADIs were able to draw on this extra funding up until the end of June 2021, an extension from the prior expiry date of March 2021.
3 November 2020	A package of additional measures were introduced, comprising: • Reduction in official cash rate target to 0.1 per cent. • Reduction in the target for the yield on the 3-year Australian Government bond to around 0.1 per cent. • Reduction in the interest rate on new drawings under the Term Funding Facility to 0.1 per cent. • Reduction in the interest rate on Exchange Settlement balances to zero. • Purchase of AUD100 billion of government bonds of maturities of around 5 to 10 years over the next six months. Under the programme, the RBA purchased bonds in the secondary market through regular auctions. The programme aimed to purchase 80% Australian Government bonds and 20% States and Territory government bonds.
2 February 2021	Announced that an additional AUD100 billion of bonds issued by the Australian Government and states and territories would be purchased when the current bond purchase programme finished in mid-April. Additional purchases were to be made at the rate of AUD5 billion per week.

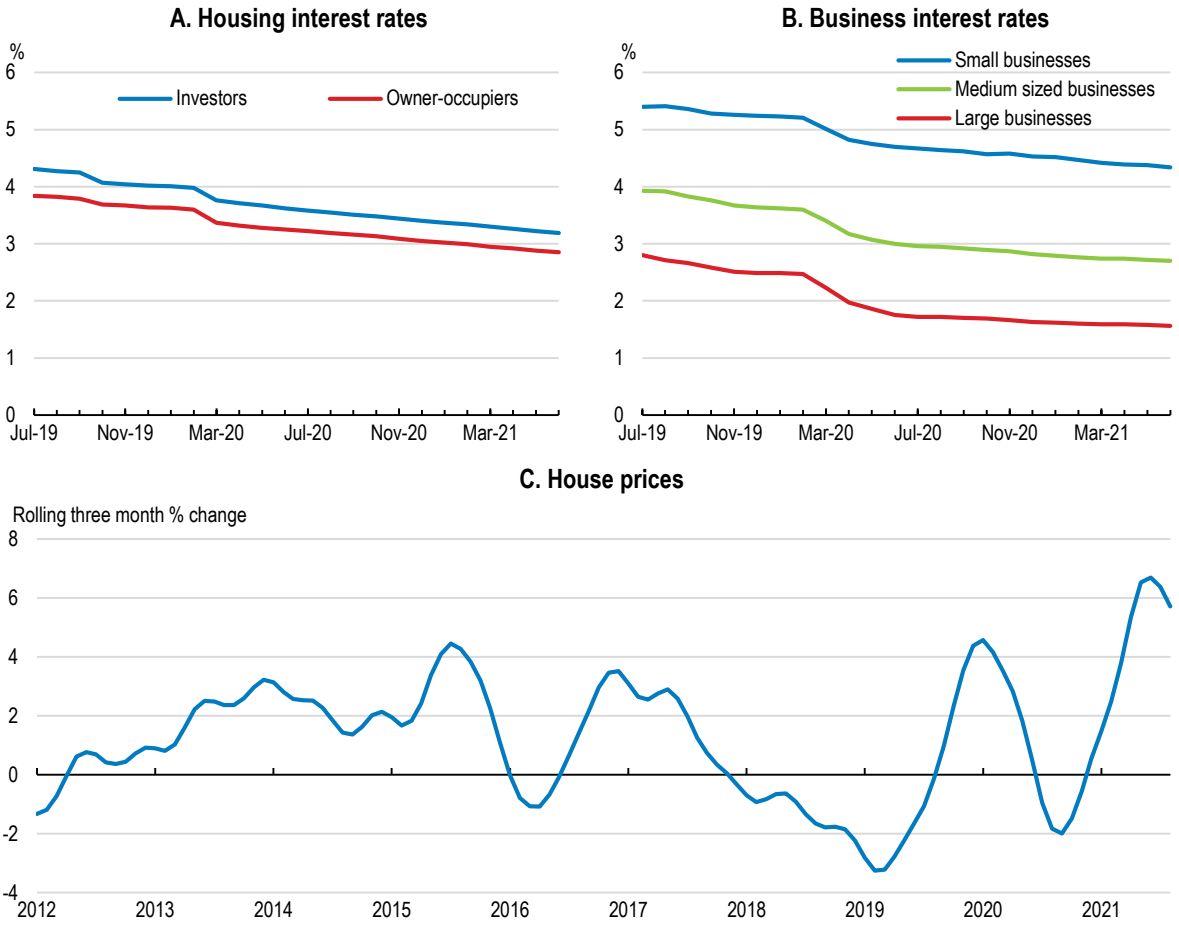
Other financial sector policies have also shifted to support the economy since the onset of the pandemic. The banking sector offered loan repayment deferrals to households and SMEs and the bank regulator allowed such deferrals to not be treated as in arrears. Insolvency thresholds were temporarily raised and a raft of additional government policies, including a loan guarantee for SMEs and investment in structured finance markets, eased the flow of credit. These policies interacted with a healthy financial sector to provide an important buffer against the economic shock. Nevertheless, as temporary support measures are further unwound, insolvencies will likely rise from the currently exceptionally low levels. The financial sector response to the pandemic and the ongoing policy challenges are discussed in the thematic chapter of this *Economic Survey*.

In response to the monetary and financial policy response, interest rates have fallen across the board (Figure 1.7, Panels A and B). Since mid-2019, housing, personal and business interest rates have declined by 1% on average. This has begun to translate into a pickup in credit growth, especially for housing. This reflects a broadly based increase in housing prices in recent months (Figure 1.7, Panel C).

Past *OECD Australia Economic Surveys* have highlighted the potential risks stemming from Australia's high household debt and strong trend increases in house prices. This remains a medium-term vulnerability for the Australian economy. In the near-term, systemic risks are moderated by the likelihood of prolonged low interest rates and the increased attention being given to lending standards in the wake of the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry (see Chapter 2). Looking forward, macroprudential tools should be the primary lever to curb emerging risks in the housing market. Such tools were judiciously employed in the period of strong house price growth from late 2014.

As discussed in Chapter 2, the Australian Prudential Regulation Authority (APRA) should continue to develop its toolkit of macroprudential interventions. Unlike in most OECD countries, Australia does not have a regulatory maximum loan-to-value ratio. Other effective macroprudential options to consider include higher capital requirements, through sectoral counter-cyclical capital buffers or higher risk weights on highly leveraged loans. APRA plans to release a new prudential standard for recovery and resolution planning by early 2022, completing the implementation of reforms started with the crisis-resolution legislation passed in 2018. The 2018 *OECD Economic Survey* highlighted that a severe crisis could test the 2018 legislation as there are no explicit bail-in provisions on senior debt or deposits owned by financial institutions. Such provisions exist in the United States and European Union and may be useful in allowing more flexible resolutions when faced with a crisis.

Figure 1.7. Market interest rates have declined



Note: Panel A and B show average interest rates on credit outstanding. Panel C is the five capital city aggregate that includes Sydney, Melbourne, Brisbane, Adelaide and Perth.
Source: Reserve Bank of Australia; CoreLogic.

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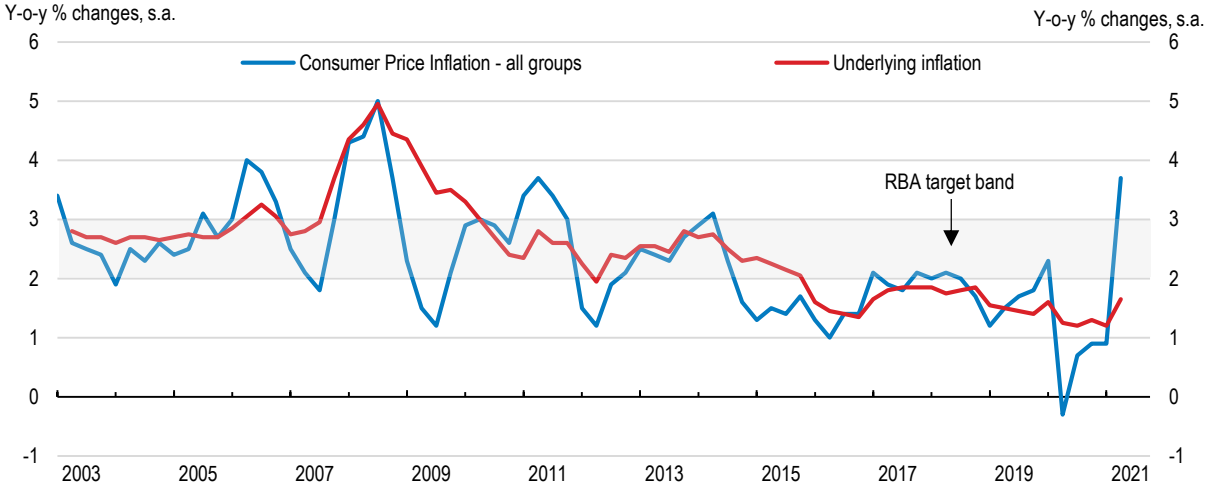
Achieving monetary policy objectives

As in many other OECD countries, inflation had fallen below the central bank's target prior to the pandemic. It has now been over five years since underlying inflation was within the RBA's 2-3% symmetric medium-term target band (Figure 1.8). A variety of idiosyncratic factors have been identified as contributing to undershooting, including the impacts of globalisation and digitalisation (Debelle, 2018; Cassidy, 2019) and underestimates of the extent of spare capacity (Bishop and Cassidy, 2017) that lead to overly tight monetary policy settings. While inflation expectations have gently declined since 2015, they are not yet de-anchored, suggesting the inflation target remains credible. However, there has been an active public debate around the RBA's policy stance and practices over the past few years (e.g. Preston, 2020; Tulip, 2021; Standing Committee on Economics, 2021).

Figure 1.8. Underlying inflation has undershot the target band for a prolonged period



Note: The measure of underlying inflation is the arithmetic average of the Trimmed Mean and Weighted Median.
Source: RBA.

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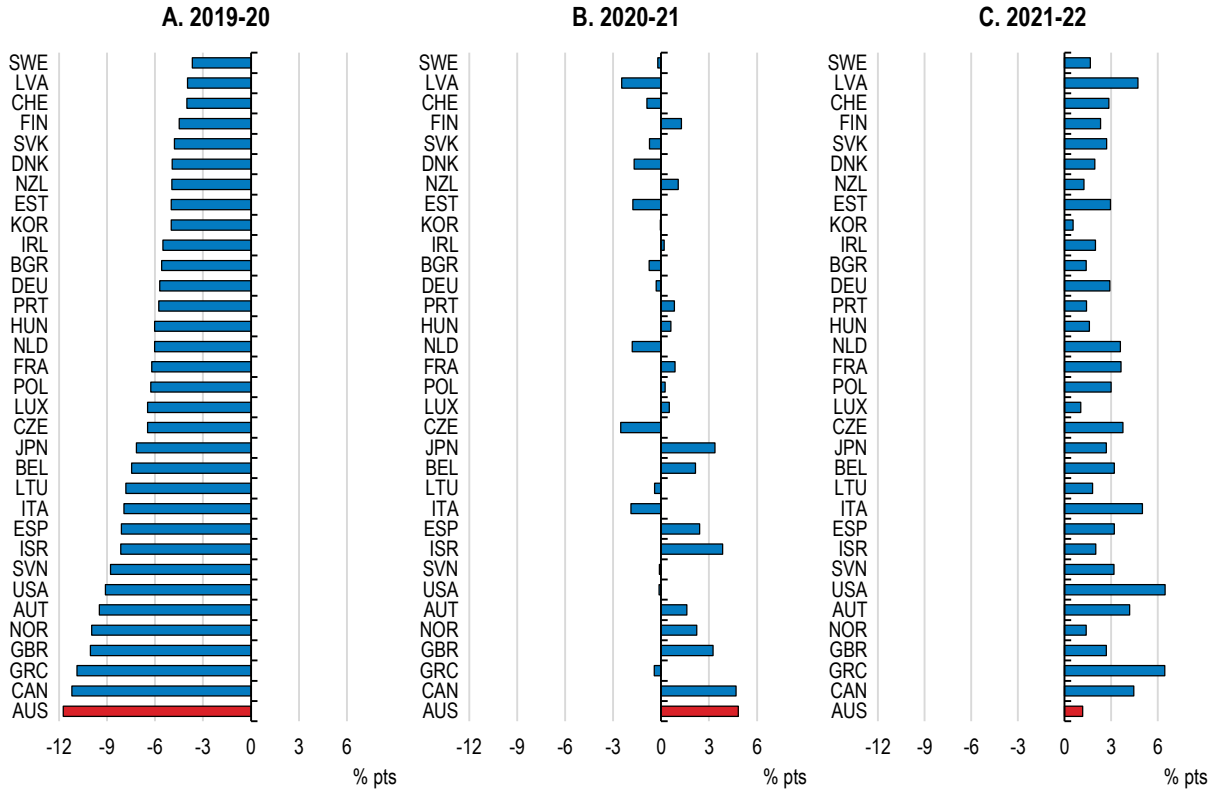
Now would seem like an appropriate time for a review of Australia's monetary policy framework, given the institutional and structural changes that have occurred in the economy as a result of the pandemic and the unconventional policy instruments the RBA has begun to employ. The experience of the many central banks in other OECD countries that have recently been through such a process could also inform the terms of reference (OECD, 2020a). Such a review should be broad in scope, potentially including a review of the central bank mandate, policy tools, methods of public communication, hiring processes and internal structures. It could also consider the alternative paths for rebuilding monetary policy space from the current position of policy rates at the zero lower bound. As was the case with recent reviews in the United States and Canada, the process should be transparent and involve consultation with a wide variety of relevant stakeholders. This can enhance public engagement and credibility in the policy framework. Looking forward, strong consideration should be given to enshrining such a review on a recurring basis.

Fiscal policy has responded with unprecedented force

Fiscal policy responded with appropriate force within the opening months of the pandemic. Direct economic and health support was initially announced in mid-March 2020 and then progressively scaled up as the severity of the pandemic became apparent. Additional fiscal support from the Commonwealth government amounted to around 15.7% of GDP, with the spending mostly concentrated in 2020. In addition, state and territory governments announced further initiatives worth around 2½% of national GDP. The immediate fiscal response was one of the largest in the OECD (Figure 1.9). It also dwarfed the 7¼% of GDP stimulus injected during the global financial crisis, which at the time was itself large compared with other countries.

Figure 1.9. Additional fiscal support was significant and front loaded

Change in projected general government budget balance, per cent of GDP



Source: OECD Economic Outlook database.

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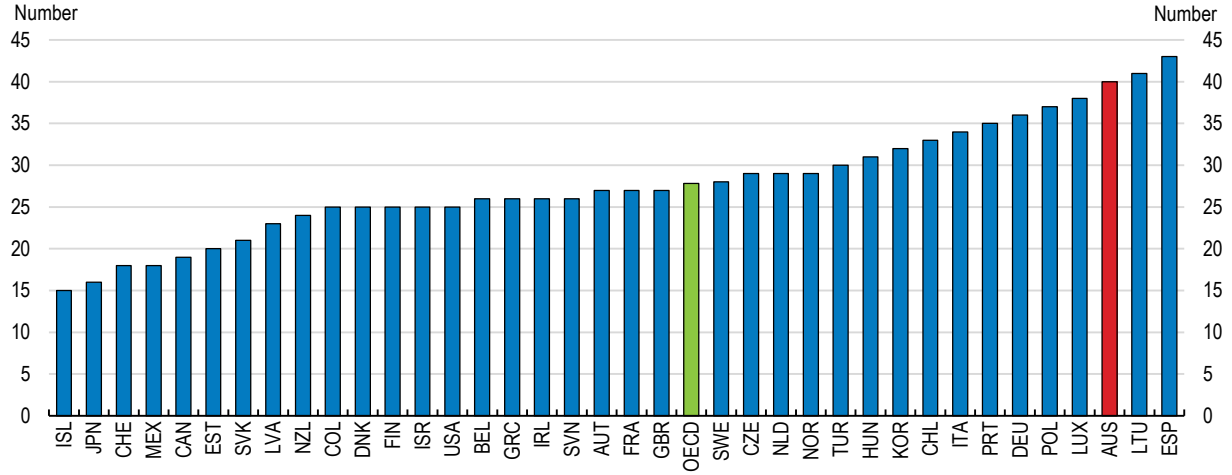
The core component of the Commonwealth government fiscal response was a large-scale temporary wage subsidy scheme called JobKeeper (Table 1.4). One estimate suggests that this programme saved at least 700,000 jobs over April to July 2020 (Bishop and Day, 2020). This was coupled with many other support measures; Australia employed a broader range of policies than most other OECD countries (Figure 1.10).

Figure 1.10. A multitude of policy measures were employed to fight the pandemic

Number of policy instruments used during the pandemic, out of 79 covered policy instruments



Note: Entries in the OECD COVID-19 Policy Response Tracker are coded into 79 policy items; loan guarantees or tax relief for firms are two examples of policy instruments. The figure shows the total number of policy items announced by a country between January and November 2020.
Source: OECD COVID-19 Policy Response Tracker.

StatLink https://stat.link/81ismq

Table 1.4. Fiscal policy support since the onset of the pandemic

Date of announcement	Measure
12 March 2020	AUD17.6 billion plan. Measures included: • One-off AUD750 direct payment to recipients of selected government income support payments and eligible concession card holders. • Increased social security payments through a cut to the deeming rate for some income support recipients. • Accelerated depreciation deductions for businesses. • Direct cash payments to small and medium-sized businesses (“Cash Flow Assistance for Businesses”). • Increased instant-asset write-off for businesses.
22 March 2020	AUD66.1 billion package. Measures included: • Income support payments – expanded eligibility and supplementary benefits (“Temporary Coronavirus Supplement”). • Additional one-off AUD750 direct payment to recipients of selected government income support payments and eligible concession card holders. • Early release of up to AUD10,000 of superannuation for individuals in financial stress on two separate occasions. • Payments to small and medium sized businesses linked to staff wage tax withholdings (“Boosting Cash Flow for Employers”). • Coronavirus SME Guarantee Scheme to support SME access to credit.
30 March 2020	AUD89 billion JobKeeper temporary wage subsidy scheme. The subsidy was paid to firms impacted by COVID-19 restrictions and was required to be passed on to employees in full. In the first phase of JobKeeper (March to September 2020) eligible businesses and not-for-profits (NFPs) were able to receive AUD1,500 (before tax) per fortnight per employee to cover the cost of wages, a rate which was equivalent to the median wage in heavily hit sectors such as retail, hospitality and tourism. In the extension phase of JobKeeper (October 2020 to March 2021), business eligibility was retested and the payment was tapered and targeted to those businesses that continued to be significantly affected by the economic downturn.
2 April 2020	Early Childhood Education and Care Relief Package. New funding arrangements that temporarily made childcare services fee free for families.

4 June 2020	HomeBuilder programme with an initial cost of AUD680 million (total cost after the scheme was extended in April 2021 was AUD2.5 billion). Under the scheme, eligible owner-occupiers were provided a grant of AUD25,000 to build a new home or substantially renovate an existing home.
6 October 2020	2020-21 Federal Budget. Measures included: • Business tax relief (full expensing of eligible assets and losses incurred to June 2022 able to be offset against prior profits). • Personal income tax cuts, through bringing forward the already-legislated Stage 2 tax cuts of the government's Personal Income Tax Plan, as well as an extension to the Low- and Middle-income Tax Offset. • Infrastructure investment focused on roads and spending on the National Water Grid. • Temporary wage subsidy for newly hired young workers (16-35) previously receiving selected government payments. • Spending on COVID-19 vaccines. • Further support for apprenticeships, through the Boosting Apprenticeship Commencements Wage Subsidy. • Two additional Economic Support Payments of AUD250 to pensioners and other eligible recipients. • Pandemic Leave Disaster Payment for eligible workers unable to work and earn income while under a direction to self-isolate or quarantine.
17 December 2020	2021 Mid-year Economic and Fiscal Outlook. Measures included: • Extension of various support measures including the temporary Coronavirus Supplement and the HomeBuilder programme. • New support for travel agents and the aviation sector. • New spending on health, including COVID-19 Vaccination Programme and aged care. • Transport infrastructure spending, particularly focused on rail.
11 May 2021	2021-22 Federal Budget. Measures included: • Extension of temporary tax relief, including full expensing, temporary loss carry-back and the low and middle income tax offset. • Aged care spending, including improvements to residential care and home care packages. • Increase of the Child Care Subsidy for families with two or more children aged five and under. The annual cap on the subsidy, applying to families with incomes over AUD189,390, will also be removed. • Spending for women's safety and economic security, including support for victims of family violence and women's health programs. • Infrastructure projects focused on road, rail and community infrastructure. • Additional support for National Disability Insurance Scheme. • COVID-19 spending on vaccination rollout and health care services. • Spending on mental health services. • Expanded wage subsidies through existing schemes, that will include subsidies for young people, parents and the long-term unemployed.
July-August 2021	Various additional fiscal supports, some under joint financing agreements between federal and state governments, were introduced for entities impacted by the reintroduction of COVID-19 containment measures in certain regions. Measures included: • The COVID-19 Disaster Payment for individuals who lost work as a result of a state public health order that imposes restrictions on movement (AUD750 per week for individuals who lost 20 hours or more of work, and AUD450 per week for those who lose between 8-20 hours). Those receiving an income support payment can also claim an extra payment of AUD200 if they have lost eight hours or more of work and meet the other eligibility requirements for the COVID-19 Disaster Payment. • Increases in business grants and broader eligibility in several states. These included expansions of the Smass Business COVID Hardship Fund in Victoria, COVID-19 Business Grants in New South Wales and a Business Support Grant in South Australia. • Additional sector-specific supports, such as grants for tourism businesses in Western Australia and a new round of payments for hospitality businesses in metropolitan Melbourne. • Expansion of the SME Recovery Loan Scheme to remove requirements that an SME had received JobKeeper or have been impacted by March 2021 floods.

Note: This is a non-exhaustive list, but serves to cover the main fiscal policy announcements through the pandemic.

Supporting the recovery while ensuring fiscal sustainability

At the time of the last Federal Budget, the government expected the Commonwealth fiscal deficit to decline from 7.8% of GDP in fiscal year 2020-21 to 2.4% in 2024-25. Commonwealth gross government debt was projected to rise from around 28% of GDP prior to the pandemic to 50% of GDP at 30 June 2025. At that time, the authorities articulated a two-stage fiscal strategy. First, the aim is to create a strong and sustainable private sector led recovery and drive down the unemployment rate. Then, once the economic recovery is well entrenched and the unemployment rate is back to pre-pandemic levels (5%) or lower, the policy focus will turn to stabilising and then reducing debt as a share of GDP.

The current strict containment measures in certain states have been accompanied by further fiscal support from both the federal and state governments (Table 1.4). The current stance of fiscal policy is appropriate and governments should stand ready to provide further fiscal support if restrictions end up being more prolonged than currently anticipated or if there are virus outbreaks in other jurisdictions that result in new containment measures being introduced. For the time being, the low interest rate environment means that the government could run primary fiscal deficits in the coming years and still put the government gross debt ratio on a downward path (Box 1.3).

The government's substantial fiscal stimulus during the pandemic was enabled by the country's strong starting fiscal position. After an extended period of "budget repair", the federal Budget had returned to balance in Financial Year 2018/19. Since its inception, Australia's *Charter of Budget Honesty* has entrenched fiscal discipline into the system, with a range of regular publications that provide insights to the government's budgetary position (Box 1.2).

Box 1.2. Australia's Charter of Budget Honesty

Legislated in 1998, the Charter of Budget Honesty occupies a central role in Australia's Commonwealth budget process, creating a system of processes that involve Parliament, the Treasury, the Department of Finance, and the Parliamentary Budget Office. The purpose of the Charter is to improve fiscal policy outcomes by requiring fiscal strategy to be based on principles of sound fiscal management, and by facilitating public scrutiny of fiscal policy and performance. There are a range of documents published each year that aim to support these objectives, including:

- The Fiscal Strategy Statement is tabled by the Federal Treasurer with the release of each annual budget, which also includes an Economic and Fiscal Outlook report.
- The Mid-Year Economic and Fiscal Outlook Report acts as an update and a progress report to the annual budget half-way through the fiscal year. It serves to highlight any changes that may affect the budget's trajectory.
- The Budget Outcome Report is published within three months of the end of the financial year and summarises the post-budget financial statements.
- The Intergenerational Report is published at least once every five years and highlights the impact of changing demographics on the economy and public finances over the following 40 years.
- A Pre-Election Fiscal Outlook is released within 10 days of the issue of the writ for a Federal election and updates budget estimates to present the country's fiscal position before the election.

The institutional fiscal framework should continue to evolve, reflecting the new environment in which fiscal policy is being conducted. Prior to the pandemic, there was a view that discretionary policy support for non-crisis cyclical fluctuations should be provided through monetary policy (Commonwealth Government, 2019). However, fiscal policy may play a more active role in managing such fluctuations in the coming

years given conventional monetary policy settings are at the lower bound. Australia's fiscal policy is also now operating in an environment of higher public debt. While Australia's public debt burden remains below most OECD countries and interest rates are expected to remain low for the foreseeable future, a shock to debt servicing costs could push public debt notably higher. For example, scenario analysis suggests that a one percentage point increase in the average interest rate would add, *ceteris paribus*, around 5½ percentage points to the public debt to GDP ratio by 2032. There are also fiscal risks associated with the mounting costs of an ageing population (discussed below). Such risks must now be more closely monitored.

Prior to the pandemic, the government's fiscal objectives were typically "to deliver budget surpluses building to at least 1% of GDP as soon as possible". This provided the government flexibility in responding to changes in economic and financial conditions. However, such a commitment was very difficult for the public to assess performance against and thus hold the government accountable. Fiscal outcomes were better than expected in the two years immediately prior to the pandemic. However, consolidation repeatedly fell short of forecasts between 2011 and 2015, following the previous large fiscal stimulus (Daley and Wood, 2016). The authorities attribute this to an unforeseen downturn in commodity prices. Australia has also exhibited a longstanding vulnerability to excessive fiscal expansion during commodity booms (OECD, 2017a). The pandemic-induced move to a state-contingent fiscal strategy (with the short-term fiscal strategy now anchored to the unemployment rate) is a positive development. From here, the authorities should implement a medium-term fiscal strategy with targets that are associated with specific timeframes or conditional on measurable economic outcomes.

The fiscal strategy should be supported by the systematic oversight of a credible independent fiscal institution. Australia's Commonwealth Parliamentary Budget Office (PBO) has been in operation since 2012, producing costings of policy proposals for all parliamentarians (not just those in government), a post-election report on the fiscal cost of election commitments and research on medium-term budgetary pressures. The design of the PBO leads it to be highly independent from a legal standpoint (von Trapp and Nicol, 2018) and it has played an invaluable role in improving the transparency and rigour of fiscal policy. While the potential scope of the PBO's responsibilities is broad ranging, it is not required to evaluate and monitor progress against the fiscal strategy, does not produce short-term macroeconomic or fiscal forecasts, nor does it assess the credibility of those prepared by the government (von Trapp and Nicol, 2017).

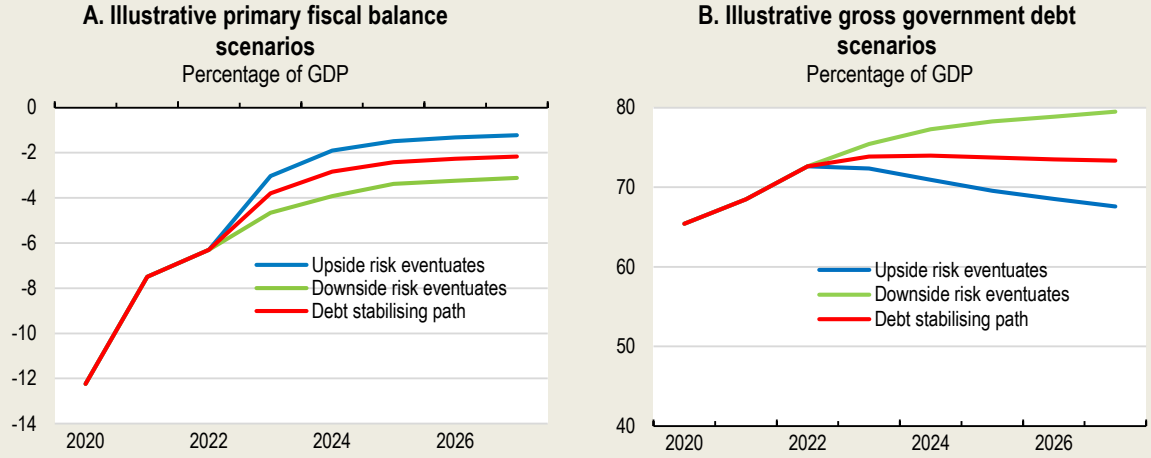
The government could strengthen the transparency and accountability of fiscal policy by explicitly requiring an independent fiscal institution to regularly evaluate and monitor the fiscal strategy. In the most comprehensive empirical analysis of independent fiscal institutions, Debrun and Kinda (2017) highlight the positive relationship between an independent institution undertaking these tasks and fiscal performance (measured by the primary budget balance and the quality of budget forecasts). This reiterates the findings of a host of other studies (e.g. Beetsma et al., 2019; Nerlich and Reuter, 2013; Fall et. al., 2015). Some OECD countries, such as Austria and Greece, have both an independent fiscal institution that monitors compliance with fiscal rules in addition to a Parliamentary Budget Office. However, in the Australian context, it may make most sense for the evaluation and monitoring of the fiscal strategy to be undertaken by the PBO given the responsibilities are within it's existing mandate. There should also be consideration given to an independent institution evaluating the government's fiscal and macroeconomic forecasts in Australia, though Budget documents do not suggest that there has been particular bias in nominal forecasts in the last few years (Commonwealth Government, 2021b).

Expanded responsibilities of independent fiscal institutions have recently occurred in various other OECD countries, including Ireland, Canada and Latvia. At the state level, the Victorian PBO is currently exploring options for broadening its responsibilities for fiscal policy evaluation and monitoring as part of its mandate review. Such reforms should be accompanied by initiatives that promote the communication of the work of independent fiscal institutions to the Australian public, thereby enriching public debate.

Box 1.3. The short-term path of fiscal policy

In the coming years, fiscal policy will need to tread the path between gradually restoring the fiscal balance while not choking off the recovery. Illustrative paths for the fiscal balance highlight that, under certain assumptions, running fiscal deficits of 2% of GDP in the short-term could be consistent with a debt stabilising path (Figure 1.11). If the economic recovery is stronger than expected, a reduction in the fiscal balance to around 1% of GDP could put the ratio of gross government debt to GDP on a steadily declining path ("Upside risk eventuates"). Alternatively, a weaker than expected recovery could be cushioned by more expansionary fiscal policy, though this would result in a steady further increase in the public debt burden ("Downside risk eventuates"). These scenarios rely on the assumption of relatively low interest rates being sustained and no major downside shock to economic growth (see figure note).

Figure 1.11. Fiscal stability can be restored in the short-term



Note: The interest rate on government debt and real GDP growth forecasts in the 2023-27 period are taken from the baseline scenario of the OECD Long-term Model. The upside risk scenario assumes that real GDP recovers more quickly to be 2½% above the baseline level in 2027 and fiscal policy responds through a decline in the primary fiscal deficit (relative to baseline). The downside risk scenario assumes that real GDP recovers more slowly to be 2½% below the baseline level in 2027 and fiscal policy responds through an increase in the primary fiscal deficit.

Source: Calculations based on OECD Long-term Model.

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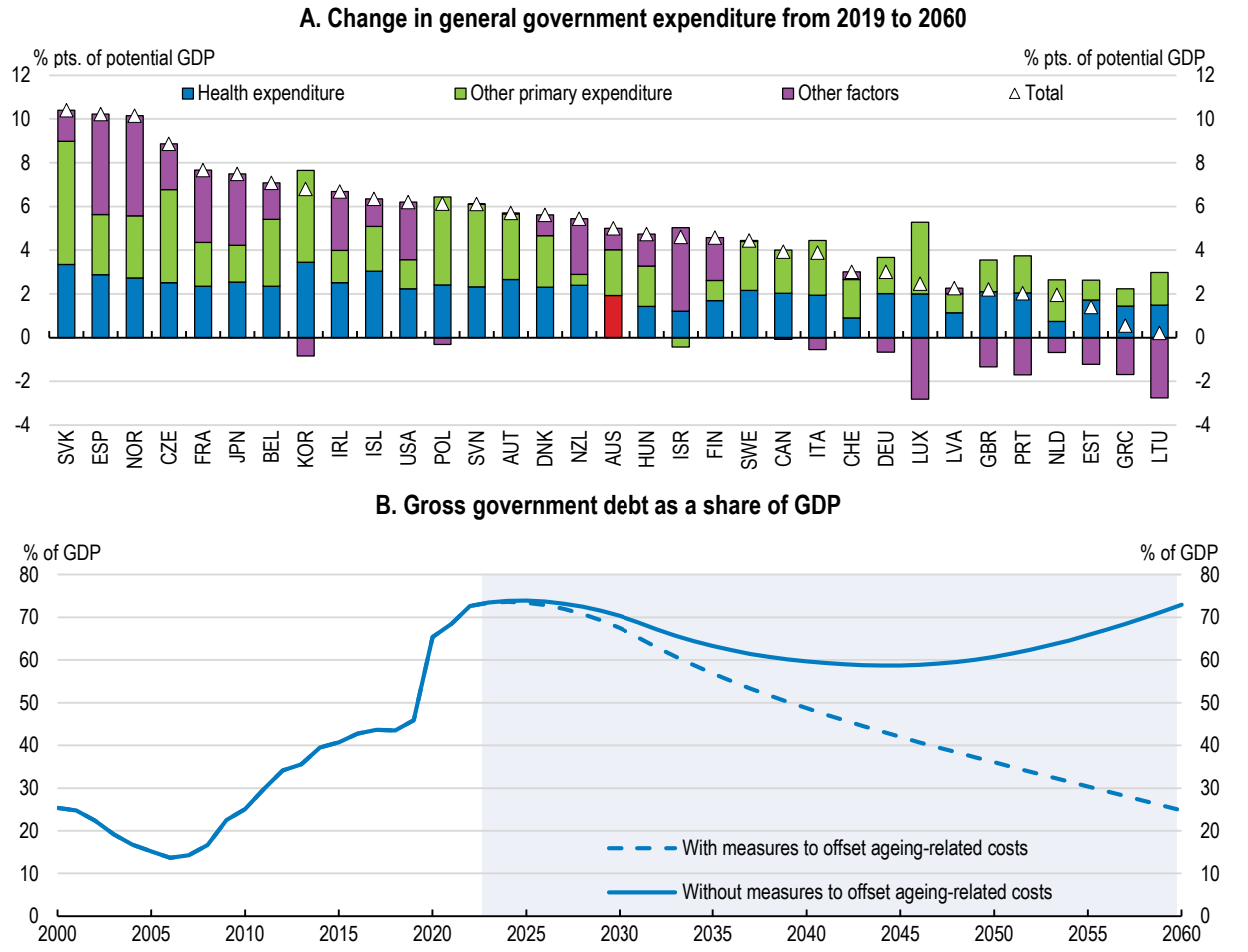
Future public spending pressures

Once the economy reopens and a well-entrenched recovery moves the economy back to full employment, the fiscal strategy will need to be framed in the context of future budgetary pressures, partly from an ageing population. Although the fiscal impacts of ageing are less pronounced in Australia than in most other OECD countries, public costs are expected to rise notably. This is consistent with the findings of the government's recent Intergenerational Report (Box 1.4). The OECD Long-term Model estimates that ageing-related fiscal costs will increase by 5% of GDP between 2021 and 2060 (Figure 1.12). This means that a similar reduction of spending or increase in revenue (or combination thereof) will be needed just to stabilise the gross debt-to-GDP ratio.

Figure 1.12. There are long-term fiscal pressures from ageing



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

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Box 1.4. The Australian Intergenerational Report 2021

On 28 June 2021, the Commonwealth government released the *Intergenerational Report 2021* (Commonwealth Government, 2021c). The report projects an outlook for the economy and the federal budget over the next 40 years.

Key findings from the report include:

- The Australian economy is projected to grow at a slower pace over the next 40 years than it has over the past 40 years, largely owing to slower population growth.
- The population will continue to age, mostly because of improved life expectancy and low fertility. The ratio of working-age people to those over 65 is projected to fall from 4.0 to 2.7 over the next 40 years.
- Real per person health spending is projected to more than double over the projection period, largely due to rising incomes, changes in preferences and the costs of using new health technology.
- Aged care spending is projected to nearly double as a share of the economy by 2060-61.
- In the future, more Australians will retire having made superannuation contributions while working. This will reduce the call for government support through the Age Pension. However, superannuation attracts favourable tax treatment which reduces government revenues.

There are some key differences in coverage and methodology between the government projections in the Intergenerational Report and those presented in Figure 1.13 which mean that the two are not directly comparable. The estimates in Figure 1.13 are taken from the OECD Long-Term Model (for details, see Guillemette and Turner, 2021) with some additional assumptions. Notable difference include:

- **Coverage of the public sector** – the OECD estimates are for general government debt (including the States and Territories) as opposed to Commonwealth government debt in the Intergenerational Report.
- **Coverage of ageing costs** – the OECD estimates do not incorporate projections of pension expenses for Australia. This is because the model does not properly capture the specificities of Australia's Superannuation system.
- **Nominal GDP and interest rate projections** – the OECD projections for nominal GDP and interest rates are taken from the OECD Long-term Model, which follows a harmonised methodology across countries.
- **Estimates of ageing costs and other primary expenditure** - the OECD projections of ageing and other primary expenditure are based on a stylised approach common to all countries. Country specificities in health, long-term care and other programme designs are generally not taken into account other than in initial expenditure levels. The stylised approach also implies a "business-as-usual" future in which no major policy changes are undertaken. One exception is already-legislated future changes in legal retirement ages, which are incorporated in employment projections. See Guillemette and Turner (2021) for additional details and references.

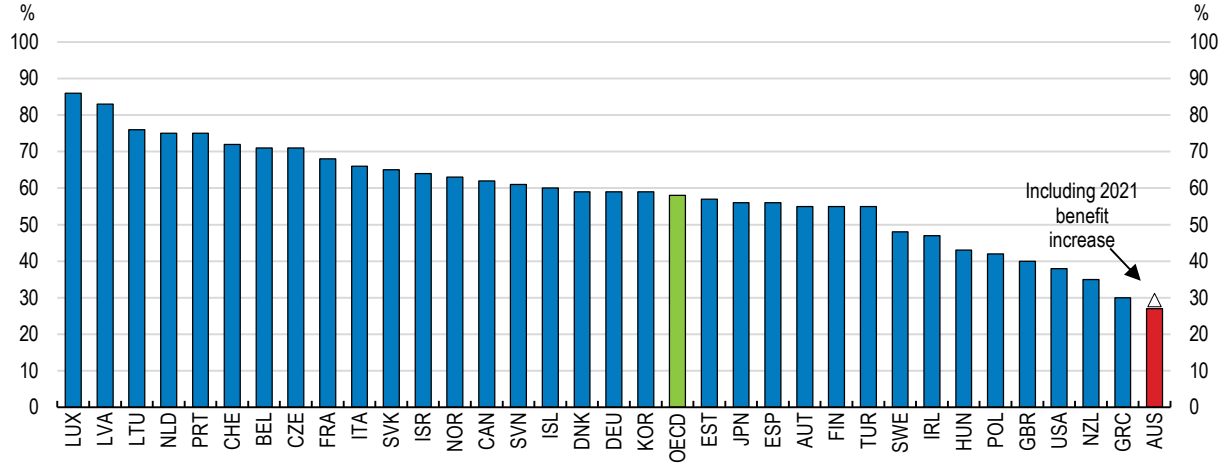
There is also a need for further spending to ensure the adequacy of the social safety net. Unlike most OECD countries, Australia does not have an unemployment insurance scheme that provides benefits linked to previous earnings, but has a tax-funded unemployment assistance programme that is not time-limited. Individuals may also receive other assistance for additional costs such as Rent Assistance for rental costs, and a Family Tax Benefit to help with the cost of raising children.

Recently, the working-age unemployment benefit was raised by AUD50 per fortnight. However, the benefit for a single person in the first month of unemployment in Australia, at just 29% of the average wage, is still very low by OECD standards (Figure 1.13). When comparing Australia's total minimum income benefits to the safety net in other countries after an individual has exhausted all unemployment benefit entitlements, Australia's total minimum income supports are around OECD average (OECD, 2019a). However, the income shock from falling into unemployment in Australia is much larger than in other countries and minimum income supports remain well below the relative poverty line. Indeed, one estimate suggests that 85% of recipients of unemployment benefits will be in poverty (Phillips 2021).

The low level of unemployment benefits partly reflects indexation of the benefit rate to consumer price inflation, rather than faster-growing average wages. The latter has been the basis for increases in other government payments, such as the Age Pension and disability support. Consequently, while unemployment benefits were above 90% of the Age Pension in 2000, the ratio had declined to 65% by 2020. The divergence in generosity across benefits can incentivise job seekers to try and move to disability support or another type of payment (Coates and Cowgill, 2021) and thus weaken activation targeting. More generally, an adequate safety net for the unemployed is an important prerequisite for the successful implementation of new reforms that promote business dynamism (discussed further down). The government should further increase the generosity of unemployment benefits and consider indexing further increases to average wage growth. When considering such a reform, the fiscal impact as well as the potential effect on work incentives of particular cohorts should be taken into account.

Figure 1.13. Unemployment benefits remain very low by international standards

Unemployment benefit net replacement rate, 2020 or latest available year



Note: Calculation includes social assistance and housing benefits.
Source: OECD Tax-Benefit Models, www.oecd.org/els/social/workincentives.

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Well-functioning activation policies are also key to avoid scarring effects on the long-term unemployed and to support within- and between-sector reallocation as a result of the pandemic. Such measures can also boost labour supply in the context of a smaller than expected working-age population, due partly to the extended closure of international borders. The 2018 *OECD Jobs Strategy* highlighted that effective activation strategies can help overcome adverse effects of benefit receipt on work incentives. Moreover, adequate unemployment benefits are needed to ensure activation policies, based on the threat of benefit sanctions, are credible and effective (OECD, 2018a).

Participation in employment service activities (career advice, voluntary work, training etc.) is an eligibility requirement for receiving unemployment benefits in Australia. Unique to the Australian system is that employment services are provided by private sector providers contracted by the government through a system called *Jobactive*. The government is adopting a *New Employment Services Model* that will replace the existing *Jobactive* programme from 2022. This will have a stronger emphasis on providing digital services, including an online platform that facilitates job matching and training services. The new programme is anticipated to yield cost savings that will contribute to funding new government investments in specialist employment services and training that were announced as part of the 2021-22 Federal Budget.

Spending on training for the unemployed, as well as the incidence of such training, has historically been quite low in Australia compared with other OECD countries (OECD, 2018b). The authorities should be careful to ensure that the private employment service providers are adequately incentivised to facilitate training for the unemployed under the new system (OECD, 2018b). The previous *OECD Australia Economic Survey* noted that providers receive no further fees after a client's 26th week of employment, meaning that longer-term employment outcomes are not rewarded (*ibid*). As part of the 2021-22 Federal Budget, the government announced some new training supports, including an extension of an apprentice wage subsidy (the *Boosting Apprenticeship Commencements* programme), additional affordable training courses for young people (through the *JobTrainer* fund) and income support for those in training (through the *Earn and/or Learn* programme). Initiatives that promote high quality training programmes will also benefit other vulnerable groups where low skills can be a barrier to labour market integration, such as Indigenous Australians (OECD, 2019b).

A strong emphasis on targeted welfare policies for specific groups experiencing complex disadvantage and particularly high poverty rates is also needed. The plight of Indigenous Australians persists, with the gap between the Indigenous and non-Indigenous employment rate around -20 percentage points in urban regions and -35 percentage points in rural regions (OECD, 2020b). As well as well-designed skills and labour market integration programmes, promoting Indigenous entrepreneurship should continue to be a priority. Past OECD work has highlighted scope for increasing opportunities for Indigenous-owned businesses in the public procurement market and, as in the United States and Canada, providing public support for Indigenous-owned financial institutions (OECD, 2020b; also see Chapter 2). The latter would benefit from further initiatives that bridge the significant gaps in measures of financial literacy and financial inclusion between Indigenous and non-Indigenous Australians (see Chapter 2).

Ensuring Indigenous communities play a key role in policy design should be a core element of any new government initiatives (OECD, 2021b). In July 2020, the *National Agreement on Closing the Gap* was signed by representatives of the National Coalition of Aboriginal and Torres Strait Islander Peak Organisations (also known as the Coalition of Peaks), each state and territory government, and the Australian Local Government Association (Box 1.5). This agreement aims to give Indigenous Australians greater input into the design and delivery of policies, programmes and services that affect them.

Box 1.5. The National Agreement on Closing the Gap

The objective of the National Agreement on Closing the Gap (the National Agreement) is to enable Aboriginal and Torres Strait Islander people and governments to work together to overcome the inequality experienced by Aboriginal and Torres Strait Islander people and achieve life outcomes equal to all Australians.

The agreement lists four reform priorities, including:

(i) **Shared decision-making**: Meaning Aboriginal and Torres Strait Islander people are empowered to share decision-making authority with governments to accelerate policy and place-based progress on Closing the Gap through formal partnership arrangements.

(ii) **Building the community-controlled sector**: Meaning there is a strong and sustainable Aboriginal and Torres Strait Islander community-controlled sector delivering high quality services to meet the needs of Aboriginal and Torres Strait Islander people across the country.

(iii) **Improving mainstream institutions**: Meaning governments and their institutions are accountable for Closing the Gap and are culturally safe and responsive to the needs of Aboriginal and Torres Strait Islander people, including through the services they fund.

(iv) **Aboriginal and Torres Strait Islander-led data**: Meaning Aboriginal and Torres Strait Islander people have access to, and the capability to use, locally-relevant data and information to set and monitor the implementation of efforts to close the gap, their priorities and drive their own development.

Source: Joint Council on Closing the Gap (2020)

Better evaluation of policies and programmes related to Indigenous people is also needed. Despite decades of new policies and changes to existing ones in an attempt to improve the lives of Aboriginal and Torres Strait Islander people, little is known about what works and why, and there is no coordinated approach to policy evaluation across governments. The Productivity Commission aimed to address this by developing an Indigenous Evaluation Strategy (Productivity Commission, 2020a).

The Indigenous Evaluation Strategy has principles-based guidance for agencies to use when selecting, planning, conducting and reporting on evaluations of initiatives affecting Aboriginal and Torres Strait Islander people and aims to lift the quality of evaluations and improve their usefulness. Past OECD work has identified a need for better data collection on Indigenous outcomes (OECD, 2021b), which would enhance this process. The Strategy puts Aboriginal and Torres Strait Islander people at its centre, and emphasises the importance of drawing on their perspectives, priorities and knowledge when deciding what to evaluate and how to conduct an evaluation. The Commission engaged widely, and worked with Aboriginal and Torres Strait Islander people and organisations, government agencies, and people administering, delivering and evaluating policies and programmes. Looking forward, the Strategy should be embedded in the policy design and evaluation process of all Australian Government agencies for both Indigenous-specific and mainstream policies that affect the Indigenous population.

Improving public spending efficiency

Since 2018, the government has had the goal of maintaining the tax-to-GDP ratio at or below 23.9% of GDP. Given the fiscal costs on the horizon, consideration may eventually need to be given to relaxing this cap. However, along with reforms that boost nominal GDP growth, improvements in public spending efficiency can reduce the need for increases in the tax burden. The health system and social welfare for the aged should be particular focuses, given that the population is ageing and these areas already account for around one quarter of all government spending.

Australia's health system is well regarded (OECD, 2019c), but in its current form will face fiscal pressures over the longer term. In addition to ageing, rising incidence of chronic disease, advances in some medical technologies and increased consumer expectations will add to future costs. While relatively stable over the past two decades, private health insurance coverage has fallen slightly in recent years, amid rising premiums, causing more people to rely on the public system.

An overreliance on hospitals can increase health costs. Australia has the third highest hospital admission rates for asthma and chronic obstructive pulmonary disease in the OECD, with the hospitalisation rate for such diseases almost twice the OECD average (OECD, 2019c). In 2018-19, almost half of all emergency department presentations were classified as semi or non-urgent, with age-standardised emergency department presentations rising over the preceding years (PwC Australia, 2020a). Shifting care to primary care settings, where appropriate, should be an ongoing focus of policy. This can also reduce the chance of hospital systems becoming overwhelmed by any rise in COVID-19 cases that follow the eventual easing of the current strict lockdown in certain states. As part of the Long-Term National Health Plan, the government has pledged to make primary health care more patient-focused, more accessible and better able to provide preventive health and management of chronic conditions (Department of Health, 2019). Harnessing technology in the health sector should be a key element in achieving this.

Telehealth is a recent example of the primary care system adjusting to deliver care in a way that provides a better patient experience at the same time as reducing costs to the public purse. During the pandemic, take-up of Telehealth consultations was impressive after the government announced a range of subsidies; the Australian Bureau of Statistics reported that one in six people used Telehealth in the month of November 2020 alone.

Home telemonitoring of patients with chronic conditions can take pressure off the health system (Oliveira Hashiguchi, 2020). For instance, "telehomecare" in Canada was shown to reduce hospital admissions by 60% to 80% (OTN, 2018). Such practices allow carers to better anticipate deterioration in a patient by interacting with them earlier and through the course of treatment (OECD, 2020c). Other OECD countries are at various points in deploying telemonitoring projects in areas such as mental health (Denmark, Ireland), chemotherapy (Denmark, Norway), palliative care (Lithuania) and cancer screening (Poland; OECD, 2020c).

Digital technologies can also improve health services in a range of areas, including remote imaging services and online secondary consultations. Electronic health records that can be shared across the health system can provide better coordination of care. Past work highlighted that less than 20 per cent of Australian general practitioners were informed when one of their patients was seen in a hospital emergency department, notably lower than in other comparable countries (Productivity Commission, 2017). However, such practices require an investment in data infrastructure. Australia has been well below the top performing countries in terms of the availability, quality and linkages of such data sources (OECD, 2021c).

Reforms to the Age Pension can also better enable future public spending obligations to be met. While the Age Pension system as it stands appears fiscally sustainable (Box 1.6), income support for seniors currently accounts for about one quarter of government spending on social welfare. As such, reforms to the system can bring material fiscal benefits.

The Age Pension is a means-tested payment to older individuals as part of the social safety net, but can supplement superannuation (Chapter 2) or other savings. As already mentioned, Age Pension payments have risen more markedly than other social benefits, such as those for the unemployed. In addition, the prolonged boom in house prices have inflated the wealth of many pensioners without impacting their pension eligibility given that the value of the family home above a modest threshold (AUD210,500) remains outside the means test. Half of the government's spending on the Age Pension currently goes to people with more than AUD500,000 in assets (Daley et al., 2018). Indeed, the government's recent Retirement Income Review highlighted that the distribution of Age Pension expenditure is much less skewed to lower wealth quintiles than other payments such as Commonwealth Rent Assistance expenditure (Commonwealth of Australia, 2020; Box 1.6).

Box 1.6. Australian Government Retirement Income Review

In July 2020, the Australian Government published a review of the retirement income system following a recommendation by the Productivity Commission. The terms of reference asked the review to focus on establishing a fact base of the current retirement income system to improve understanding of its operation and the outcomes it delivers Australians. It was not asked to make recommendations or propose changes to policy settings.

According to the terms of reference, Australia has a three pillar retirement income system consisting of; 1) A means-tested Age Pension, 2) Compulsory superannuation (see Box 2.1 for a discussion of Australia's Superannuation Industry) and 3) Voluntary savings, including home ownership.

Main observations from the review included that:

- The Australian retirement income system is effective, sound and its costs are broadly sustainable.
- There is a need to improve understanding of the system. Complexity, misconceptions and low financial literacy have resulted in people not adequately planning for their retirement or making the most of their assets when in retirement.
- The Age Pension, combined with other support provided to retirees, is effective in ensuring most Australians achieve a minimum standard of living in retirement. This is especially the case for retirees who own a home.
- Renters and involuntary retirees experience higher levels of financial stress and poverty than the working age population. For many who retire involuntarily due to job related reasons, the adequacy of their living standards before Age Pension eligibility age depends on the level of the unemployment benefit payment.
- Superannuation savings are supported by tax concessions for the purpose of retirement income and not purely for wealth accumulation. Yet most retirees leave the bulk of the wealth they had at retirement as a bequest.
- Using superannuation assets more efficiently and accessing equity in the home can significantly boost retirement incomes without the need for additional contributions.
- The *Pension Loans Scheme* is an effective option for accessing equity in the home for both age pensioners and self funded retirees. The current exemption of the principal residence from the Age Pension assets test is a disincentive to using the equity in the home to support retirement incomes.
- While the Age Pension helps offset inequities in retirement outcomes, the design of superannuation tax concessions increases inequality in the system. Tax concessions provide greater benefit to people on higher incomes.
- Tax concessions encourage saving in tax-preferred forms, but they may displace other forms of saving and have a limited impact on overall saving. People with very large superannuation balances receive very large tax concessions on their earnings.
- Government expenditure on the Age Pension as a proportion of GDP is projected to fall slightly over the next 40 years, as higher superannuation balances reduce Age Pension costs. The cost of superannuation tax concessions is projected to grow as a proportion of GDP and exceed that of Age Pension expenditure by around 2050. This is due to earnings tax concessions.

Source: Commonwealth Government (2020a)

In 2017, the government announced an increase in the Age Pension qualifying age to 67 by 2023-24. A further increase in the qualifying age to 70 was proposed, but subsequently abandoned. This should be reconsidered over the coming years and future increases in the pension age linked to changes in life expectancy. The entire value of the family home – or that portion above a certain threshold – should also be included in the means test for pension eligibility. As suggested by the government's Retirement Income Review (Box 1.6), the Pension Loan Scheme could be better used to access equity in the home for those pensioners who have little income but live in a high-value property (see also Coates and Nolan, 2020). Taken together, this reform would not reduce the income available to pensioners in retirement. The cost would be shifted off the government balance sheet and onto inheritances. In addition to improving fiscal sustainability, this would disincentivise older people from staying in large family homes that are no longer fit for their purposes. In a context of declining housing affordability, along with rising intergenerational and intragenerational inequality, such a reform has multiple benefits.

Box 1.7. Budgetary impact of the main fiscal recommendations

The following estimates are taken from a variety of sources and quantify the fiscal impact of selected medium-term reforms.

Table 1.5. Illustrative fiscal impact of selected reforms

Policy	Scenario	Additional annual fiscal cost (-) or revenue (+), percentage points of GDP
Spending measures		
Further raising unemployment benefits	Unemployment benefits are increased to the point where the minimum amount a JobSeeker Payment recipient receives through private income and government payments equals the OECD relative measure of poverty.[1]	-0.5%
Improving health spending efficiency	Reduce the number of avoidable hospital admissions, partly through expanding and better integrating primary healthcare.[2]	+0.3%
Include the family home in Age Pension means test	Include the entire value of the family home in the means test for pension eligibility.[3]	+0.2%
Revenue measures		
Cutting personal income taxes	Australia moves into the lowest decile of OECD countries in a measure of (personal income tax + social security contributions) as a percentage of GDP.[4]	-0.9%
Increasing the GST rate	Increase the GST rate to 12.5% on the current base.[5]	+1.0%

Note: Behavioural changes in response to a tax or spending change are not taking into account. In formulating this table, it is assumed that switch from a stamp duty to land value tax is designed to be fiscally neutral in the medium-term.
Source:
1 Partially based on calculations from Parliamentary Budget Office (2020).
2 Estimate taken from Australian Healthcare Reform Alliance (2018).
3 Partially based on earlier estimate from Daley et. al. (2018).
4 Underlying data taken from OECD Global Revenue Statistics Database.
5 Estimate taken from PwC Australia (2020b).

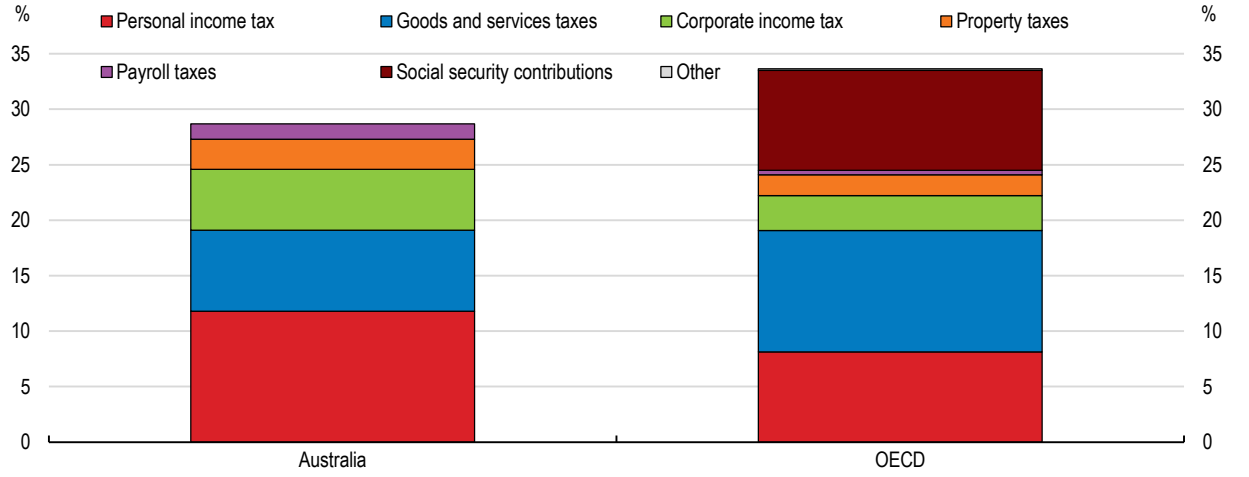
Growth-enhancing tax reforms

Population ageing will also result in lower future tax revenue. Australia's tax base has become increasingly reliant on personal income taxation (Table 1.6) meaning the declining share of people active in the labour market, as the population ages, will have significant implications for tax receipts. This is especially the case given the relatively light taxation of pension income. Furthermore, an overreliance on income taxation could

diminish potential output growth (Akgun et al., 2017), further threatening fiscal sustainability as well as gains in living standards. To address these factors, the tax base should be further reoriented towards indirect taxation and some inefficiencies and distortions removed from the system. Doing so can also help address other government priorities such as improving housing affordability, reducing income inequality and negative environmental externalities.

Figure 1.14. The tax base is skewed towards income taxation

Revenue as a share of GDP, 2018



Source: OECD Global Revenue Statistics Database.

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Table 1.6. The tax burden is increasingly falling on personal incomes

Share of total taxation

	2003/04	2009/10	2020/21	2024/25
Personal income tax	44.5	42.0	45.8	46.4
Corporate income tax	16.4	18.2	18.7	17.7
Goods and services tax	15.4	15.9	14.1	14.7
Excise taxes	12.0	10.4	8.5	8.1
Superannuation tax	2.6	2.1	2.3	2.8
Other	9.2	11.5	10.7	2.8

Note: Calculations are based on Australian Financial Year. Numbers for 2024/25 are based on projections from the 2021/22 Federal Budget.
Source: Parliamentary Budget Office; OECD calculations.

Particular areas that should be a focus of future reforms are:

- **Increasing the contribution of the goods and services tax to the overall tax mix.** Australia raises a relatively small share of its revenues from the Goods and Services Tax (GST), a revenue base that will be largely unaffected by population ageing (Parliamentary Budget Office, 2020). Over the last decade, revenues from the GST have been falling as a share of total taxes (Table 1.6) and will continue to do so if recent changes to the pattern of household consumption persist (Parliamentary Budgetary Office, 2020). Compared with other OECD countries, the consumption tax rate is relatively low (Figure 1.15, Panel A) and a much larger share of consumption goods are GST-free or GST-exempt in Australia (Figure 1.15, Panel B). The authorities should aim to increase the overall contribution of GST revenues to its tax mix once the economic recovery is firmly

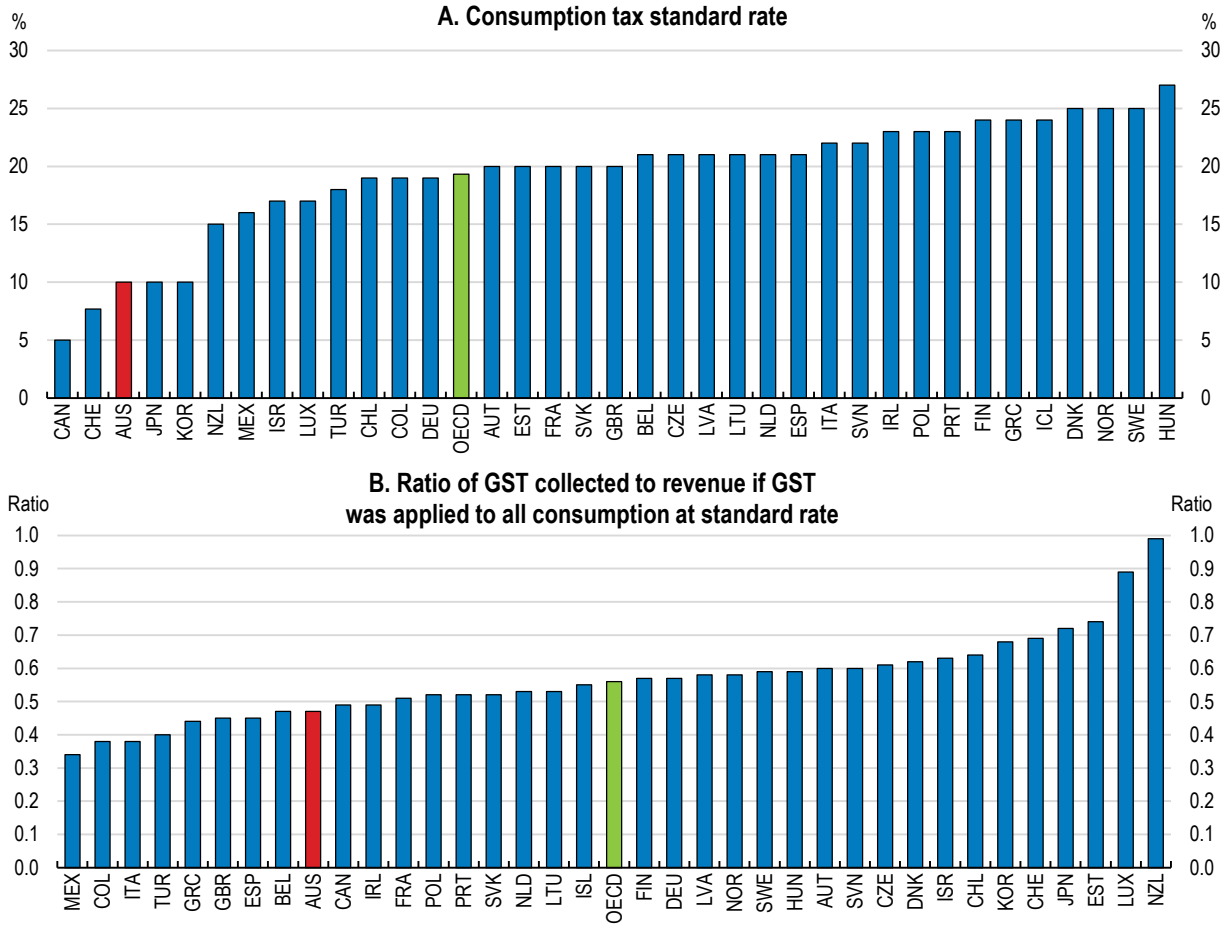
entrenched. However, careful consideration should be given to the distributional effects. One potential policy package that could support the tax system's overall progressivity would involve a broadening of the base or an increase in the rate of the GST in combination with cuts to personal income taxes for low and middle income earners (see below) and the increase in the unemployment benefit rate also recommended in this Survey. As revenues from the GST are distributed to the states, such a reform may be best pursued through the National Federation Reform Council (see Box 1.1 further above).

- **Further reducing personal income taxes**. The government has already made progress in reducing the personal income tax burden, with a series of significant tax cuts under the *Personal Income Tax Plan* having recently been introduced or scheduled to take effect (Table 1.7). However, even with the legislated tax cuts, bracket creep is likely to result in the average personal tax rate of many workers rising over the period to 2030, especially those in the low-middle part of the income distribution (Parliamentary Budget Office, 2020a). As noted above, an increase in revenues from the goods and services tax could be accompanied by further lightening the taxation of personal incomes for such workers.
- **Aligning the taxation of different forms of savings.** There is little consistency in the way that different forms of savings are taxed. While Australia has close to the highest marginal effective tax rate on bank deposits in the OECD, the rates on private pension savings are well below average (OECD, 2018c). These differences, combined with a high level of complexity in the various tax provisions, can encourage costly tax planning schemes and distort the flow of savings (see Box 1.4; Varela et al., 2020). The fact that older and higher income households have a relatively high share of assets in those savings vehicles more lightly taxed can exacerbate both intra- and intergenerational inequalities. In addition, Australia does not have an inheritance tax, after such levies were removed at both the state and federal level four decades ago. To both improve the efficiency and equity of the system, greater neutrality in the taxation of savings is needed. A first step could be to reduce some of the concessions for the taxation of private pensions, particularly those that favour high income earners. For example, the annual concessional contributions cap could be lowered and private pension earnings in retirement (currently untaxed for balances below AUD1.6 million) taxed at the same rate as private pension earnings before retirement.
- **Reducing the capital gains tax discount.** Taxing capital gains at the full income tax rate would mean taxing the component of returns simply due to inflation. As a result, there is a case for providing a capital gains tax discount, but the current discounts are very generous and well in excess of inflation. The size of the current discount risks distorting household investment decisions, particularly skewing household balance sheets towards residential property investment (see Chapter 2).
- **Replacing stamp duty with a recurrent land tax.** State and territory governments are heavily reliant on real-estate transaction taxes ("stamp duty") that inhibit residential mobility and may contribute to the pro-cyclicality of state budgets. A host of modelling exercises have suggested substantial economic benefits of replacing stamp duty with recurrent land taxes. The challenge is devising the transition path (Helm, 2019). Two jurisdictions have made progress in making such a tax switch, with different approaches. The Australian Capital Territory has coupled the introduction of a broad based land tax with a partial credit for stamp duty recently paid, while New South Wales is proposing to allow purchasers to voluntarily opt-in to the tax. The New South Wales approach may be more politically palatable, but involves a very long transition period given that only around 5% of properties are transacted each year. Indeed, the New South Wales Review of Federal Financial Relations explicitly cautioned against such an approach (New South Wales Review of Federal Financial Relations, 2020).
- **Better pricing road use and environmental externalities.** Opportunities to better address environmental issues include road transport taxation and charging where there is scope to shift the

mix partly away from systems based on car ownership towards those based on car use, notably distance-based road user charging and congestion charging. Congestion in capital cities has been growing with rising populations. Related costs, which represented 1% of GDP in 2011, are expected to reach 2% by 2031 (Infrastructure Australia, 2016). As discussed further below, the effective pricing of energy-related carbon emissions is low compared with other high income OECD countries, although emissions are priced to some extent through mechanisms other than explicit carbon and fuel taxes (e.g. through the Emission Reduction Fund and Renewable Energy Target). Adequate pricing of carbon emissions could promote the development and diffusion of low-carbon technologies and steer households and businesses towards lower carbon emissions, contributing to a cost-effective approach towards reaching international commitments. The revenue from carbon pricing can facilitate a just transition and support a more efficient tax system overall.

- **Review the taxation of corporate income.** Small and medium sized enterprises (SME) are taxed at a preferential rate of 25%, compared with 30% for larger firms. A two-rate system risks distorting how firms are structured and how they behave, especially around the threshold between the two rates. It can also raise the cost of tax compliance as firms move between the two rates. To the extent that SME support is required, it may be better channelled to particular SME segments where market failures are rife, such as young businesses in innovative sectors. The distortionary impact of the current two-tier corporate tax system should be investigated.
- **Continue to evaluate the approach to natural resource taxation**. As discussed in previous *OECD Economic Surveys*, a shift towards taxing resource rents, rather than royalties could improve the climate for resource-sector investment and exploration (OECD, 2018b; OECD, 2014). In Australia, natural-resource taxation is primarily a state-level responsibility, the federal government only has exclusive power for taxing offshore natural resources.

Figure 1.15. The GST rate is low and there are significant exemptions



Note: Panel B is the "VAT Revenue Ratio".
Source: OECD Consumption Tax Trends database.

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Table 1.7. Past OECD recommendations on fiscal policy

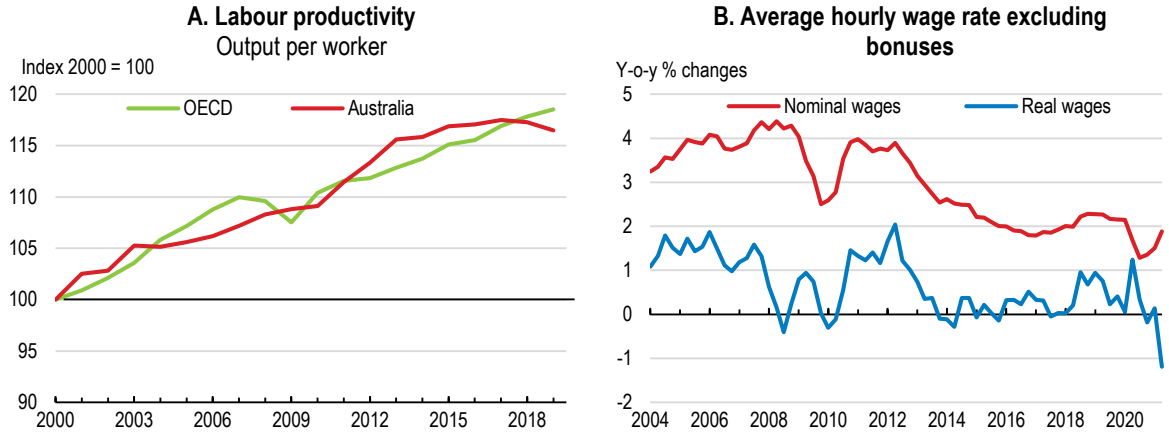
Recommendations in past *Surveys*	Actions taken since the previous *Survey* (December 2018)
Further shift the tax mix from direct taxes (corporate and personal) and inefficient taxes (including real-estate stamp duty) and towards the Goods and Services Tax and land taxes.	The Government has taken steps to flatten the personal income tax schedule. In 2018-19 the top threshold of the 32.5 per cent bracket increased from AUD87,000 to AUD90,000. In 2020-21 the top threshold of the 19 per cent tax bracket increased from AUD37,000 to AUD45,000 and the top threshold of the 32.5 per cent bracket increased from AUD90,000 to AUD120,000. In 2024-25, the top threshold of the 32.5 per cent tax bracket will increase from AUD120,000 to AUD200,000, removing the 37 per cent tax bracket completely. In addition, the 32.5 per cent rate will be reduced to 30 per cent so that taxpayers with incomes from AUD45,001 to AUD200,000 will face the same marginal rate. New South Wales Treasury has also begun consulting on a proposal to transition away from stamp duties on conveyances towards a broad based land tax. The Government has been successful in implementing the OECD recommendations to apply GST to low value goods, digital products and services purchased by Australian consumers from offshore online

	vendors and digital platforms. By broadening its GST base to include these online sales, which were previously largely GST free, the Government has already collected considerable additional GST revenues and minimised competitive distortions between domestic businesses and offshore online vendors.
Follow up on the recommendations for improving public services made by the Productivity Commission's "human services" inquiry, notably those in health care and long-term care.	No action taken.
Consider a spending ceiling to contain expenditure growth in booms and targeting debt in the long term.	No action taken.
Create stabilisation funds using resource revenues, or make greater use of existing funds, to insulate the budget from commodity price changes.	No action taken.
Make the R&D Tax Incentive more effective, for instance by combining an eligibility threshold with an increase in the expenditure cap.	In the 2020-21 Budget the Government announced that, as of 1 July 2021, the R&D expenditure threshold will increase from AUD100 million to AUD150 million, offset rates will be determined by reference to claimants' company tax rates and the offset rate for larger businesses will be calculated with reference to the claimant's R&D intensity: - companies with an aggregated annual turnover of less than AUD20 million will be entitled to a refundable tax offset of their company tax rate plus 18.5 per cent for their first AUD150 million of eligible R&D expenditure; and - companies with an aggregated annual turnover of AUD20 million or more will be entitled to a non-refundable tax offset on the first AUD150 million of eligible R&D expenditure. The rate of the offset will be calculated with reference to the claimant's R&D intensity (R&D expenditure as a proportion of total expenses). In the 2021-22 Budget the Government announced a patent box to encourage companies to develop and apply their medical and biotechnology innovations in Australia. This incentive will tax corporate profits from Australian developed and patented medical and biotechnology innovations at a concessional 17 per cent effective corporate tax rate.
Encourage more innovation in public services by opening up procurement to more bidders and further development of digital government services.	In September 2020, the Government announced the AUD800m Digital Business Plan. Key initiatives include: ● AUD256.6 million to develop an expanded Digital Identity system to enable more secure and convenient engagement with government services. ● A further AUD419.9 million to enable the full implementation of the Modernising Business Registers (MBR) program, a one-stop shop for business registry data. ● AUD3.6 million towards mandating the adoption of electronic invoicing by 1 July 2022 for all Commonwealth government agencies. In the 2021-22 Budget the Government announced AUD2.6 million over four years from 2021-22 to support and strengthen small and medium enterprise participation in Commonwealth procurement.
Reduce the number of support schemes for innovative SMEs	No action taken.

Regulatory and institutional reforms are needed for a sustained recovery

When the pandemic hit, the Australian economy was exhibiting signs of structural headwinds. Business formation and job switching rates had declined (Quinn, 2019), accompanied by a slowing in the pace of productivity-enhancing labour reallocation (Andrews and Hansell, 2019) and trend business investment had been weak for some time (International Monetary Fund, 2020). Consequently, as in many other OECD countries, productivity growth had fallen (Figure 1.16, Panel A), contributing to real wage stagnation through much of the past decade (Productivity Commission, 2020b; Figure 1.16, Panel B).

Figure 1.16. Productivity and real wages have stagnated



Note: Panel B presents the Wage Price Index. The measure of real wages is deflated by the Consumer Price Index excluding volatile items.
Source: Australian Bureau of Statistics; OECD.

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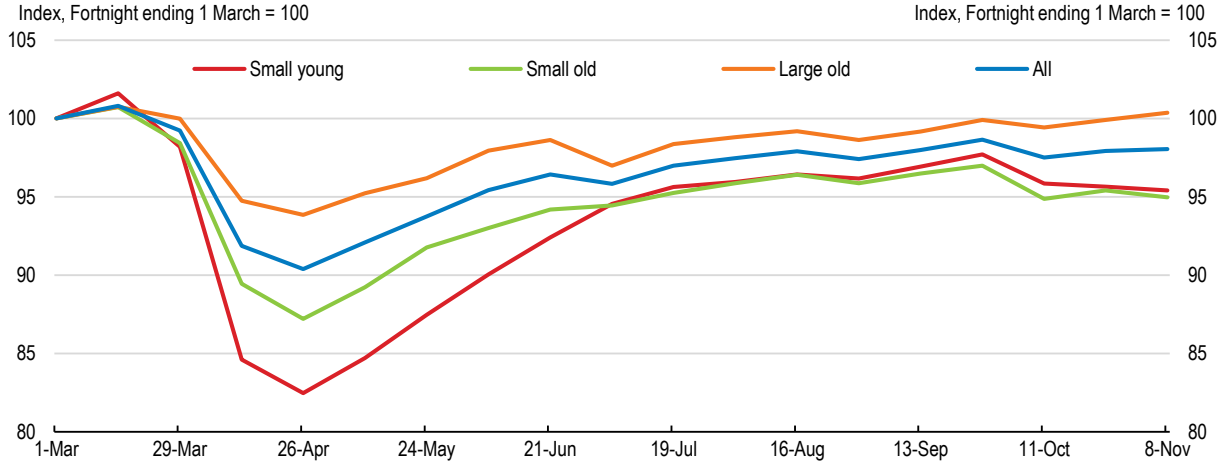
There are some indications that the initial downturn resulting from the COVID-19 pandemic was accompanied by productivity-enhancing reallocation (Andrews et al., 2021a; Andrews et al., 2021b) and accelerated digital adoption by firms (AlphaBeta, 2020). Nevertheless, small young firms exhibited relatively weak growth dynamics (Figure 1.17). Given that such firms have accounted for a disproportionate share of job creation over the past decade (Box 1.8) and have particularly high investment intensity (Hambur and Jenner, 2019), the prospects of this cohort will be particularly important for the strength and sustainability of the future recovery in the real economy and labour market. Simulations using firm level data from Australia's Business Longitudinal Analysis Data Environment (BLADE) combined with the framework outlined by Sedláček and Sterk (2020) underscore this point. If, following the financial crisis, the firm entry rate had gradually returned to its pre-crisis level, rather than continuing to trend down, Australian employment would have been 6% higher by 2019 (see Box 1.8).

Figure 1.17. Small young firms were hard hit at the onset of the pandemic

Payroll employment by firm size and age category (index, fortnight ending 1 March = 100)



Note: SME are businesses with 1-199 employees and young are firms aged 0-5 years.
Source: Australian Treasury.

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Policy reforms that lower barriers to entrepreneurship and the expansion of young firms are thus a priority. Adequate access to finance for start-ups and young firms is critical, which is discussed extensively in Chapter 2 of this *Economic Survey*. However, regulatory and administrative procedures, competition policies and the integrity of the business sector are also of primary importance.

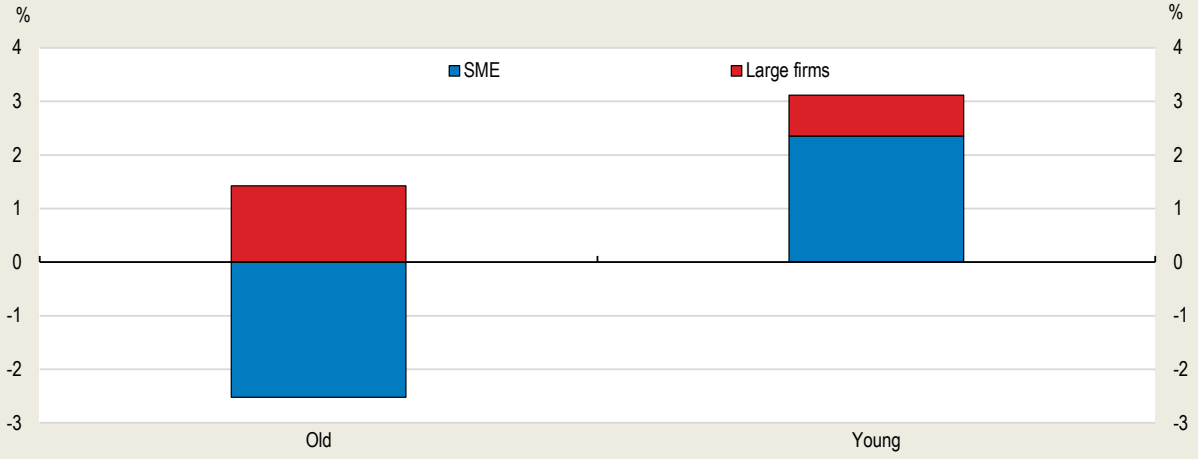
Box 1.8. The impact of business dynamics on employment growth

As in many OECD countries, young firms have been core drivers of economic activity and job creation in Australia. In collaboration with the Australian Treasury, this has been examined for this *Economic Survey* by using firm-level data from the Business Longitudinal Analysis Data Environment (BLADE), compiled by the Australian Bureau of Statistics.

Over the period 2007-19, young firms accounted for the majority of net employment growth in Australia, in particular small startups (Figure 1.18). However, the employment share of such firms (i.e. young SMEs) declined over the period from 22% in 2007 to 18% in 2019.

Figure 1.18. Young firms have been the drivers of employment growth

Average net employment growth as a share of total employment, 2007-19



Note: Agriculture, Mining, Utilities and non-market industries are excluded. The results presented in this figure and the other figures in this box are based, in part, on Australian Business Register (ABR) data supplied by the Registrar to the Australian Bureau of Statistics (ABS) under A New Tax System (Australian Business Number) Act 1999 and tax data supplied by the Australian Taxation Office (ATO) to the ABS under the Taxation Administration Act 1953. These require that such data are only used for the purpose of carrying out functions of the ABS. No individual information collected under the Census and Statistics Act 1905 is provided back to the Registrar or ATO for administrative or regulatory purposes. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes, and is not related to the ability of the data to support the ABR or ATO's core operational requirements. Legislative requirements to ensure privacy and secrecy of this data have been followed. Only people authorised under the Australian Bureau of Statistics Act 1975 have been allowed to view data about any particular firm in conducting these analyses. In accordance with the Census and Statistics Act 1905, results have been confidentialised to ensure that they are not likely to enable identification of a particular person or organisation.
Source: Australian Treasury calculations based on BLADE dataset.

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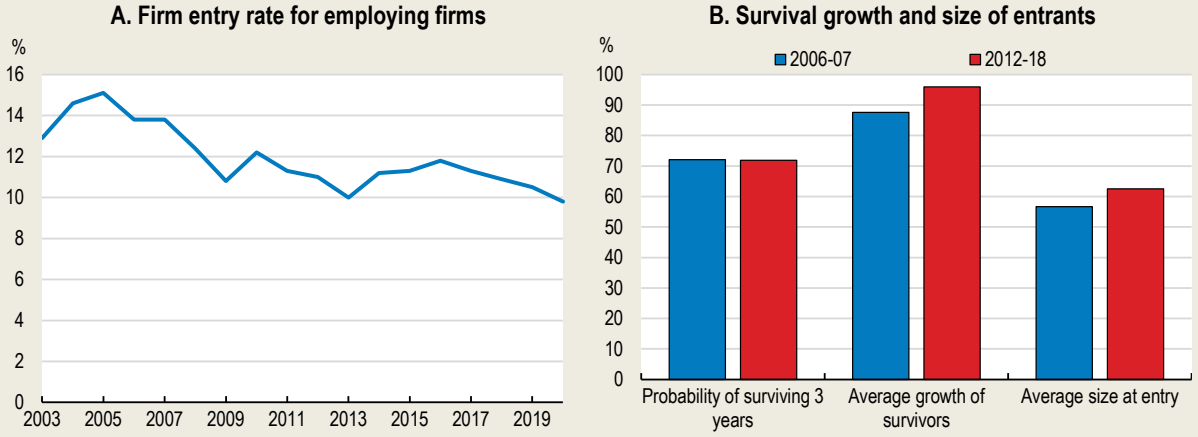
Figure 1.19. Firm entry rates have slumped and those that do enter are larger



Note: In Panel B, Agriculture, Mining, Utilities and non-market industries are excluded.
Source: Australian Bureau of Statistics; Australian Treasury calculations based on BLADE dataset.

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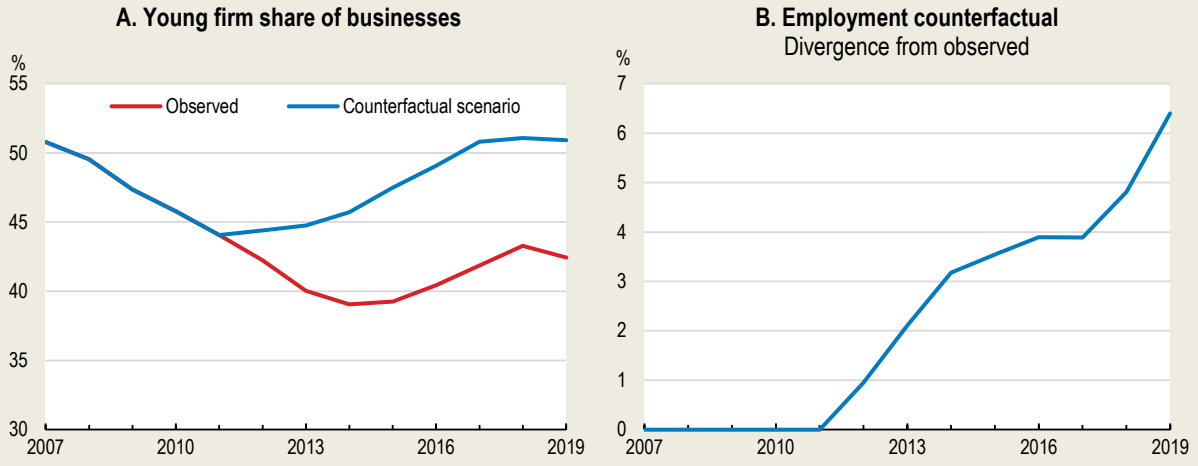
To illustrate the direct employment effects of the decline in the firm entry rate, a counterfactual exercise is undertaken using the framework of Sedláček and Sterk (2020). Specifically, the BLADE data is used to estimate employment outcomes under a counterfactual scenario whereby the firm entry rate (both in terms of number of firms and employment share) had rebounded to its pre-crisis levels (specifically, the 2003-2007 average) after declining through the financial crisis (Figure 1.20, Panel A). The results suggest that employment would have been around 6 per cent higher at the end of the period than actually observed (Figure 1.20, Panel B).

Figure 1.20. A higher share of young firms would considerably boost employment



Note: Agriculture, Mining, Utilities and non-market industries are excluded. Counterfactual assumes entry rate remains at pre-GFC average of around 12 per cent, and firm initial size and growth rate return for 2005/06 to 2006/07 average.
Source: Australian Treasury calculations based on BLADE dataset.

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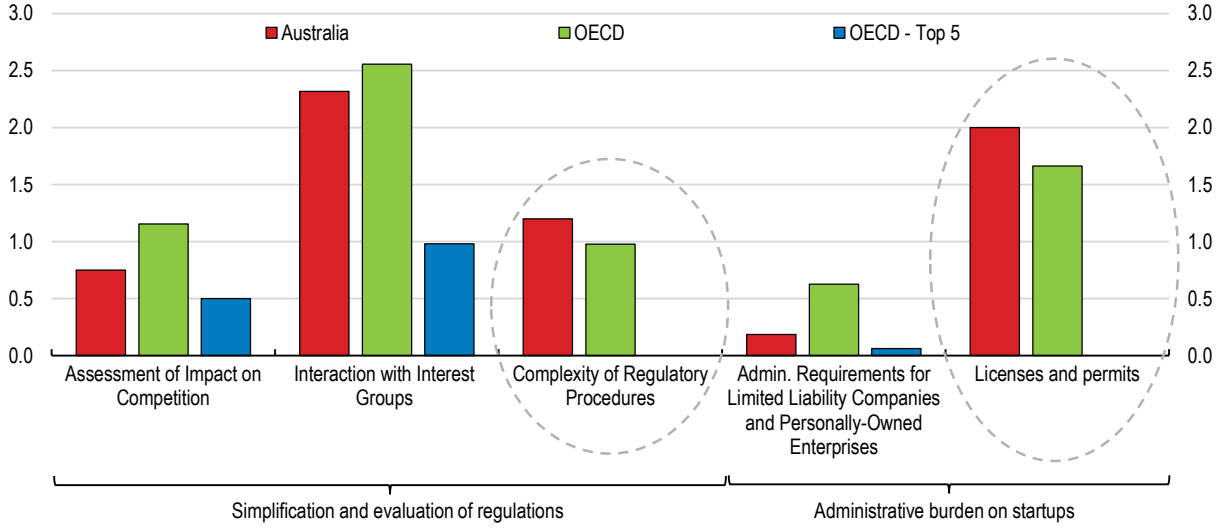
Reforming regulatory and administrative procedures

The design and implementation of regulations and administrative procedures are a key determinant of the capacity for bright ideas to be converted into businesses that can expand and thrive (OECD, 2015). Product market regulation settings in Australia are generally favourable, indicating a well-functioning and competitive market environment. The OECD Product Market Regulation (PMR) Indicator highlights that Australia is in the lowest quartile of member countries for the overall restrictiveness of such regulations. Even so, the licensing and permit system and the complexity of regulatory procedures have been identified as relatively cumbersome (Figure 1.21). Digging deeper, shortcomings in coordinating the permits and licenses across the states and territories and in transparency regarding regulatory changes are particular reasons for elevated scores on these dimensions. Such weaknesses impact upon the efficacy of policies in a range of areas. However, the occupational licensing regime and land use regulations are two areas that have gained added importance following the pandemic and will be influential in determining the shape of the economic recovery.

Figure 1.21. The licensing system and regulatory complexity are ripe for reform

Product Market Regulation Indicators, subcategories 2018



Source: OECD 2018 PMR database.

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Occupational licensing

Occupational licensing can be important where the competence of a provider can impact the health and safety of customers or where large information asymmetries exist regarding service quality. However, such regulations can stifle business dynamism by protecting incumbents (Bambalaite et al., 2020) and the reallocation of workers from low to high productivity firms (von Reuden et al., 2019). The reduction in job mobility tends to be particularly damaging for groups with low labour market experience, such as young and low-skilled workers (Haltiwanger et al., 2018). Recent work has linked weak wages growth in Australia to a slowdown in job-to-job transitions (Andrews et al., 2019).

Facilitating job mobility is particularly important at present given the structural trends highlighted above and the more pronounced need for within- and between-sector reallocation in the wake of the pandemic. The growing importance of Australia's services sector also means unnecessary occupational restrictions

will be an increasing drag on aggregate productivity. At the onset of the pandemic, new digital tools were already narrowing many of the information asymmetries that occupational licenses were established to address. This will have been compounded through the accelerated diffusion of such tools during the pandemic, potentially making parts of the regime obsolete.

About one fifth of Australian workers currently require a registration or license to perform their work (Commonwealth Government, 2021d), a proportion that is comparable with other OECD countries (Bambalaite et al., 2020). However, most of these professionals, such as builders, plumbers and real estate agents require distinct licenses in each Australian state and territory. There is limited economic rationale for separate licenses in different jurisdictions and such a practice can raise substantial economic costs. Recent OECD empirical work related to the United States highlights that differences in occupational licensing regimes across states can have significant impacts on reallocation mechanisms (Hermansen, 2019).

While there has been a policy of mutual recognition of licenses across Australian jurisdictions since 1992, the Commonwealth, State and Territory governments have now reached an intergovernmental agreement on automatic mutual recognition and begun to implement the scheme (Table 1.9). The federal government has passed enabling legislation. Once legislation is passed by the states, licenses subject to the Mutual Recognition Act will be automatically recognised across jurisdictions without needing to reapply for a license and pay associated fees (except where jurisdictions exempt specific occupational licences temporarily or to protect against significant risks for up to five years, subject to review). Following this reform, it is anticipated that 124,000 licensees will benefit from reduced administrative costs from no longer needing to hold multiple licences and an additional 44,000 workers will benefit from being able to take up new jobs across borders (PwC Australia, 2020c). However, to deliver the full benefits of the reform, it is critical that the states only exempt occupations where a significant risk exists to consumer protection, the environment, animal welfare or the health or safety of workers or the public. Under the agreement, governments also pledged to support ongoing improvements to the regulatory environment for occupational registration and to reduce impediments to labour mobility. Implementation of the reforms will be regularly monitored and independently reviewed.

Automatic mutual recognition is a good initial step in occupational licensing reform that should be fully actioned. Attempts in recent decades at national licensing reform have failed (McDonald, 2020), but this should not deter policymakers from continuing to find ways of simplifying the regime, improving flexibility and ensuring it is fit for purpose as the economy evolves. This will require further cooperation between governments to investigate the scale of occupational licensing, the welfare benefits of particular licenses, the avenues for further harmonisation across jurisdictions and the extent to which new technologies are making existing licenses obsolete. There are various instances where licenses exist only in some states and territories, such as for beauticians in New South Wales and for professional matchmakers in Victoria and Queensland (Wild, 2018). At a minimum, some agreement between jurisdictions about those occupations where there is a strong public safety or health justification for licensing is needed. Regulators should play a key role in streamlining regulatory arrangements and adopting best practice, including through the use of new technologies for cooperation between jurisdictions.

Recent lessons from the European Union may be relevant, with member states undertaking a transparency and mutual evaluation exercise in 2014 and subsequently introducing a proportionality directive that established clear criteria for Member States when introducing new or altered professional requirements (von Rueden and Bambalaite, 2020). Data collection will be an important element of such an exercise in Australia, as information on the licensing system is highly fragmented, currently spanning multiple regulatory agencies in each jurisdiction with little national coordination. The Australian Bureau of Statistics could be tasked with including questions about occupational licensing in the Labour Force Survey. This would mimic the approach taken by the Bureau of Labor Statistics in the United States since 2015, where data on certification and licensing of workers is published on an annual basis for different industries and worker characteristics.

More broadly, better coordination between the states on the regulatory landscape should be a priority. The upcoming work of the Deregulation Taskforce on unnecessarily overlapping or duplicative cross-jurisdictional burdens can be a critical input to better coordination in the future. The newly established National Federation Reform Council also provides an opportunity for states and territories to fully commit to a shared regulatory reform agenda that they can work through in a concerted manner.

Box 1.9. Estimated GDP impact of selected structural reforms

The following estimates roughly quantify the cumulative GDP impact of reform scenarios after 10 years and are illustrative.

Table 1.8. Illustrative GDP impact of selected recommendations

Policy	Scenario	GDP Impact
Reduce product market regulations	Reduce the stringency of Product Market Regulation Index to put Australia in the top 10% of best performing OECD countries. The reform is assumed to be phased in immediately.	+1.5%
Domestic stock of R&D capital	Domestic stock of R&D capital is assumed to increase the average of the top quartile of OECD countries, phased in over 10 years.	+0.2%
Cut in personal income tax	Australia moves into the lowest decile of OECD countries for the personal income tax wedge for both singles earning 100% of the average wage without children and for couples with one earner earning 100% of the average wage and two children. The reform is assumed to be phased in immediately.	+1.5%

Note: In the OECD Long-term model, reductions in the personal income tax wedge are fiscally neutral meaning that such a scenario should be understood as a shift toward less-distorting forms of taxation (such as the Goods and Services Tax).
Source: OECD Long-term model.

Land use regulations

Structural change requires adapting metropolitan land-use to new circumstances. For instance, any lasting shifts in the nature of office work following the pandemic, like greater working from home, will be accompanied by changes in the optimal way for land to be used. Reforms that make land supply more flexible can also remove obstacles to labour reallocation (OECD, 2021a), while streamlining of the permit and development system can lower business costs and facilitate investment.

Land use policies suffer from considerable variation across Australia. Each State government controls their zoning legislation, leading to the number of zones and the allowable activities within each varying considerably between jurisdictions. Then, in each state, local governments decide how to allocate land under the zoning system and may add further development criteria (e.g. building-height restrictions). In some states, local governments even have discretion to vary or tailor zone types (Productivity Commission, 2021). When these diverge from state level planning policies, there is often little consequence (Productivity Commission, 2021). As a result, the zoning system has been criticised as inconsistent, containing too many categories and excessively prescriptive about the allowable activities within each zone (OECD, 2018b).

State governments should move to fewer zone types, which are harmonised where possible, and less prescriptive about the types of activities that can be undertaken. This can make it easier for new business to enter and expand and for land use to adapt to the changing nature of the economy and local demography. Such a direction has been long-championed by the Productivity Commission (Productivity

Commission, 2012; Productivity Commission, 2017a; Productivity Commission, 2021), leading to some states making noteworthy reforms. For example, Queensland now has minimal prohibited uses enshrined in zone definitions, while Victoria has moved to fewer commercial and industrial zone types. Nevertheless, there remains considerable scope to further improve the zoning system and the adherence of local governments to state-level planning policies.

It may be that the incentive structures of local governments translate into overly restrictive planning practices. This is often the case in countries where local authorities have limited fiscal autonomy (OECD, 2017b), such as Australia. The main source of revenue for Australia's local governments are property rates which are capped in the largest states by state governments. Local governments also receive a minimum Financial Assistance Grant from the federal government irrespective of their capacity to raise revenue. At the same time, development control is discretionary, as in most other Commonwealth countries. Contrasting with the rules-based systems more common in Europe, this means that every single planning application is subject to review and political opposition by local residents (OECD, 2017b). Providing fiscal incentives for local authorities to rapidly approve applications that will have a net benefit for the community may encourage authorities to resist a few loud voices opposed to such projects.

Other OECD countries use the fiscal framework to support well-functioning land use policies in different ways. In Switzerland, local government finances are heavily reliant on property taxation and there is significant flexibility afforded to authorities for setting the applicable tax rates. This incentivises actions by authorities that raise property values, including allowing the conversion of low value land to higher value uses. It also creates an incentive to attract new residents and businesses. An alternative approach was proposed in the United States *American Jobs Plan*, with a competitive grant programme awarding flexible funding to jurisdictions deemed to be taking concrete steps to streamline zoning systems.

There may be a risk of greater urban sprawl when increasing fiscal incentives for local authorities to attract and approve land use proposals. As urban sprawl tends to be associated with higher car dependency and longer commuting distances, this could imply more traffic jams, higher greenhouse gas emissions and air pollution (OECD, 2018d). Such urban growth patterns can also substantially increase the per-user costs of providing public services such as water, energy, sanitation and public transport (ibid). However, the risk of greater urban sprawl can be mitigated by well-enforced top-down spatial planning frameworks (OECD, 2017b). As an example, Ireland established a dedicated institution in 2018, the Office of the Planning Regulator, that is responsible for ensuring local development plans and spatial strategies align with the National Planning Framework.

Looking forward, Australia should end the minimum Financial Assistance Grant for wealthier local authorities, allocating the savings to local governments in more disadvantaged areas. This should be combined with reforms that allow local authorities to raise more of their own-source revenue. This system will provide an incentive for local authorities in those areas where land is in highest demand to reduce barriers to businesses or households entering and promote more flexible land use. As well as promoting business investment and productivity, such reforms can also improve housing affordability through boosting supply of housing in desirable locations.

Competition policy

Competition policy also influences the dynamics of firm creation and expansion. The decline in business dynamism in Australia has coincided with indicators of reduced competitive intensity in product markets. Hambur (2021) highlights that the average firm mark-up (the ratio of price to marginal cost of production) increased by around 5% from the early 2000s to the mid-2010s. This was accompanied by a rise in the average share of sales accruing to the largest four firms in an industry and a decline in the probability of such firms being displaced. Furthermore, the more significant economic hit to small young firms with the pandemic may be increasing the market share of larger incumbent firms (Hambur, 2021). While market

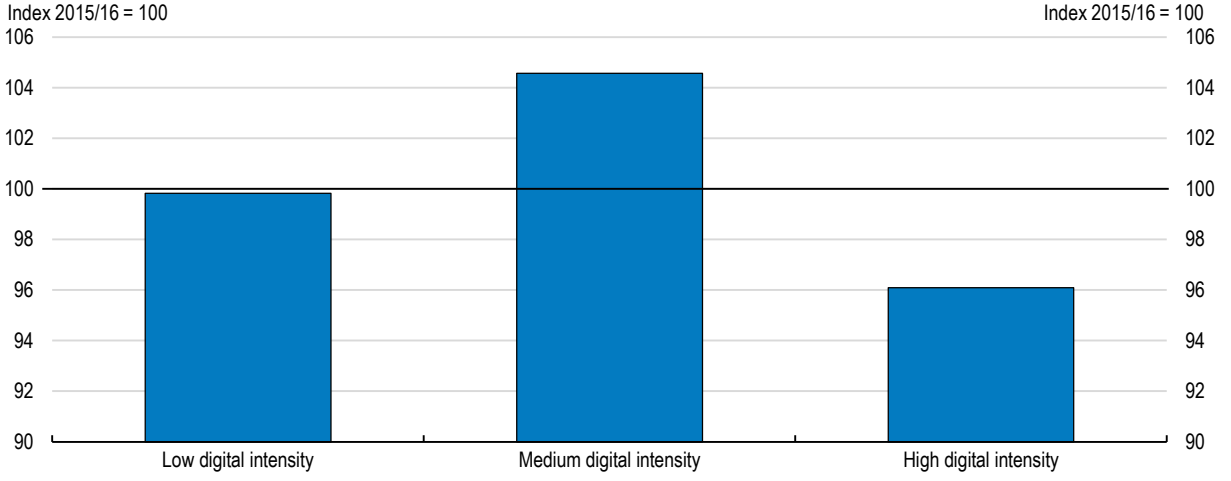
power is not automatically a cause for concern, it may require a competition policy response if it is durable, difficult to contest, or defended through anticompetitive conduct.

One of the contemporary challenges for competition authorities across OECD countries is reckoning with the impact of digitalisation on both labour market and product market competition. This was already the case before the onset of the pandemic. Then, once the pandemic hit, the requirement for physical distancing contributed to an acceleration in the pace of digitalisation. The proliferation of digital technologies can be competition-enhancing. Nonetheless, substantial network effects, high fixed costs and low variable costs are unique features of digital markets that may lead to the entrenchment of market power that adversely impacts social welfare. These features can translate into heightened merger and acquisition activity in digitally intensive sectors, sometimes due to smaller innovative firms being acquired by large incumbents to prevent them from growing into potential competitors (i.e. "killer acquisitions"; OECD, 2020d).

Recent evidence highlights cause for concern about the impact of digitalisation on competitive dynamics in Australia. The recent slowdown in the firm entry rate highlighted in Figure 1.19, that has coincided with weaker productivity growth (Figure 1.16, Panel A), appears to have been driven by weaker start-up activity in digitally intensive sectors (Figure 1.22). Indeed, the work by Hambur (2021) shows that the rise in firm mark-ups over this period was significantly larger in digitally intensive sectors. Additionally, the number of mergers and acquisitions in Australia's technology sector have picked up notably over the past few years (BDO, 2020).

Figure 1.22. The pace of entrepreneurialism has been weakest in digitally intensive sectors

Firm entry rates by digital intensity of industry, 2019/20 (100=2015/16)



Note: Firm entry rates are defined as number of business entries as a share of total businesses at the beginning of the operating year. "Digital intensive" sectors are defined using the taxonomy outlined in Calvino and Criscuolo (2019). The finding of lower firm entry rates in high digital intensity sectors is also apparent when using earlier time periods, such as 2010/11-2013/14 (covered by the prior ABS release).
Source: ABS; OECD calculations.

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Australia has a comprehensive competition law, most recently reviewed in 2015. The law is enforced by a strong regulator in the Australian Competition and Consumer Commission (ACCC). To ensure it remains fit-for-purpose, the government has directed the ACCC to undertake long-term monitoring of, and public reporting on, potential areas of concern. In 2017, the government passed major reforms to competition laws, including strengthening its misuse of market power provision. At the same time, it directed the ACCC

to conduct an inquiry into the impact of digital platforms on competition in media and advertising services markets. The final report was published in 2019 and a key finding was that an imbalance of bargaining power existed between digital platforms and Australian news businesses. In response, the government implemented a mandatory bargaining code. Since coming into effect in March 2021, several agreements have been reached between digital platforms and news businesses.

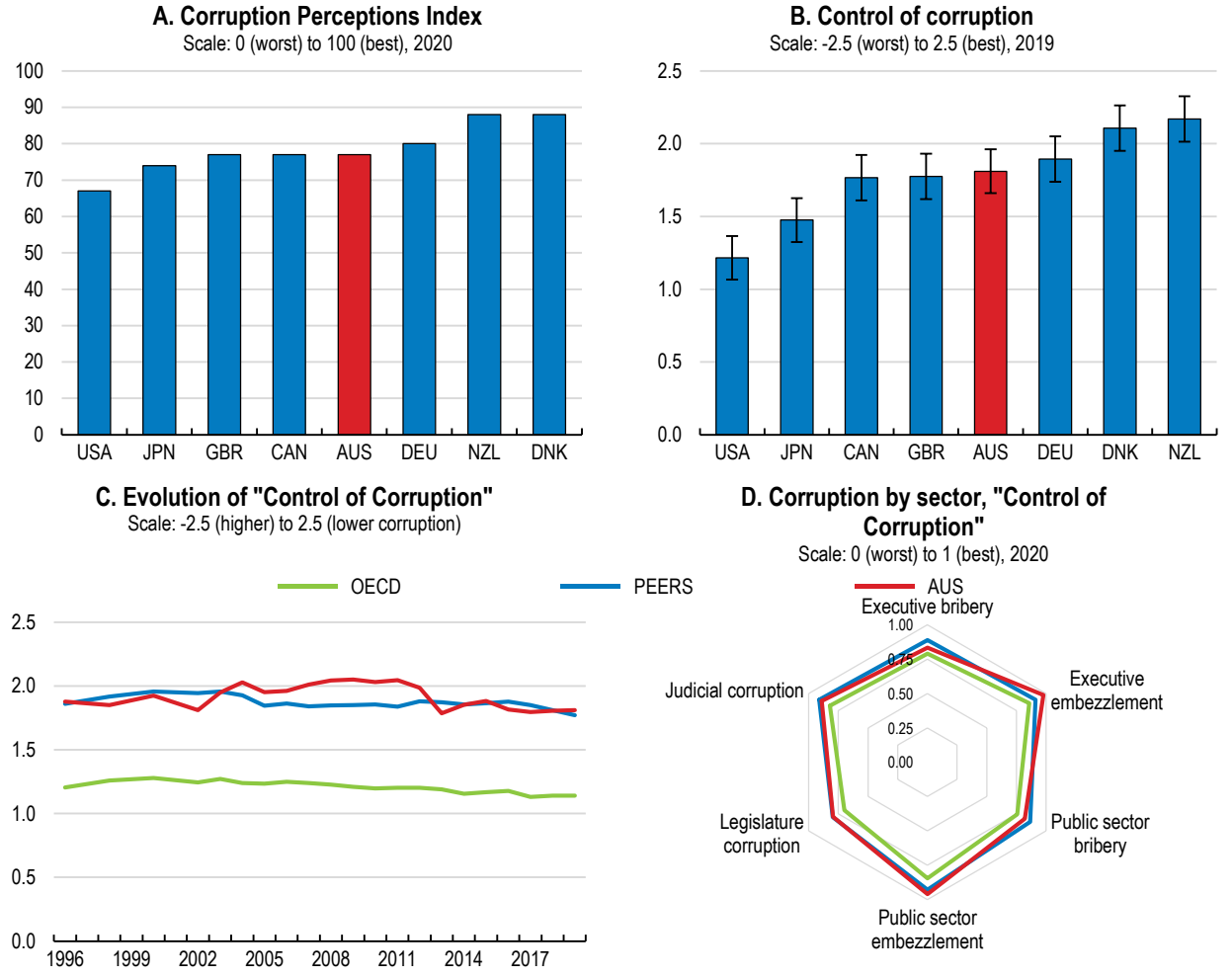
The ACCC considers the effective pursuit of anti-competitive merger and acquisition activity an ongoing challenge. In particular, it notes limited success in stopping anti-competitive mergers once they proceed to litigation. The Authority has proposed changes to the merger regime to further public debate on the issue (Sims, 2021a). These include a new formal merger review process, changes to the merger test and reforms to deal with acquisitions by large digital platforms. Reforms to increase effectiveness of the merger control framework should continue to be explored and discussed. In doing so, the benefits for competition of tightening merger protocols should be carefully weighed against the potential increase in regulatory costs and deterrent effects of such protocols on productivity- and competition-enhancing mergers.

Digitalisation may also lead to new concerns about the abuse of market power not covered under existing legislation. Practices such as larger businesses threatening smaller ones with commercial consequences unless they agree to change contract terms are not illegal under the current interpretation of unconscionability by Australia's courts (Sims, 2021b). The ACCC is proposing the introduction of an unfair practices prohibition to eliminate such conduct. In November 2020, Australian consumer affairs ministers agreed to undertake further work to establish if government intervention is warranted in this area.

Promoting investment through vigilance in fighting economic crimes

An effective anti-corruption framework is also an important element for reversing Australia's structural slowdown. Corruption – the abuse of public office for private gain – discourages business dynamism, reducing investment and innovation, and weighs on growth prospects (Jin, 2020). It also undermines equality of opportunity and erodes trust in government. In doing so, it makes the structural reforms that are necessary to drive the economic recovery more difficult to implement. Australia scores relatively well in international indicators of domestic corruption, ranking among peer countries on the public perception of corruption and control of corruption (Figure 1.23). Nevertheless, two thirds of Australians now think that corruption is a quite big or very big problem (Transparency International and Griffith University, 2020).

Figure 1.23. Australia ranks among peer countries in indicators of corruption



Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.
Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Project, V-Dem Dataset v11.

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Each state now has a unique institutional framework for combatting corruption. However, there are significant differences in their institutional approach (Transparency International, 2016). At the federal level, important anti-corruption institutions have been established to oversee corruption in law enforcement bodies (i.e. the Australian Commission for Law Enforcement Integrity and the Australian Federal Police Fraud and Corruption Centre). Yet, there is currently no agency responsible for public sector integrity, more broadly.

Encouragingly, the federal government has committed to establishing a Commonwealth Integrity Commission and is in the process of finalising its design. The process is a timely opportunity to create an institution that buttresses trust in the public sector and acts as an illustration of best practice to analogous institutions in the states and territories. To achieve this standard, adjustments to the proposed model should be considered.

Under the current proposal, the institution would be characterised by two distinct divisions with different structures. A "law enforcement division" would have jurisdiction over law enforcement agencies (replacing

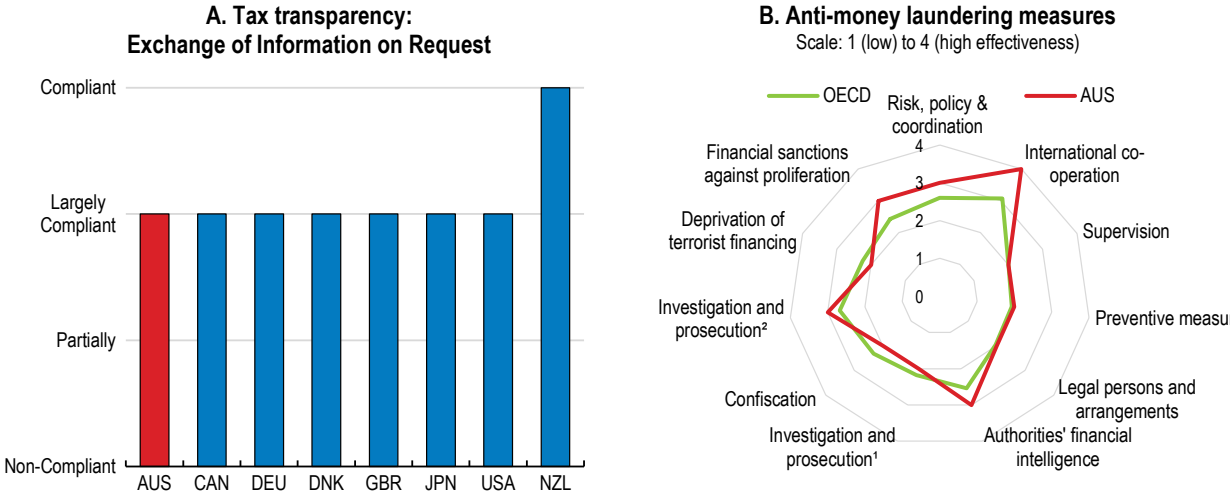
the current Australian Commission for Law Enforcement Integrity). This division would be able to investigate both criminal and non-criminal forms of corruption from referrals made by a broad range of individuals, including staff members, whistle-blowers or members of the public and could hold public hearings. The "public sector division" would be responsible for investigating corruption in the rest of the public sector (accounting for about 80% of federal government employees and 90% of expenditures), including public servants and parliamentarians. However, this division would not be able to investigate non-criminal forms of corruption, nor would it be able to directly accept referrals from staff, whistle-blowers or members of the public and could not hold public hearings. While this division would not be able to make public findings that a person engaged in corrupt conduct, it is intended that any evidence or allegations of corruption would be referred to a relevant authority for prosecution or civil proceedings.

The government has indicated that the rationale for the two-division structure is to reflect the different nature of the corruption risk that exists in law enforcement agencies as opposed to the broader public sector. However, none of the states or territories have such a demarcation within their respective anti-corruption institutions. In other OECD countries, such a structure is also uncommon. As the government seeks to improve the design of the institution ahead of its establishment, the powers and processes of the public sector division should be brought more closely into line with those of the law enforcement division. If making this change will require dedicating further financial resources to the agency, then such funding should be made available.

Prevention-focused activities should also be strongly emphasised in the mandate of the new institution. As provided in the OECD Recommendation on Public Integrity, an effective complement to investigative powers is a framework that fully addresses systemic and situational corruption risks that may lead to future wrongdoing (OECD, 2020e). For example, the New South Wales anti-corruption institution undertakes data analysis to help identify patterns that may indicate fraudulent activity (Wood and Griffiths, 2021). Transparency International suggests that prevention activities in anti-corruption institutions in Australia are mostly ad hoc, patchy and inconsistent, with the importance of prevention not reflected in formal structures or resourcing (Transparency International Australia and Griffith University, 2020).

In terms of tax transparency, which reduces the scope for tax evasion, Australia is largely compliant and similar to other comparable countries (Figure 1.24). On anti-money laundering measures, Australia performs better or at least equivalent to its peers. However, the country remains technically non-compliant in five areas of the International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation: reporting of suspicious transactions, internal controls and foreign branches and subsidiaries, regulation and supervision of financial institutions, guidance and feedback and powers of law enforcement and investigative authorities. In addition, there are several areas of the OECD Anti-Bribery Convention where Australia remains non-compliant (OECD, 2019d). The OECD Working Group on Bribery is also concerned about the continued low level of foreign bribery enforcement. Since the Australian foreign bribery legislation was enacted 20 years ago, just two corporate entities and six individuals have been sanctioned in two cases (OECD, 2019d).

Figure 1.24. Australia is in line with other comparable countries on tax transparency



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 prosecution¹" refers to money laundering. "Investigation and prosecution²" 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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Table 1.9. Past OECD recommendations on ensuring a competitive and innovative business environment

Recommendations in past *Surveys*	Actions taken since the previous *Survey* (December 2018)
Reforms should include adopting lighter product standards, paring back professional and occupational licensing, and reducing operating restrictions in shipping.	On 11 December 2020, the National Cabinet agreed to establish a widespread uniform scheme for occupational licences to be automatically recognised across jurisdictions. The scheme took effect in some states on 1 July, but there is a transitional period before it becomes fully functional. At present, a limited number of occupational registrations are currently within the scheme in New South Wales, Victoria, the Australian Capital Territory and the Northern Territory. Other states are expected to implement automatic mutual recognition over the coming year. Safeguards are embedded in the Bill to maintain high standards of consumer and environmental protection, animal welfare, and the health and safety of workers and the public as licensed workers move between jurisdictions. Following consultation in 2019 and 2020, the Department of Infrastructure, Transport, Regional Development and Communications is proposing reforms to cargo vessel regulations under the Coastal Trading Act. These reforms are intended to ensure the coastal trading regime remains fit-for-purpose.
Widen the scope of subsidies for innovation-related subjects beyond STEM (e.g. innovation-related arts disciplines)	No action taken.
Increase labour mobility, for instance by lower interstate differences in education and training programmes.	From 1 December 2020, all job seekers participating in employment service programs are immediately eligible for the Relocation Assistance to Take Up a Job program, which provides between AUD3,000 and AUD9,000 in relocation assistance for job seekers relocating to take up work, with a particular focus on job seekers who take up work in regional areas. The establishment of a widespread uniform scheme for automatic mutual recognition of occupational licenses (discussed above) will also promote labour mobility.

Improve competition law, notably by strengthening the definition of abuse of dominant position.	The July 2019 Digital Platforms Inquiry Report by the Australian Competition and Consumer Commission (ACCC), found an imbalance in bargaining power between digital platforms and local news businesses. Consequently, the News Media and Digital Platforms Mandatory Bargaining Code came into force on 2 March 2021. The Code will ensure that news media businesses are fairly remunerated for the content they generate, thereby helping to sustain public interest journalism in Australia.
Adjust insolvency legislation	Reforms to the insolvency framework took effect on 1 January 2021. These were designed to make the framework more fit for small business, reducing complexity, time and costs. These will enable more Australian small businesses to quickly restructure. The reforms feature three key elements: • a new debt restructuring process for small businesses, to enable distressed but viable firms to restructure their debts in a streamlined and cost-effective way. • a new, simplified liquidation process for small businesses to allow faster and lower-cost liquidation. • complementary measures to build the capacity of the insolvency sector, so that it can respond to developments in the insolvency market and the needs of small businesses. In May 2021, the government announced it would explore further insolvency reforms. As part of this process, stakeholder views will be sort on: • improving the schemes of arrangement process to better support company turnaround. • clarifying the application of trusts under insolvency law to reduce complexity and cost. The Government also announced that it would: • commence an independent review of the insolvent trading safe harbour to ensure it remains fit for purpose. • increase the threshold at which creditors can issue a statutory demand on a company, from AUD2,000 to AUD4,000. This increase came into effect on 1 July 2021. On 5 February 2020, Australia passed legislation amending corporations and tax laws to include new offences and penalties to deter and sanction those who engage in and facilitate illegal phoenix activity (i.e. where a new company is created to continue the business of an existing company that has been deliberately liquidated to avoid paying outstanding debts).

Faster decarbonisation can bring significant economic benefits

As the driest inhabited continent on the planet, with settlement primarily on the coasts, Australia is highly vulnerable to long-term climate change and associated extreme events—such as extreme heat, heavy rainfall and coastal inundation, fire weather and drought. The country is also uniquely placed to benefit economically from the decarbonisation of the global economy, with a large (and windy) land mass, ocean access, solar radiation and strong human capital to form the basis of innovation and new trade opportunities. As a consequence of its endowments, Australia currently boasts some of the best wind and solar resources in the world (Wood and Dundas, 2020). It also has good foundations for further developing other renewable energy sources such as tidal and geothermal. At the same time, Australia faces a more challenging decarbonisation task than many other countries due to a historical reliance on coal generation and the presence of significant mining and agriculture sectors.

Further reducing greenhouse gas emissions from high levels

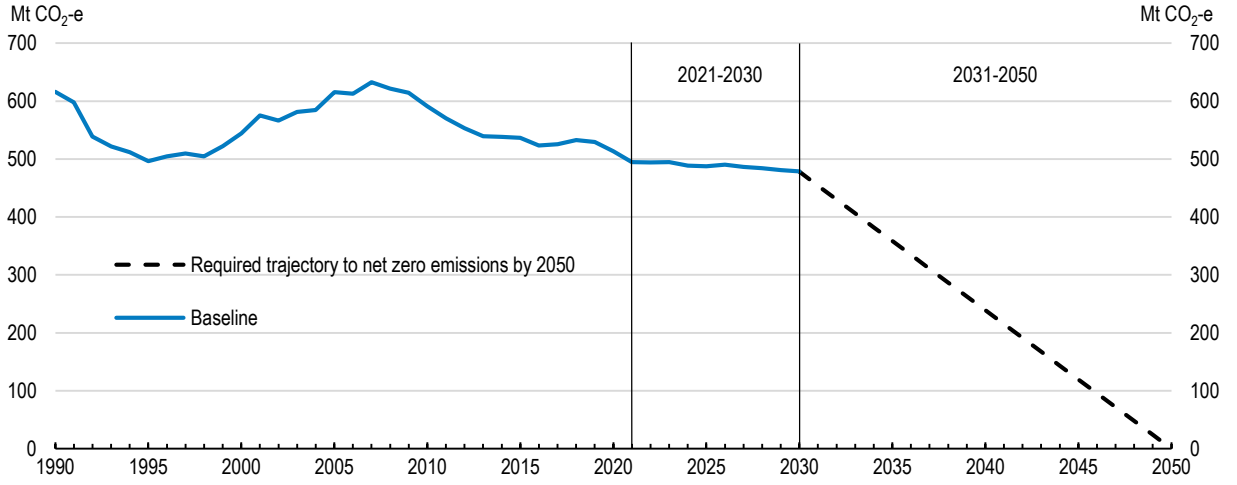
Australia has made progress in decoupling environmental pressures from economic activity: total greenhouse gas emissions (including land use, land use change and forestry) per unit of real GDP fell from 0.47 in 2005 to 0.26 in 2020 (Department of Industry, Science and Energy Resources, 2021a). In per capita terms, greenhouse gas emissions (including land use, land use change and forestry) declined by around 30% between 2005 and 2017, compared with a fall of 15.9% across OECD countries. Nevertheless,

Australia's greenhouse gas emissions per unit of GDP and per capita remain among the highest in the OECD (OECD, 2021d).

The federal government is now aiming to achieve net zero carbon emissions as soon as possible and preferably by 2050. At the same time, all states and territories have committed to achieving net zero carbon emissions by 2050. The government's objective under the Paris Agreement of reducing net emissions (including land use, land use change and forestry) by 26-28% between 2005 and 2030 is within reach. However, emissions will need to decline on a significantly steeper trajectory for Australia to reach net zero by 2050 (Figure 1.25, Panel B).

Figure 1.25. Emissions will need to decline faster to achieve net zero emissions by 2050

Greenhouse gas emission projections and required trajectory to achieve net zero emissions at 2050



Note: The data for 2021-2030 correspond to government projections under the department's baseline scenario as at December 2020. The measure includes land use, land use change and forestry.
Source: Department of Industry, Science and Energy Resources; OECD calculations.

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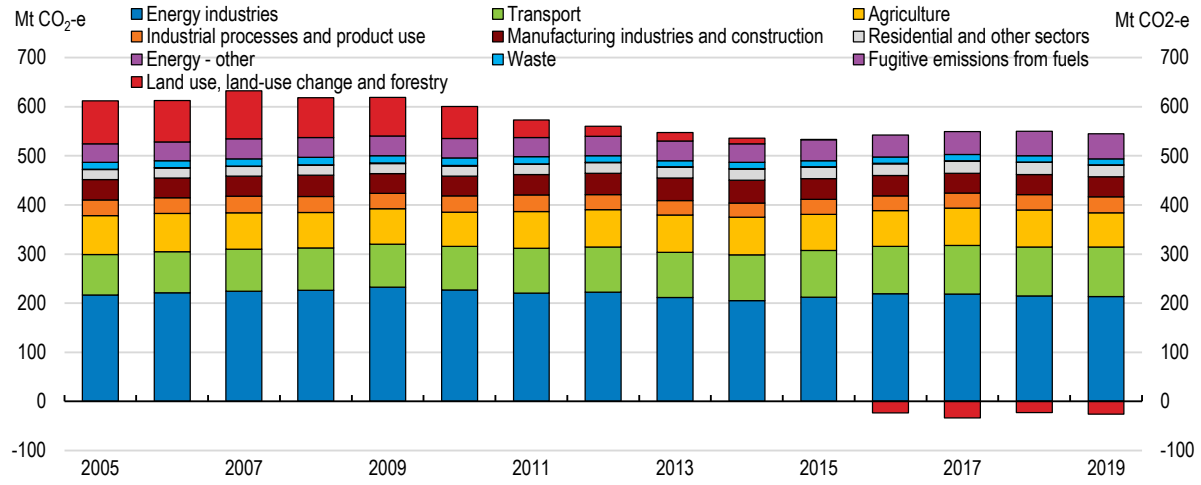
The vast majority of Australia's decline in greenhouse gas emissions since 2005 has been due to emission reductions in the land use sector (Figure 1.26). Between 2005 and 2019, annual emissions from land use, land use change and forestry declined by 114.1 million tonnes of CO_2 equivalent. This reflected reductions in native forest harvesting and primary forest clearing, improved soil carbon management, the fostering of native vegetation growth and retention and improved fire management in Australia's Top End savannas. Government data show that there has also been a reduction in emissions from the electricity sector, especially over the past decade: after peaking in the year to June 2009, emissions from the electricity sector had fallen by 20.9% by the year to December 2020 (44.2 million tonnes of CO_2 equivalent). Declines in emissions from other sectors have been more limited. There have been increases in emissions from the transport sector and from fugitive emissions from fuels (largely deriving from the production of liquefied natural gas and coal for export) over the period.

Figure 1.26. Progress in reducing net emissions has varied across sectors

Historical greenhouse gas emissions



Note: "Energy industries" includes activities such as energy extraction, energy production and transformation, electricity generation and petroleum refining.

Source: OECD Greenhouse Gas Emissions dataset.

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State and territory governments have become increasingly active in introducing distinct climate change policies as they seek to achieve net zero emission targets on an individual basis. The different costs of emissions abatement across states means that such an approach will come at a higher cost than a nationally coordinated strategy. The government's forthcoming Long-term Emissions Reduction Strategy is an opportunity to articulate a more co-ordinated and ambitious climate-change policy that puts the national economy on the path to reaching net zero emissions as soon as possible and preferably by 2050. Doing so could propel innovation in low carbon technologies and catalyse their diffusion throughout the economy. At the same time, it can allow Australia to meet its international climate change commitments without unnecessarily raising the short-term economic costs of doing so. The new International Programme for Action on Climate (IPAC) could assist Australia in tracking progress in achieving its emission reduction goals.

Significant economic benefits can come from a quicker pace of emission reductions. Following such a path could reduce the chance of locking-in emissions-intensive infrastructure that becomes stranded in the future. It also has the potential to support more affordable access to investment capital (from reduced climate-related exposures), enhanced agricultural productivity, reduced energy use and costs for households and businesses and lower health risks (Kompas et al., 2019). In addition, there can be substantial commercial benefits from developing and selling emissions reduction technology for a country like Australia with rich access to human capital, developed financial markets and world class research institutions.

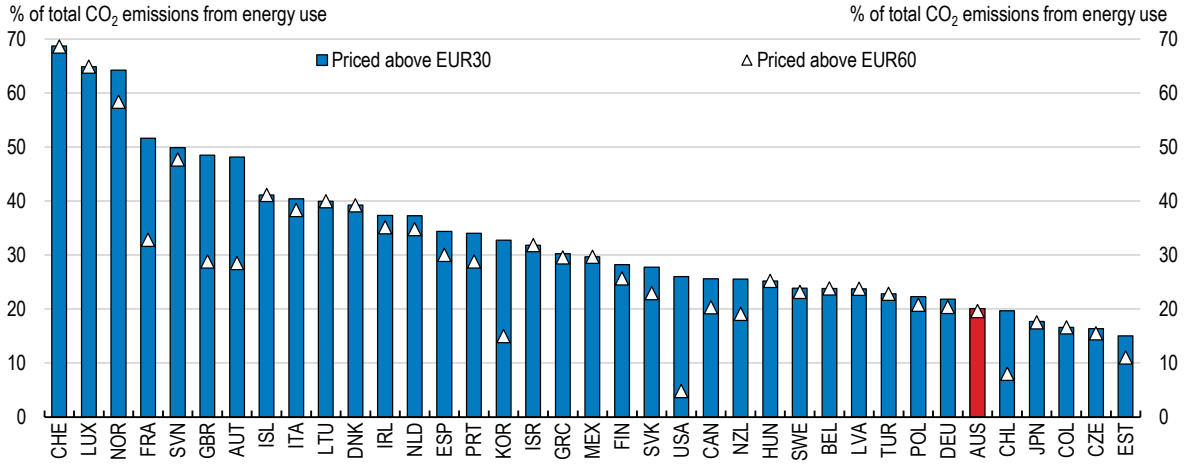
The federal government has recently stressed the development of clean energy technologies as the path to lower emissions. Strong institutions are already in place to support these aims. The Australian Renewable Energy Agency provides grants for research, development, demonstration, deployment and early-stage commercialisation of renewables technology. In addition, Australia is one of the few OECD countries to have established a green bank at the national level (OECD, 2019e). The Clean Energy Finance Corporation facilitates the financing of clean energy projects through a variety of instruments including co-financing, project finance, corporate loans, climate bonds and equities. Since 2013, the CEFC has made investment commitments of more than AUD9.1 billion in projects worth over AUD31 billion. Despite these institutions being considered best practice within the OECD and having been in existence for many years,

innovations are less likely to be environment-related in Australia than in other OECD countries (Figure 1.28, Panel A). Furthermore, there has been a trend decline in environmental R&D over the past decade (OECD, 2019e).

In 2020, the government released the Technology Investment Roadmap that identified five key areas where technological developments could reduce emissions in Australia's most carbon-intensive sectors. The focus will specifically be on clean hydrogen, energy storage, low carbon materials (e.g. low emission steel production), carbon capture and storage and soil carbon. The Roadmap will guide AUD20 billion of government investment over the next decade and will help leverage AUD80 billion in total investment. Overall, climate-related spending by the federal government will account for around 0.2-0.3% of total government expenditure in the coming years (Commonwealth Government, 2021e).

The efficacy of the public investment and technology policies would be enhanced by ensuring that market prices adequately reflect carbon content. Doing so would provide the essential price signal for further mobilising private investment in clean technologies (IMF/OECD, 2021). As with any emission reduction policy, the potential impact on cost of living and competitiveness needs to be taken into account, especially in areas where there are currently fewer low emissions alternatives. At present, Australia's carbon emissions are priced lower than in most other high income OECD countries, but similar to some other commodity exporters such as Chile (Figure 1.27). Carbon prices in Canada, another major commodity exporter, are higher and the Canadian government has proposed that they rise significantly over the years ahead (OECD, 2021e). Around 20% of Australia's carbon emissions are priced above EUR 30 per tonne of CO^2 (a conservative estimate of the climate damage from one tonne of CO_2 emissions), with the majority of unpriced emissions deriving from the electricity and industry sectors (OECD, 2021f).

Figure 1.27. Carbon emissions are priced lower than in most other countries



Note: Data are for 2018 and includes explicit carbon pricing from carbon taxes, ETSs and fuel taxes, not other market and regulatory measures.
Source: OECD Effective Carbon Pricing Dataset.

StatLink https://stat.link/ql9bc0

More generally, widespread diffusion of new clean energy technologies will require a Long-term Emissions Reduction Strategy that defines clear goals and corresponding policy measures for the path to achieving net zero emissions by 2050. The least cost approach to meeting these emission targets would involve an economy-wide carbon price. However, if the political environment precludes such an approach, other existing instruments will need to be scaled up and new sector-based solutions considered. More ambitious emission reduction policies will be especially needed in those sectors that are the biggest emitters – energy, transport and agriculture.

Energy sector

Energy intensity has fallen, with the decline in the ratio of total energy supply to GDP over the past decade similar to that in other OECD countries (Figure 1.28, Panel B). This partly reflects the progress in the electricity sector already discussed. Even so, CO_2 intensity of electricity generation remains around double the OECD average (OECD, 2019e).

High emissions intensity reflects the very high share of fossil fuels still in the energy mix (OECD, 2019e). Oil, coal and natural gas account for about 93% of primary energy supply compared with 80% on average across the OECD. The share of renewables in energy supply and electricity generation have increased rapidly over recent years, partly due to the success of the government's Renewable Energy Target. Australia now boasts the highest installed photovoltaic capacity per inhabitant in the world (International Energy Agency, 2020a). Such technology was initially in rooftop applications, especially in the residential sector, before shifting to utility scale applications (ibid.). While Australia has more solar and wind capacity installed than any country outside of Europe, there is significant scope for further increases in renewable energy, given that the share remains low compared with other OECD countries (Figure 1.28, Panel C).

The relative costs of renewable energy sources are anticipated to fall further in the years ahead (International Energy Agency, 2020b). The Australian Energy Market Operator has highlighted that economic forces will cause renewables to continue displacing coal in the electricity market (Australian Energy Market Operator, 2020). However, greater renewable generation needs to be accompanied by further investment in the transmission network with projects supported by careful cost-benefit analysis (Wood, 2020).

There is also a critical role for the federal government to play in managing the transition to renewables at least cost. This will provide greater certainty for investors, ensure proper planning can be undertaken to maintain network reliability and allow flanking policies to be devised that support displaced workers. The Long-term Emissions Reduction Strategy should outline specific emission reduction targets for electricity over regular intervals that are consistent with net zero emissions by 2050. These targets could then be enforced through a scaled-up version of the Safeguard Mechanism that already exists as part of the government's Emissions Reduction Fund.

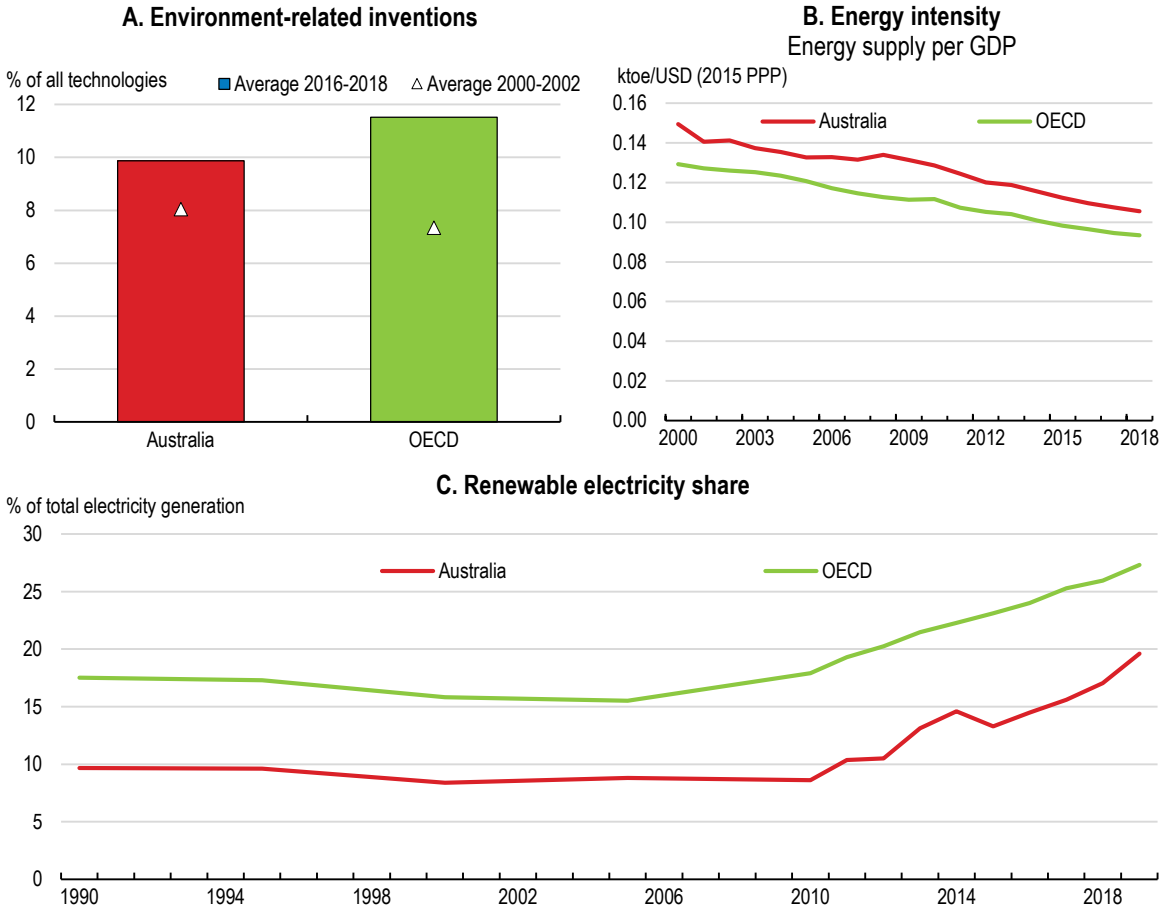
The Safeguard Mechanism currently requires the largest emitters in mining, manufacturing, transport, electricity and other industrial sectors to purchase an Australian Carbon Credit Unit (ACCU) if their emissions exceed a defined baseline. ACCU's are created through eligible domestic abatement projects being undertaken that are funded through the government's Emission Reduction Fund. It is conceivable that the Safeguard Mechanism could be used as a way to ensure emission reduction goals are met in a range of sectors outside of electricity. A well-communicated schedule for future declines in the baseline that accord with the government's emission abatement goals would provide clarity to businesses. Past proposals that detail the design and sequencing for an emission reduction framework that utilises the Safeguard Mechanism (e.g. Wood and Blowers, 2016) should now be reconsidered by the authorities.

In scaling up the Safeguard Mechanism, the government should consider providing carbon credits for entities that undershoot baseline emissions. Under its current form, there is little incentive for emitters to reduce emissions below the baseline level. The authorities have already committed to trial a similar approach in response to a proposal of the final report of the expert panel examining additional sources of low-cost abatement (i.e. 'the King Review'; Commonwealth Government, 2020c). This will credit reductions in emissions intensity (rather than absolute emissions) to avoid crediting reduced production or facility closures (ibid.).

The further transition away from fossil fuel energy generation must be accompanied by policies that support the transition of workers. Coal mining in Australia employs about 40,000 people and many of the intensive coal-dependent regions will not be able to seamlessly switch to producing large-scale renewable energy, given that the best solar and wind resources are located elsewhere (Briggs et. al., 2020). As such,

programmes that diversify and develop economic activities in the most affected regions will be key. Many OECD countries have now established "just transition" authorities to plan for this process. In Germany, the government tasked a "coal commission" with developing a path for such a transition by 2038, through broad stakeholder consultation. This was accompanied with additional funding to implement the transition projects.

Figure 1.28. Green growth indicators



Source: OECD Green Growth Indicators database.

StatLink https://stat.link/0tfzuj

Transport

CO_2 emissions from the transport sector grew by 22% between 2005 and 2019, accounting for around 18% of total emissions by that time. The majority derive from cars and light commercial vehicles. Specifically, fossil fuel combustion in internal combustion engines (Climate Change Authority, 2020a). The private and public transport sectors offer considerable opportunities for abatement given the rapid development of the global electric vehicle market. However, this will only be true if significant emission reductions in electricity generation are achieved.

So far, uptake of electric vehicles has been modest compared with other OECD countries. Electric vehicles accounted for less than 1% of new car sales in Australia in 2020, compared with 2-4% in markets such as the United States and Canada, around 10% in the UK and EU and as high as 75% in Norway (International

Energy Agency, 2020c). Some countries such as the UK and France have set a target of 100 per cent of new car purchases being electric by 2040, whilst others like the Netherlands and Norway aim to achieve the same target by 2025 (Commonwealth of Australia, 2019). A dramatic fall in the cost of lithium-ion batteries has allowed for the introduction of longer range electric vehicles at more affordable prices. Australia is well positioned to benefit economically from growth in the electric vehicle market given a rich endowment of lithium, nickel, cobalt and rare earth materials that are used in battery manufacture (Climate Change Authority, 2020a).

The barriers to a greater proportion of electric vehicles on Australian roads can be reduced by adjusting public policy. While public charging infrastructure is currently insufficient, the federal government recently announced co-investment with the private sector from the AUD71.9 million *Future Fuels Fund* to address "charging blackspots" and to demonstrate hydrogen refuelling infrastructure (Department of Industry, Science and Energy Resources, 2021b). Federal government leadership on developing this infrastructure is important to avoid interoperability issues between states and territories.

Cost can also be a barrier to greater electric vehicle uptake. This is because electric vehicles typically involve greater upfront costs, even though costs can be comparable with internal combustion engine vehicles over the entire useful life. Continued efforts should be made to inform consumers that operational costs of electric vehicles are comparatively low. The federal government provides preferential tax treatment of electric vehicles through a higher luxury car tax threshold (worth around AUD3,500 per vehicle) and some state governments offer additional financial support for electric vehicle purchases. The Victorian government has introduced a new distance-based road user charge that applies only to electric vehicles. A move to road user charging across all vehicle types should be a priority of Australian governments (OECD, 2019e). While internal combustion engine vehicles would continue paying fuel excise, road user charges that are levied only on electrical vehicles risk disincentivising the transition to cleaner forms of transport. At a minimum, the new tax should be coupled with incentives that fully offset any potential negative impact on their adoption. The New South Wales government has announced that it will delay a road user charge for zero- and low-emissions cars until mid-2027 or once electric vehicles account for 30% of new car sales (whichever comes first). In addition, the government is waiving stamp duty on electric vehicle purchases and providing rebates for cars priced under AUD68,750 (EUR43,376).

Corporate and government fleet cars make up approximately half of new car sales in Australia, meaning that they are an important source of used cars. Furthermore, the total cost of electric vehicle ownership for local government fleets is already cost-competitive with internal combustion vehicles (ClimateWorks 2019). Targets for electric vehicle procurement in government fleets could thus be a worthwhile initiative to support the broader proliferation of electric vehicles.

Stricter fuel efficiency standards are also necessary for reducing emissions and air pollution as the transition to increased electrification of the vehicle fleet occurs. Vehicle efficiency clearly lags behind international peers such as the United States, China, Europe, Canada and Japan (Climate Change Authority, 2020a). Australia is one of the few G20 countries without mandatory emissions or fuel efficiency standards for cars. It also does not have any policy to reduce emissions from freight trucks. In keeping with the recommendations of the most recent *OECD Environmental Policy Review*, Australia should introduce fuel quality and vehicle emission standards, including CO_2 and other pollutant emissions that are on par with global best practices.

Agriculture

There has been progress in reducing aggregate emissions from agriculture over the past decade. Agricultural emissions (excluding land use, land use change and forestry) fell by 12.5% between 2005 and 2019, compared with an increase of 4.2% in the OECD. By 2019, the sector accounted for around 13% of Australia's greenhouse gas emissions, largely deriving from livestock production. There have been significant advances in technologies designed to reduce emissions from agriculture. For instance, methane

emissions can be reduced by employing new types of feed or breeding practices and more efficient nitrogen fertilisers are available. There is also more interest in farms using renewable energy solutions given the significant falls in prices (Eckard, 2020).

The main government policy designed to reduce Australia's agricultural emissions is the Emissions Reduction Fund (Table 1.10). Many of the abatement projects under the scheme that result in Australian Carbon Credit Units are related to agriculture. Since 2012-13, 53 million tonnes of abatement have been achieved related to the land sector under the scheme (including agricultural, vegetation and savanna burning methods). The Climate Change Authority has noted that the Emissions Reduction Fund has robust mechanisms for ensuring the environmental integrity of the contracted abatement projects (Climate Change Authority, 2020b).

Looking forward, the government should ensure that reductions in agricultural emissions are a core element of the nationally integrated strategy to reach net zero carbon emissions by 2050. If the government were to use a recalibrated Safeguard Mechanism to achieve net zero emissions by 2050, there would be a significant increase in demand for Australian Carbon Credit Units. In turn, this could mean increased funding of abatement projects in the agricultural sector. The authorities should continue to ensure that a broad range of agricultural producers and projects can be eligible for funding under the Emissions Reduction Fund, that the lowest abatement cost projects are prioritised and that the scheme is not funding abatement initiatives that would have been undertaken in the absence of the programme (Climate Change Authority, 2020b).

Table 1.10. Past OECD recommendations on promoting environmental sustainability

Recommendations in past *Surveys*	Actions taken since the previous *Survey* (December 2018)
Stabilise and strengthen climate-change policy. Develop and implement a national, integrated energy and climate policy framework for 2030 based on a low-emission development strategy for 2050, in line with the Paris Agreement objective. Guide the energy transition through an emissions reduction goal for the power sector supported by a market-based mechanism.	In 2019 the Government announced the AUD3.5 billion Climate Solutions Package. The package included AUD2 billion to build on the Emissions Reduction Fund, including through auctions to purchase low-cost abatement The package also included funding for energy efficiency and for pumped hydro projects. In September 2020 the Government released the first Low Emissions Technology Statement. The Statement set stretch goals for five priority technologies. The 2020-21 Budget included AUD1.9 billion to invest in technologies identified in the roadmap. This included funding for carbon capture and storage, hydrogen, electric vehicle infrastructure and to support industry to adopt low emission technologies. In November 2020, the Government announced that it will establish a new, National Resilience, Relief and Recovery Agency to drive the reduction of natural disaster risk, enhance natural disaster resilience and ensure effective relief and recovery to all hazards. On 25 January 2021, the Government announced that Australia will develop a new National Climate Resilience and Adaptation Strategy. This would replace the existing Strategy, released in 2015. As part of the 2021-22 Budget, the Government announced further investment of AUD539.2 million in new clean hydrogen, carbon capture, use and storage (CCS/CCUS) projects. In addition, a further AUD565.8 million was committed to funding low emissions international technology partnerships and initiatives by co-funding research and demonstration projects.
Give greater priority to biodiversity in project approval and land use.	The ten yearly independent review of Australia's national environment law was completed in October 2020. The review found that significant reform is required. The Australian Government has committed to a staged program of reform, which is now underway.

Table 1.11. Key Policy Insights recommendations

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Ensuring a sustained recovery in output and jobs	
International borders remain closed, negatively impacting education exports and bilateral tourism. Labour shortages are arising in some sectors traditionally reliant on foreign workers and there are many Australian citizens stuck abroad because of hotel quarantine caps.	**Ensure all eligible adults are able to receive COVID-19 vaccination and open international borders at the earliest possible date.**
A substantial fiscal response at the onset of the pandemic was enabled by the country's strong starting fiscal position. The stimulus measures were front loaded and temporary.	**Restore fiscal sustainability in a gradual manner and adopt a more expansionary stance of fiscal policy if further containment measures have a significant negative impact on economic growth.**
Fiscal policy is now being conducted in an environment of higher public debt, with fiscal costs from ageing in prospect. The independent fiscal authority fulfils a narrower role than counterparts in many other OECD countries.	**Task an independent fiscal institution, such as the Parliamentary Budget Office, with both formal evaluation and monitoring of the government's fiscal strategy.**
Young and low-wage workers experienced the greatest job losses through the pandemic. The unemployment benefit replacement rate remains close to the lowest in the OECD and below estimates of the relative poverty line. This partly reflects prior indexation to consumer price inflation.	**Further increase the unemployment benefit rate and consider indexing the rate to wage inflation.**
Australia's tax mix remains tilted towards income taxes and has increasingly relied on personal income taxation. With an ageing population, revenue streams will come under significant pressure under current policy settings. In addition, some prominent inefficiencies and distortions in the tax system remain.	**Further shift the tax mix away from income taxes (especially personal income tax) and inefficient taxes (including real-estate stamp duty) and towards the Goods and Services Tax and recurrent land taxes.** Reduce some of the concessions for the taxation of private pensions, particularly those that favour high income earners. Reduce the capital gains tax discount. Assess the distortionary impact of the current two-tier corporate tax system.
Health and social welfare for the aged already account for one quarter of all government spending and costs will grow with the ageing population. An overreliance on hospitals inflates health spending pressures. Half of the government's spending on the Age Pension currently goes to people that are asset rich.	Boost primary care capacity through further promoting new methods of care that harness digital technologies. Include the entire value of the family home, or that portion above a certain threshold, in the means test for Age Pension eligibility. Consider increasing the qualifying age for the Age Pension to 70.
Gaps in economic and wellbeing between Indigenous and non-Indigenous Australian remain large. There are a raft of policy measures aimed at improving outcomes for Indigenous Australians. However, little is known about what policies work and why, and there is no coordinated approach to policy evaluation across government.	Embed the Productivity Commission Indigenous Evaluation Strategy in the policy design and evaluation process of all Australian Government agencies for both Indigenous-specific and mainstream policies that affect the Indigenous population.
The Reserve Bank of Australia has added new instruments to its toolkit. In particular, a government bond purchasing programme, though it remains comparatively small in scale. The central bank's preferred measures of underlying inflation have undershot the target since 2015.	**As in other OECD countries, undertake a review into the monetary policy framework that is broad in scope, transparent and involves consultation with a wide variety of relevant stakeholders.** **Keep monetary policy expansionary, but stand ready to tighten policy if underlying inflation risks sustainably rising above the target or inflation expectations risk becoming de-anchored.**
Households are amongst the most indebted in the OECD and banks are highly exposed to housing assets. Risks are moderated by high household asset holdings, well-capitalised banks and close supervision.	If credit growth picks up and there are other signs of building risks, implement macroprudential tools. Complete implementation of a loss-absorbing regime, including bail-in provisions, in case of financial institution insolvency.
Raising productivity growth to boost future living standards	
About one fifth of Australian workers require a license to perform their work. Most need distinct licenses in each Australian state and territory. This unnecessarily raises economic costs, including by slowing resource reallocation.	**Legislate automatic mutual recognition of occupational licenses.** Further investigate occupational licensing requirements from systemic and sectoral perspectives, considering the avenues for further harmonisation across jurisdictions and the extent to which new technologies are making existing licenses obsolete. Improve data collection about occupational licensing regimes across the country and information exchange systems between jurisdictions.
Land needs to be repurposed to take into account structural changes, not least those induced by the pandemic. However, there is limited	**Allow local authorities to raise more of their own-source revenue, at the same time as reallocating the minimum Financial Assistance Grant from wealthier local authorities to those in more**

incentive for local authorities in desirable locations to attract new businesses or expand dwelling supply.	**disadvantaged areas.** Move towards fewer land zone types, which are harmonised where possible, and less prescriptive about the types of activities that can be undertaken.
Australia scores relatively well in indicators of domestic corruption, butthe institutional arrangement for fighting corruption could be strengthened. The authorities plan to establish a Commonwealth Integrity Commission, but the proposed institution would have stronger powers for the Law Enforcement Division than for the Public Sector Division.	Establish a Commonwealth Integrity Commission and more closely align the mandate of the Public Sector Division with that currently proposed for the Law Enforcement Division.
There are signs of reduced competitive intensity in product markets. In particular, firm entry rates have declined in digitally intensive sectors. There has been a pick-up in merger and acquisition activity in the technology sector over the recent period.	Consider the introduction of an unfair practices provision to eliminate various practices that are a clear abuse of market power but are currently not illegal. Consider changes to merger review legislation that better take into account the competitive dynamics in digital markets.
Reducing greenhouse gas emissions in a cost efficient way	
All states and territories have now committed to achieving net zero carbon emissions by 2050. National carbon emissions need to decline on a much steeper trajectory if this goal is to be met.	**Develop a national, integrated Long-term Emissions Reduction Strategy that defines clear goals and corresponding policy settings for the path to achieving net zero emissions as soon as possible and preferably by 2050.** **Scale up the Safeguard Mechanism that exists as part of the government's Emissions Reduction Fund to appropriately price carbon emissions across sectors.** Ensure that reductions in agricultural emissions are a core element of the nationally integrated strategy to reach net zero carbon emissions by 2050.
Australia is one of the few G20 countries without mandatory emissions or fuel efficiency standards for cars.	Introduce fuel quality and vehicle emission standards, including CO_2 and other pollutant emissions that are on a par with global best practices.

References

Akgun, O., B. Cournede, J.M. Fournier, (2017), "The effects of tax mix on inequality and growth", *OECD Economics Department Working Paper*, No. 1447, OECD Publishing, Paris.

AlphaBeta (2020), "Australia's digital resilience: how technology strengthened Australian business during COVID and beyond", September 2020.

Andrews, D. et. al. (2021a), "COVID-19 and Productivity-Enhancing Reallocation in Australia: Real-time evidence from Single Touch Payroll", *OECD Economics Department Working Paper*, forthcoming.

Andrews, D. et. al. (2021b), "COVID-19 and Productivity-Enhancing Reallocation in Australia: Timely evidence from three OECD countries", *OECD Economics Department Working Paper*, forthcoming.

Andrews, D. et. al. (2019), "Wage growth in Australia: lessons from longitudinal microdata", *RBA Annual Conference Papers*, Reserve Bank of Australia.

Australian Competition and Consumer Commission (2019), *Digital Platforms Inquiry*, Final Report, June 2019.

Australian Energy Market Operator (2020), *2020 Integrated System Plan for the National Electricity Market*, July 2020.

Australian Institute of Family Studies (2021), *Child care in 2020*, Towards COVID normal, Report no. 3, June 2021.

Bambalaite, I. et. al. (2020), "Occupational entry regulations and their effects on productivity in services: Firm-level evidence", *OECD Economics Department Working Papers*, No. 1605, OECD Publishing, Paris.

Beetsma, R. et. al. (2019), "Independent fiscal councils: Recent trends and performance", *European Journal of Political Economy,* Vol. 57.

BDO (2020), *Technology M&A Highlights*, Q3 2020.

Bishop, J. and I. Day (2020), "How many jobs did JobKeeper keep?", *RBA Research Discussion Paper*, No. 2020-07, Reserve Bank of Australia.

Briggs, C. et al. (2020), *Renewable energy jobs in Australia: Stage One*, prepared for Clean Energy Council by UTS Institute for Sustainable Futures, University of Technology Sydney.

Calvino, F. and C. Criscuolo (2019), "Business dynamics and digitalisation", *OECD Science, Technology and Industry Policy Papers*, No. 62, OECD Publishing, Paris.

Cassidy, N. (2019), *Low Wages Growth in Australia – An Overview*, Reserve Bank of Australia.

Climate Change Authority (2020a), *Prospering in a low emissions world: an updated climate policy toolkit or Australia*¸ Australian Government, March 2020.

Climate Change Authority (2020b), *Review of the Emissions Reduction Fund*, Australian Government, October 2020.

ClimateWorks (2019), *Electrical Vehicle Ready Local Government Fleets: Increasing Uptake and Ambition*, March 2019.

Coates, B. and M. Cowgill (2021), "Now is an especially bad time to cut unemployment benefits", *Pearls and Irritations*, 25 February.

Coates, B. and J. Nolan (2020), "Balancing act: managing the trade-offs in retirement incomes policy", *Submission to the Retirement Income Review*, Grattan Institute.

Commonwealth Government (2021a), *Women's Budget Statement*, Federal Government Budget 2021-22.

Commonwealth Government (2021b), *Statement 8: Forecasting Performance and Sensitivity Analysis*, Federal Government Budget 2021-22, Budget Paper No. 1.

Commonwealth Government (2021c), *Intergenerational Report: Australia over the next 40 years*, June 2021.

Commonwealth Government (2021d), *Mutual Recognition Amendment Bill*, Second Reading, House of Representatives Hansard, 18 March 2021.

Commonwealth Government (2021e), *Statement 7: Debt Statement*, Federal Government Budget 2021-22, Budget Paper No. 1.

Commonwealth Government (2020a), *Retirement Income Review*, Final Report, July 2020.

Commonwealth Government (2020b), *Australian Government response to the Final Report of the Expert Panel examining additional sources of low-cost abatement*, Department of Industry, Science and Energy Resources.

Commonwealth Government (2019), *Senate Estimates – Opening Statement*, Secretary to the Treasury, October 2019.

Climate Change Authority (2015), *Final Report on Australia's Future Emission's Reduction Targets*, 2 July 2015.

Daley, J. et. al. (2018), *Housing affordability: re-imagining the Australian dream*, Report No. 2018-04, Grattan Institute.

Daley, J. and D. Wood (2016), "Fiscal challenges for Australia: the next decade and beyond", *Asia & the Pacific Policy Studies*, Vol. 3, No. 3,

Debelle, G. (2018), "Low Inflation", Address at The Economic Society of Australia (QLD) Business Lunch, Brisbane, 22 August.

Debrun, X. and T. Kinda (2017), "Strengthening post-crisis fiscal credibility: Fiscal councils on the rise—A new dataset.", *Fiscal Studies*, Vol. 38.

Department of Health (2019), *Australia's Long-term National Health Plan: to build the world's best health system*, August, 2019.

Department of Industry, Science, Energy and Resource (2021a), *Quarterly Update of Australia's National Greenhouse Gas Inventory*, December 2020.

Department of Industry, Science, Energy and Resource (2021b), *Future Fuels Strategy: Discussion Paper*, February 2021.

Eckard, R. (2020), "Australia's farmers want more climate action – and they're starting in their own (huge) backyards", *The Conversation*, 20 August.

Fall, F. et al. (2015), *Prudent debt targets and fiscal frameworks*, OECD Economic Policy Paper, July 2015, No. 15, OECD Publishing, Paris.

Guillemette, Y. and D. Turner (2021), "The Long Game: Fiscal Outlooks to 2060 Underline Need for Structural Reform", *OECD Economics Department Policy Papers*, No. 29, OECD Publishing.

Guinness, H. et. al. (2020), *A Blueprint for the National Cabinet*, Blueprint Institute.

Grattan Institute (2020), *The Recovery Book: what Australian governments should do now*, Grattan Institute Report No. 2020-10, June 2020.

Haltiwanger, J., H. Hyatt and E. McEntarfer (2018), "Who Moves Up the Job Ladder?", *Journal of Labor Economics*, Vol. 36/S1.

Hambur, J. (2021), "Product market power and its implications for the Australian economy", *Treasury Working Paper*, forthcoming.

Hambur, J. and K. Jenner (2019), "Can structural change account for the low level of non-mining investment?", *RBA Bulletin – June 2019*, Reserve Bank of Australia.

Hermansen, M. (2019), "Occupational licensing and job mobility in the United States", *OECD Economics Department Working Papers*, No. 1585, OECD Publishing, Paris.

IMF/OECD (2021), *Tax Policy and Climate Change*, IMF/OECD Report for the G20 Finance Ministers and Central Bank Governors, April 2021.

International Energy Agency (2020a), *Trends in Photovoltaic Applications 2020*, OECD Publishing, Paris.

International Energy Agency (2020b), *World Energy Outlook 2020*, OECD Publishing, Paris.

International Energy Agency (2020c), *Global EV Outlook*, OECD Publishing, Paris.

International Monetary Fund (2020), "Australia: Selected Issues", IMF Country Report, No. 20/69.

Jin, Y. (2021), "Framework to discuss corruption in OECD Economic Surveys", *OECD Economics*

Department Working Paper, forthcoming.

Johansson, Å. et al. (2008), "Taxation and economic growth", *OECD Economics Department Working Papers*, No. 620, OECD Publishing, Paris.

Joint Council on Closing the Gap (2020), *National Agreement on Closing the Gap*, July 2020.

Kompas, T., et al. (2019), "Australia's Clean Energy Future: Costs and Benefits", *MSSI Issues Paper*, No. 12, Melbourne Sustainable Society Institute, The University of Melbourne.

KPMG (2019), *She's Price(d)less: the economics of the gender pay gap*, prepared with Diversity Council of Australia and the Workplace Gender Equality Agency, August 2019.

McDonald, J. (2020), "Why deregulate?", Speech transcript, *Productivity reform in Australia and New Zealand – Barriers and opportunities*, 24 November 2020.

Nerlich, C. and W. Reuter (2013), The design of national fiscal frameworks and their budgetary impact., *Working Paper Series,* No. 1588, European Central Bank, Frankfurt.

NSW Review of Federal Financial Relations (2020), "Supporting the road to recovery", Final Report, August 2020.

OECD (2021a), *Brick by Brick: Building Better Housing Policies*, OECD Publishing, Paris

OECD (2021b), *Economic Policy Reforms 2021: Going for Growth: Shaping a Vibrant Recovery*, OECD Publishing, Paris

OECD (2021c), *Empowering the health workforce: Strategies to make the most of the digital revolution*, OECD Publishing, Paris.

OECD (2021d), "Climate change", in Environment at a Glance Indicators, OECD Publishing, Paris.

OECD (2021e), *Effective Carbon Rates 2021: Pricing Carbon Emissions through Taxes and Emissions Trading*, OECD Publishing, Paris.

OECD (2021f), OECD Economic Surveys: Canada 2021, OECD Publishing, Paris.

OECD (2020a), "Issue Note 3. Post-financial- crisis changes to monetary policy frameworks: Driving factors and remaining challenges", *in Chapter 2 of OECD Economic Outlook*, Volume 2020, Issue 2, OECD Publishing, Paris.

OECD (2020b), *Linking Indigenous Communities with Regional Development in Australia*, OECD Rural Studies, OECD Publishing, Paris.

OECD (2020c), "Empowering the health workforce: strategies to make the most of the digital revolution", *OECD Directorate of Employment, Labour and Social Affairs*, Health Division, OECD Publishing, Paris.

OECD (2020d), "Start ups, killer acquisitions and merger control", *Directorate for Financial and Enterprise Affairs Competition Committee*, Background Note.

OECD (2020e), *OECD Public Integrity Handbook*, OECD Publishing, Paris.

OECD (2019a), *Society at a Glance 2019: OECD Social Indicators,* OECD Publishing, Paris.

OECD (2019b), *Linking Indigenous Communities with Regional Development*, OECD Rural Policy Reviews, OECD Publishing, Paris.

OECD (2019c), *Health at a Glance 2019: Australia*, OECD Publishing, Paris.

OECD (2019d), *Phase 4 Two-Year Follow-up Report: Australia*, Implementing the OECD Anti-Bribery Convention, OECD Working Group on Bribery.

OECD (2019e), *OECD Environmental Performance Reviews: Australia 2019*, OECD Environmental Performance Reviews, OECD Publishing, Paris.

OECD (2018a), *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy*, OECD Publishing, Paris.

OECD (2018b), *OECD Economic Surveys: Australia 2018*, OECD Publishing, Paris.

OECD (2018c), *Taxation of Household Savings*, OECD Tax Policy Studies, No. 25, OECD Publishing, Paris.

OECD (2018d), *Rethinking Urban Sprawl: Moving Towards Sustainable Cities*, OECD Publishing, Paris.

OECD (2017a), *OECD Economic Surveys: Australia 2017*, OECD Publishing, Paris.

OECD (2017b), *The Governance of Land Use in OECD Countries: Policy Analysis and Recommendations*, OECD Publishing, Paris.

OECD (2015), *The Future of Productivity*, OECD Publishing, Paris.

OECD (2014), *OECD Economic Surveys: Australia 2014*, OECD Publishing, Paris.

Oliveira Hashiguchi, T. (2020), "Bringing health care to the patient: An overview of the use of telemedicine in OECD countries", *OECD Health Working Papers*, No. 116, OECD Publishing, Paris,

OTN (2018), *OTN Annual Report 2017/18*, Ontario Telemedicine Network.

Parliamentary Budget Office (2020a), *2020-21 Medium-term fiscal projections*, Report No. 04/2020.

Parliamentary Budget Office (2020b), *Structural Trends in GST*, Report No. 2/2020.

Parliamentary Budget Office (2020c), *Increase JobSeeker Payment*, Policy Costing, 17 March.

Parliamentary Budget Office (2019), *Australia's Ageing Population: understanding the fiscal impacts over the next decade*, Report No. 02/2019.

Phillips, B. (2021), "There are lots of poverty lines and JobSeeker doesn't keep people above any of them", *The Conversation*, 30 March 2021.

Preston, B. (2020), "The case for reform of the RBA's policy and communications strategy", *Centre for Applied Macroeconomic Analysis*, Australian National University.

Productivity Commission (2021), *Plan to identify planning and zoning reforms*, Information Paper, March 2021, Commonwealth of Australia.

Productivity Commission (2020a), *Indigenous Evaluation Strategy*, October 2020, Commonwealth of Australia.

Productivity Commission (2020b), *Recent productivity trends*, PC Productivity Insights, February 2020, Commonwealth of Australia.

Productivity Commission (2018), "Rising inequality? A stocktake of the evidence", *Productivity Commission Research Paper*, August 2018.

Productivity Commission (2017a), *Integrated care*, Shifting the Dial - Supporting Paper No. 5, August 2017.

Productivity Commission (2017b), *Local government*, Shifting the Dial - Supporting Paper No. 16, August 2017.

Productivity Commission (2012), *Performance Benchmarking of Australian Business Regulation: The Role of Local Government as Regulator*, Research Report, Volume 1, July 2012.

PwC Australia (2020a), *Economic benefits of the RACGP's Vision for general practice and a sustainable healthcare system,* Commissioned and supported by The Royal Australian College of General Practitioners, July 2020.

PwC Australia (2020b), "How GST reform can help reboot prosperity for Australia", Where next for Australia's tax system?, July 2020.

PwC Australia (2020c), Economic Impact Assessment *of automatic mutual recognition of occupational licensing - Final report*, prepared for Department of the Prime Minister and Cabinet, December 2020.

Quinn, M. (2019), *Keeping pace with technological change: the role of capabilities and dynamism*, OECD Global Forum on Productivity, Speech.

RBA (2021), *Statement on Monetary Policy*, May 2021.

Sedláček, P. and V. Sterk (2020), "Startups and employment following the COVID-19 pandemic: a calculator", VOXeu, Centre for Economic Policy Research.

Sims, R. (2021a), "Protecting and promoting competition in Australia", Competition and Consumer Workshop 2021, *Law Council of Australia*, Speech, 27 August, 2021.

Sims, R. (2021b), "Tackling market power in the COVID-19 era", *National Press Club*, Speech, 21 October, 2021.

Standing Committee on Economics (2021), *Reserve Bank of Australia - Annual Report 2019*, 5 February,

Hansard.

Transparency International Australia (2021), *Submission To The Attorney-General's Department Consultation process to establish a Commonwealth Integrity Commission*, 12 February 2021.

Transparency International Australia and Griffith University (2020), *Australia's National Integrity System: The Blueprint for Action*, National Integrity Assessment, November 2020.

Transparency International (2016), "Anti-corruption agencies in Australia", *Position Paper*, No. 3, January 2016.

Tulip, P. (2021), "The Reserve Bank needs accountability that only external scrutiny can provide", *Pearls and Irritations*, 11 February.

Varela, P. et. al. (2020), "The taxation of savings in Australia: Theory, current practice and future policy directions", *Policy Report*, No. 01-2020, Tax and Transfer Policy Institute.

van Eeden, L.M. et. al. (2020), "Impacts of the unprecedented 2019-20 bushfires on Australian animals", Report prepared for WWF-Australia, Ultimo NSW.

von Rueden, C. and I. Bambalaite (2020), "Measuring occupational entry regulations: a new OECD approach", *OECD Economics Department Working Paper*, No. 1606.

von Trapp, L. and Nicol, S. (2018) "Measuring IFI independence: A first pass using the OECD IFI database", In R. Beetsma, and X. Debrun (eds.), *Independent fiscal councils: Watchdogs or lapdogs?* VoxEU and CEPR.

von Trapp, L. and Nicol, S. (2017) *Designing effective independent fiscal institutions*. OECD Publishing, Paris.

Wild, D. (2018), "The case for abolishing occupational licensing", Institute of Public Affairs, May 2018.

Wood, D. and K. Griffiths (2021), *Submission on the Commonwealth Integrity Commission draft legislation*, Grattan Institute, February 2021.

Wood, D. et. al. (2020), *Cheaper childcare: a practical plan to boost female workforce participation*, Grattan Institute, August 2020.

Wood, D. et. al. (2019), *Generation gap: ensuring a fair go for younger Australians*, Grattan Institute.

Wood, T. and G. Dundas (2020), *Start with steel: a practical plan to support carbon workers and cut emissions*, Grattan Insitute, May 2020.

Wood, T. (2020), *What is the electricity transmission system, and why does it need fixing?*, The Conversation, 16 October 2020.

Wood, T. and D. Blowers (2016), *Climate Phoenix: a sustainable Australian climate policy*, Grattan Institute, April 2016.

Yashadhana, A. et. al. (2020), "Indigenous Australians at increased risk of COVID-19 due to existing health and socioeconomic inequities", *The Lancet Regional Health – Western Pacific*, No. 1/202

2 The role of the financial sector in supporting a sustainable and inclusive recovery

Australia's financial sector entered the COVID-19 crisis in a strong position, enabling it to play a key role in cushioning the pandemic's impact. Once the economy reopens, policymakers will turn their focus to securing a robust, sustainable and inclusive recovery. However, low interest rates are boosting house prices and demand for credit in a banking sector that is already highly exposed to housing and highly indebted households. At the same time, many young and innovative firms – which are the drivers of job creation and productivity growth - struggle to access finance. And financial frictions impede the alignment of financial flows with environmental sustainability. Addressing these obstacles, through regulatory change, developing alternatives to bank finance and facilitating technological transformation, would raise productivity and set the recovery on a more sustainable path. Financial inclusion and financial literacy are comparatively high and financial education is entrenched at schools. Further efforts are still needed to address persistent gaps in outcomes for disadvantaged groups, accompanied by stronger consumer protections to ensure that the recovery is inclusive.

Australia's well-developed financial sector is a vital part of the economy. Its direct contribution is amongst the highest in the OECD, at around 9% of gross value added. The global financial crisis highlighted the potential for an insufficiently supervised financial sector to harm growth and put the economy under stress. Credit over-expansion can weigh on growth and increase inequality (Cournède et al., 2015). However, the COVID-19 crisis has demonstrated that a well-capitalised and well-regulated financial sector can cushion, rather than amplify, economic shocks, both in Australia and elsewhere (RBA, 2020a). And, in normal times, the financial sector contributes to productivity growth by allocating financial resources across the economy efficiently and raises wellbeing by facilitating transactions and saving.

Against this backdrop – and the fact that the COVID-19 pandemic brought the first recession Australia has seen in 28 years – this chapter explores ways that various parts of the financial sector can contribute to a stronger, more sustainable and inclusive recovery. After highlighting key features of Australia's financial sector, it considers the response to the pandemic and the implications for financial stability. It then examines three ways that policymakers can ensure the financial sector contributes to the recovery: (i) by enhancing mechanisms that channel funds to productive firms, particularly young and innovative firms; (ii) by addressing financial frictions impeding the transition to a low-emissions economy; and (iii) by equipping individuals with sufficient financial knowledge and regulatory protections. The main focus is on the banking sector, given its centrality in the financial system, and investors, including pension funds. Other ways that the financial system could contribute to the recovery that are not evaluated here include through deeper debt and derivatives markets, better-functioning insurance markets and a more efficient pension system. Overall, this chapter highlights that:

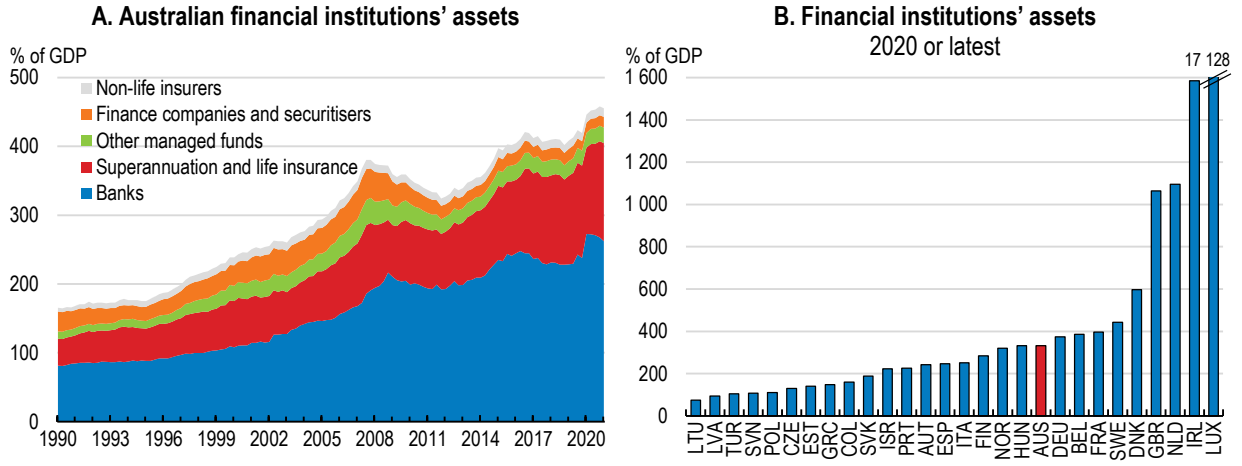
- The strength of the Australian financial system allowed it to support the economy during the crisis. While near-term risks to financial stability may be manageable, pre-existing medium-term risks stemming from high housing debt remain.
- Technological developments and regulatory change could lower barriers to credit for young and innovative firms by improving competition in lending and allowing better assessment of credit risk.
- Disclosure of climate-related financial risks has progressed substantially in recent years, but a lack of information continues to hamper the efficient allocation of funds.
- Levels of financial literacy and inclusion are high overall but greater efforts to focus on disadvantaged groups and closing gaps in consumer protections would increase inclusion.

Key trends in Australia's financial sector

Australia's financial system, as measured by its assets, has grown much faster than the overall economy over recent decades. By 2020, assets held by financial institutions were approaching 500% of GDP on an unconsolidated basis, up from 200% in the 1990s (Figure 2.1, Panel A). On a consolidated basis, and excluding central bank assets, financial institutions' assets totalled 333% of GDP in 2020, above the median of around 250% among OECD countries with consolidated data (Figure 2.1, Panel B). Following financial deregulation and the establishment of a compulsory defined-contribution pension system (known as "superannuation") in the 1990s, banks and pension funds have come to dominate the sector (Figure 2.1, Panel A; Box 2.1).

Australia's financial institutions devote a larger share of their balance sheet to household debt than those in other OECD countries. Businesses are, in aggregate, less leveraged than other countries and their debt-to-GDP ratio is below the OECD median, partly reflecting the system of "dividend imputation" (whereby a domestic investor ultimately only pays tax on distributed corporate profits at their personal income tax rate, removing double taxation) which provides neutral tax treatment of debt and equity investment.

Figure 2.1. Australia's financial system has grown dramatically in recent decades



Note: In panel A data are not consolidated and there is a break in July 2019 due to changes in reporting. Panel B shows assets on a consolidated basis for countries with available data and excludes central bank assets, with the exception of the United Kingdom and the Slovak Republic.
Source: ABS; OECD, *National Accounts database*; OECD *Economic Outlook* Database; and RBA.

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Box 2.1. Australia's superannuation industry

Australia's mandatory retirement saving system – known as superannuation – was created in 1992 to increase retirement savings, thereby reducing reliance on the old-age pension and associated fiscal pressures. At inception, the compulsory contribution rate was 3% of the employees' income (4% for large employers). This rate has increased to 10% currently and is legislated to gradually rise to 12% by July 2025. There are tax incentives for employees to make additional voluntary contributions.

Initially, employers selected the fund where contributions were paid. In 1999 "self-managed superannuation funds" were created to allow small businesses and self-employed workers to manage their superannuation. Since 2005 employees have been able to choose the fund where their contribution is paid. "Industry funds", which are run on a not-for-profit basis, are the largest type of fund with 28% of assets under management and 46% of accounts (Table 2.1). A further quarter of assets are held by self-managed superannuation funds", whereby an individual manages their own funds with up to three family or friends. Retail funds, run by financial institutions on a for-profit basis, account for around one-fifth of assets.

Table 2.1. Most superannuation assets are managed by industry funds

Type of fund	Total assets (AUD billion)	Number of funds	Number of accounts (million)
Industry	927	33	11.3
Self-managed funds	822	599 593	1.1
Retail	689	93	8.1
Public sector	584	16	3.5
Corporate	61	14	0.3
Total	3 303		24.4

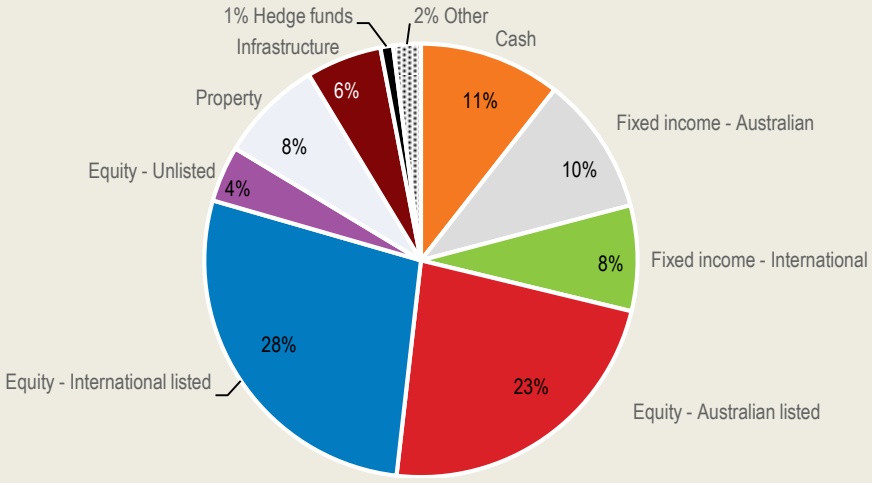
Note: Data are for June 2021 except number of accounts which is at June 2020. The value of assets does not sum to the total.
Source: APRA; Association of Superannuation Funds of Australia (2021), *Superannuation Statistics: March 2021*

The system of superannuation has contributed substantially to Australia's national saving, with assets of AUD3 trillion – around 160% of GDP – by June 2021. In 2019, Australia had the fourth-largest pool of pension fund assets in the OECD in absolute terms. The value of superannuation assets is expected to continue outpacing GDP growth over the next two decades given the rising contribution rate to 2025 and investment returns on existing balances (Deloitte, 2019).

Superannuation funds have diversified portfolios overall (Figure 2.2). Prudentially regulated superannuation funds have invested about half of all assets in equities. Self-managed funds have lower equity holdings on average (30% of total) and are more heavily invested in property (16% of assets). Together these funds held around 30% of the Australian Stock Exchange at end 2020.

Figure 2.2. Around half of superannuation funds' assets are invested in equities

At June 2021



Note: Data are for APRA-regulated funds with more than four members which accounted for 69% of superannuation fund assets.
Source: APRA (2021), *Quarterly Superannuation Performance Statistics.*
Box source: ASFA; APRA; ATO.

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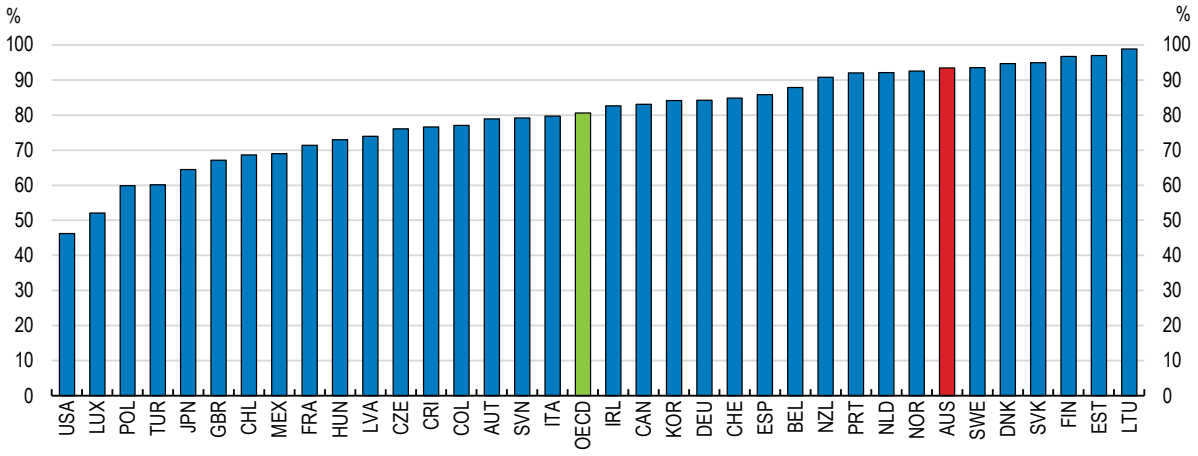
Banks account for over half of financial system assets. More than many other OECD countries, the level of, and growth in, bank assets reflects expanding household debt, which grew from around 50% of GDP in the mid-1990s to 120% of GDP in 2020. These assets are funded predominantly by households and foreign investors (30% each). Although banks reduced their reliance on foreign wholesale funding after the financial crisis, it is still considered a source of vulnerability (IMF, 2019). Another feature of Australia's banking landscape is the dominance of four major banks, which hold 80% of banking sector loans. Consequently, the sector is more concentrated than in the average OECD country (Figure 2.3). A "four pillars policy" prevents mergers between the four largest banks, aiming to preserve competition.

Figure 2.3. The banking system is relatively concentrated

Five-largest banks' share of assets, 2017



Source: World Bank Global Financial Development database.

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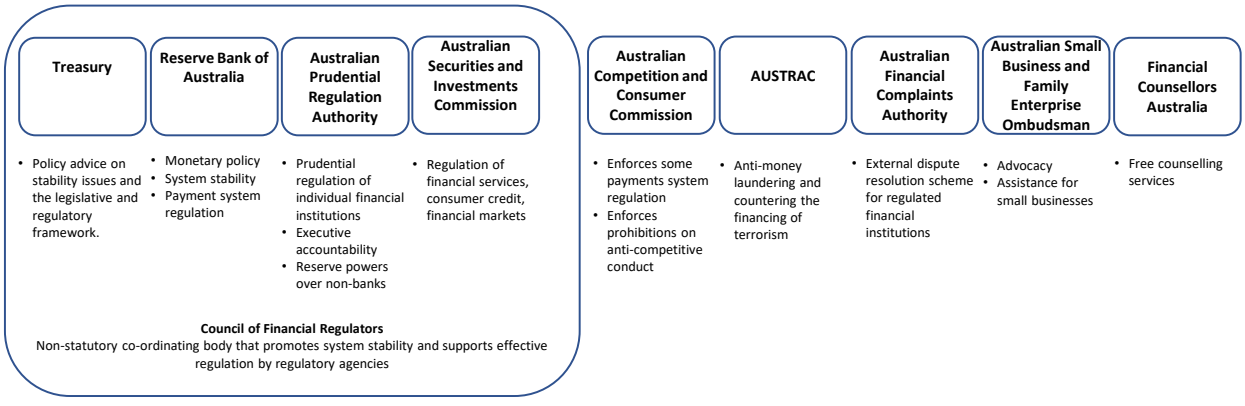
In recent years financial institutions, especially banks, have faced increased regulatory scrutiny. Financial institutions – including banks, superannuation funds, other managed funds, infrastructure operators and insurers - are regulated under the "twin peaks" model, with the Australian Prudential Regulation Authority (APRA) as the prudential supervisor and the Australian Securities and Investments Commission (ASIC) responsible for market conduct and consumer protection. Together with the Reserve Bank of Australia (RBA) - tasked with maintaining system stability – and the Australian Treasury, these regulators form the Council of Financial Regulators (Figure 2.4). Since a major independent inquiry into the financial system in 2013 and 2014 – the *Financial System Inquiry* – regulators have been increasingly active conducting inquiries and reviews into competition and conduct within the financial sector (Table 2.2). These culminated in a royal commission into misconduct in the sector, including banking, insurance, financial advice and superannuation (Annex 2.A). A rate-rigging scandal and breaches of anti-money laundering laws led to reputational damage and fines exceeding AUD2 billion (EUR1.2 billion). These specific challenges came as the financial sector grappled with structural challenges including: the prospect of a prolonged period of low interest rates; the digital transformation of financial services with the potential for disintermediation and competition from fintech (financial technology) entrants (OECD, 2020a); and climate change-related risks and opportunities.

Figure 2.4. Institutions in the Australian financial sector and their responsibilities



Source: Government and agency websites

Table 2.2. Timeline of inquiries into the financial services industry

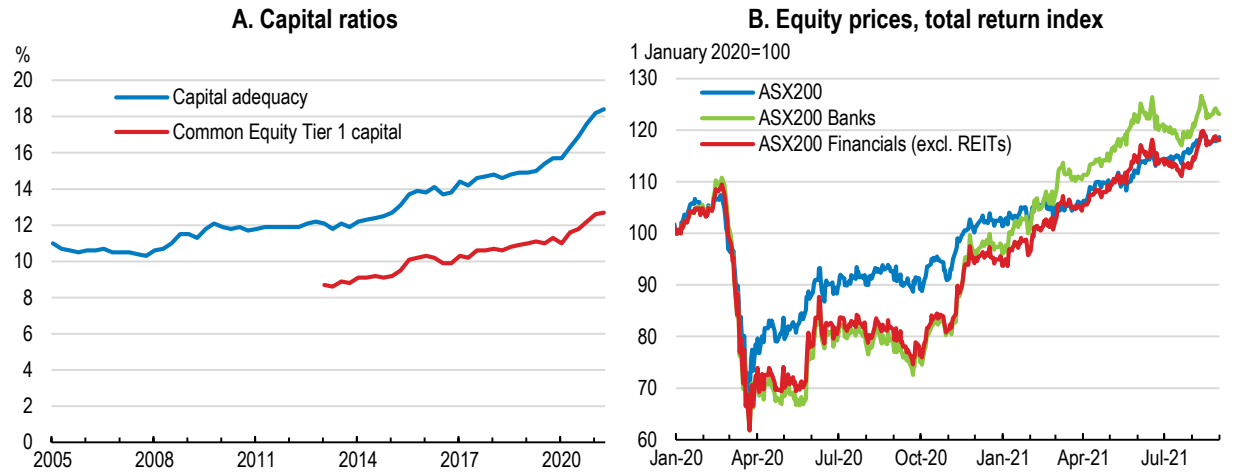
Date of final report	Inquiry or review
December 2014	Financial System Inquiry
September 2016	ASIC Review of interest-only home loans: mortgage brokers' inquiries into consumers' requirements and objectives
April 2017	Retail Banking Remuneration Review (independent review commissioned by the Australian Bankers' Association)
December 2017	ASIC Enforcement Review (included corporate and financial sector misconduct)
May 2018	APRA Prudential Inquiry into the Commonwealth Bank of Australia
August 2018	Productivity Commission Competition in the Australian Financial System Inquiry
December 2018	ACCC Residential Mortgage Products inquiry
February 2019	Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry
February 2019	Senate inquiry into credit and financial products targeted at Australians at risk of financial hardship
July 2019	APRA Capability Review
December 2020	ACCC Home Loans Price Inquiry
Ongoing	Standing Committee on Economics Review of Australia's Four Major Banks and other Financial Institutions
Ongoing	Senate Select Committee on Financial Technology and Regulatory Technology

The financial sector has played a critical role in the COVID-19 crisis response

From the outset of the pandemic, the financial sector has played an active role. One of the earliest announcements was by the banking sector, offering loan repayment deferrals to households and small and medium-sized businesses (SMEs). This was particularly important given households' high level of mortgage debt. In tandem, APRA provided regulatory relief by allowing banks (including credit unions and building societies) to exclude such deferrals from arrears for reporting purposes and by relaxing the supplementary capital requirements in force from January 2020 (known as "unquestionably strong" benchmarks, equivalent to around 2 percentage points of Common Equity Tier 1 capital ratios for major banks) (RBA, 2020a). Overall, APRA's guidance created a capital buffer equivalent to over 6 percentage points, one of the highest across comparable advanced economies (IMF, 2020a). A raft of government policies ensured there was plenty of liquidity for firms and households including by supporting the flow of credit (Table 2.3). This response was accompanied by looser monetary policy, a wage subsidy equivalent to 4½% of GDP, a temporary doubling of unemployment benefits and a temporary loosening of insolvency regulations. Together these cushioned the impact of the pandemic.

Key to this response was the strengthening of the financial sector ahead of the crisis. Regulatory changes introduced since the global financial crisis and 2014 *Financial System Inquiry* had raised capital and liquidity ratios. The capital adequacy ratio for Australian banks was around 18% in June 2021 compared with 10% ahead of the global financial crisis (where "banks" is used broadly to include credit unions and building societies; Figure 2.5, Panel A). On an internationally comparable (less conservative) basis, the major banks' Tier 1 capital ratios are estimated to be within the top quartile of large banks internationally (RBA, 2021, 2020b). Stress tests of banks by APRA and the RBA also suggest that banks could withstand an adverse scenario; the APRA tests included a 30% fall in house prices and unemployment rising to 13% (Kearns, 2020; APRA 2020a). Financial markets perceive the sector to be in a good position with banks' equity prices recovering by late 2020 and subsequently outperforming the broader index (Figure 2.5, Panel B).

Figure 2.5. Stronger capital ratios supported banks' resilience



Note: In Panel A, data are for all authorised deposit-taking institutions as they are all regulated as banks. In Panel B ASX200 Financials excludes Real Estate Investment Trusts.
Source: APRA; Refinitiv.

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Table 2.3. Overview of policies in response to COVID-19 relying on the financial sector

Measure	Description	Timeframe	Take-up
Policies instigated by the financial sector			
Loan repayment holidays	Banks deferred loan repayments for households and SMEs affected by the crisis. Borrowers could lengthen the loan tenure or restructure the repayments. APRA also provided temporary concessional capital treatment for deferred bank loans.	From late March 2020 for six months. Extended to March 2021 at lenders' discretion. Re-started in July 2021 for three months.	Peaked at 10% of loans and AUD266 billion in May 2020
Temporary emergency capital raising measures for listed companies	The ASX raised placement capacity from 15% to 25%. It also waived the one-for-one cap on non-renounceable entitlement offers.	From 31 March - 31 July 2020. Extended to 20 November 2020.	
Co-ordinated support for insurance policyholders	General insurers received permission from the competition authority to co-ordinate responses including premium payment deferrals and coverage of unoccupied premises. Life insurers received permission to not consider potential exposure to COVID-19 for frontline workers.		
Policies to support the flow of credit			
RBA Term Funding Facility	Initially banks could borrow up to 3% of total credit outstanding for three years at 0.25%. In the supplemental phase a further allowance was made equivalent to 2% of credit outstanding was available and from November 2020 banks could borrow at 0.1%. If banks lent to businesses, they could access additional funding, with a higher multiple for SME lending.	Initial phase: 30 March - 30 September 2020 Extended to June 2021.	A total of AUD213 billion was available, with AUD188 billion drawn down at end June 2021.
Structured Finance Support Fund	The Australian Office of Financial Management is making targeted investments in structured finance markets used by smaller lenders that provide consumer and business finance, investing in rated term securitisations and in rated and unrated securitisation warehouses.	From 25 March 2020	As at 30 June 2021, AUD3.8 billion in investments had been committed.

SME Guarantee Scheme	Phase 1: Guarantee of up to 50% for unsecured working capital loans for three years and up to AUD250 000. Phase 2: Loans can be secured, up to AUD1 million and up to 5 years. The interest rate was capped at 10%. SME Recovery Loan Scheme:borrow up to AUD5 million for up to 10 years, loan guarantee of 80%. Initially for SMEs that had received JobKeeper in Q1 2021 or had been adversely affected by the floods in New South Wales in March 2021. Broader eligibility was announced in August 2021.	First phase: 1 April - 30 September 2020 Second phase: 1 October 2020 - 30 June 2021 Third phase (also known as the SME Recovery Loan Scheme): 1 April 2021 – 31 December 2021	As at 30 April 2021, around 54,000 loans worth approximately AUD4.7 billion had been made under the two phases of the SME Guarantee Scheme
Show Starter Loans Scheme	100% guarantee on loans for eligible arts and entertainment businesses for up to half of the cost of a new production or event. Administered under the SME Guarantee Scheme	December 2020 - 30 June 2021	As at 30 April 2021, four loans worth AUD7.75 million had been written under the Scheme.
Other policies to support household and business finances through the financial sector			
Early access to superannuation	Access to AUD10 000 before 1 July 2020 and another AUD10 000 from 1 July to 31 December 2020.	20 April-31 December 2020	4.9 million applications totalling AUD37.3 billion.
Insolvency law	Increased protection for Directors from risks of personal liability for insolvent trading. Minimum amount of debt that can trigger insolvency actions by creditors raised to AUD20 000 (from AUD5 000 for individuals and AUD2 000 for corporate insolvency). Individuals have 6 months to respond to a Bankruptcy Notice (from 21 days). Companies have 6 months to respond to notices by creditors (from 21 days).	March 2020-September 2020. Extended to 31 December 2020.	
Other policies announced by APRA and ASIC			
Bank capital requirements relaxed	APRA relaxed "unquestionably strong" capital requirement of common equity tier 1 ratio (10.5% for major banks) and advised them to use management capital buffers if needed.	19 March 2020 until at least December 2021	
Regulatory exemptions for lenders	All SME lending exempted from responsible lending obligations (usually loans must be wholly or predominantly for business purposes to be exempt).	20 March 2020-present	
Asset revaluation deferred	Annual revaluation of commercial properties used as collateral was deferred.	24 July 2020 - 31 March 2021	
Dividends reduced	Banks were to retain at least half their earnings and make use of dividend reinvestment plans and other capital management techniques.	19 March – 31 December 2020	
Regulatory relief for "low doc" capital raising	ASIC expanded access to "low doc" capital raising for companies that were suspended for 10 days (from 5 days) in the past 12 months.	31 March – 31 December 2020	

Note: This is not an exhaustive list but indicates the range of policies and announcements.
Source: Lewis and Liu (2020), "The COVID-19 outbreak and access to small business finance", *RBA Bulletin,* September; OECD (2020), *COVID-19 Government Financing Support Programmes for Businesses*, www.oecd.org/finance/COVID-19-Government-Financing-Support-Programmes-for-Businesses.pdf; *OECD* (2020), *Insurance Sector Responses to COVID-19 by Governments, Supervisors and* Industry, www.oecd.org/finance/insurance/Insurance-sector-responses-to-COVID-19-by-governments-supervisors-and-industry.pdf; RBA (2020a), *Financial Stability Review*, October; Government websites; Australian authorities.

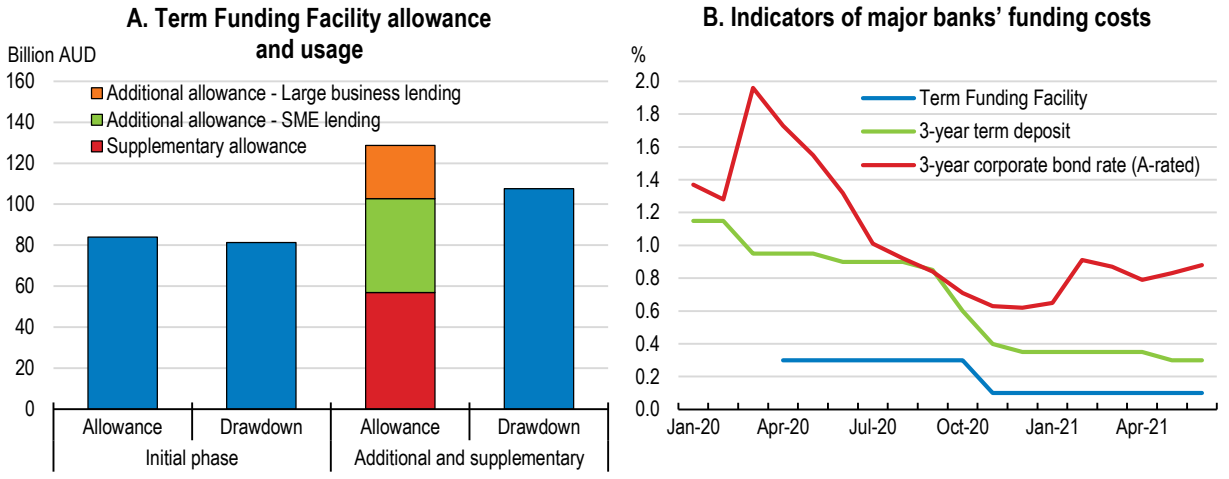
Shoring up liquidity

Several schemes were put in place to ensure that credit continued to flow to businesses. These schemes were targeted at different parts of the lending market:

- **A Term Funding Facility at the Reserve Bank of Australia** – With funding of around AUD200 billion (approximately 10% of GDP), the facility aimed to provide banks with ample three-year funding. When the scheme commenced, entitlements were based on credit outstanding in the three months to January 2020. Additional entitlements were also provided based on new lending to businesses since around the start of the scheme. SME lending was incentivised by offering an additional five dollars for each dollar of new lending; lending for large business was matched.
- **A Structured Finance Support Fund –** With funding of AUD15 billion designed to support banks and non-bank lenders that could not access the Term Funding Facility. The fund was used by the Australian Office of Financial Management to invest in structured finance markets. A forbearance special purpose vehicle was established to mitigate the impacts on securitisation vehicles of forbearance arrangements arising from COVID-19 hardship. To broaden access for smaller lenders without existing securitisation programmes, the Australian Office of Financial Management also invested in private warehousing facilities.
- **A loan guarantee for SMEs** – With a government guarantee of 50% on up to AUD40 billion in new lending to SMEs by participating lenders. The design of the scheme evolved from unsecured loans aimed at providing working capital, to larger loans for five years for investment, to a larger guarantee (80%) with a longer and more flexible repayment period for qualifying firms that were particularly hard-hit by the pandemic (Table 2.3).

Overall, these programmes appear to have helped maintain liquidity and support access to finance, although evaluation is hampered by limited publicly available data. The Term Funding Facility allowed banks to avoid fundraising in volatile bond markets (Figure 2.6). It supported some new business lending, indicated by the additional allowances, but little SME lending as loan demand was reportedly soft. It boosted housing lending activity, including refinancing. Fixed mortgage rates fell by more than variable rates and fixed-rate loans rose to 25% of outstanding housing loans (from 20%) (Garner and Suthakar, 2021; Alston et al., 2020). However, because the initial and supplementary allowances under the facility were linked to credit outstanding, it could have disadvantaged new and growing banks. And by requiring high-quality collateral (for repurchase agreements with the RBA) the scheme may have favoured banks with self-securitised assets to use as collateral. Take-up of the loan guarantee for SMEs was lower than anticipated, even with its relatively small size, equivalent to 1% of GDP compared to 17% in the United Kingdom or 34% in Italy (IMF, 2020a). This reflected a combination of tighter lending standards (Kent, 2021), weak loan demand (in part due to adequate support through other government schemes) and financial institutions using their existing products and services to provide assistance. Overall, the three schemes have contained borrowing rates (*ibid.*). As well as evaluating the efficacy of each measure, policymakers should assess the subsequent effect of the guarantee on firm-level investment given evidence that high debt burdens can weigh on investment (Demmou et al, 2021).

Figure 2.6. The Term Funding Facility provided a large amount of low-cost funding for banks

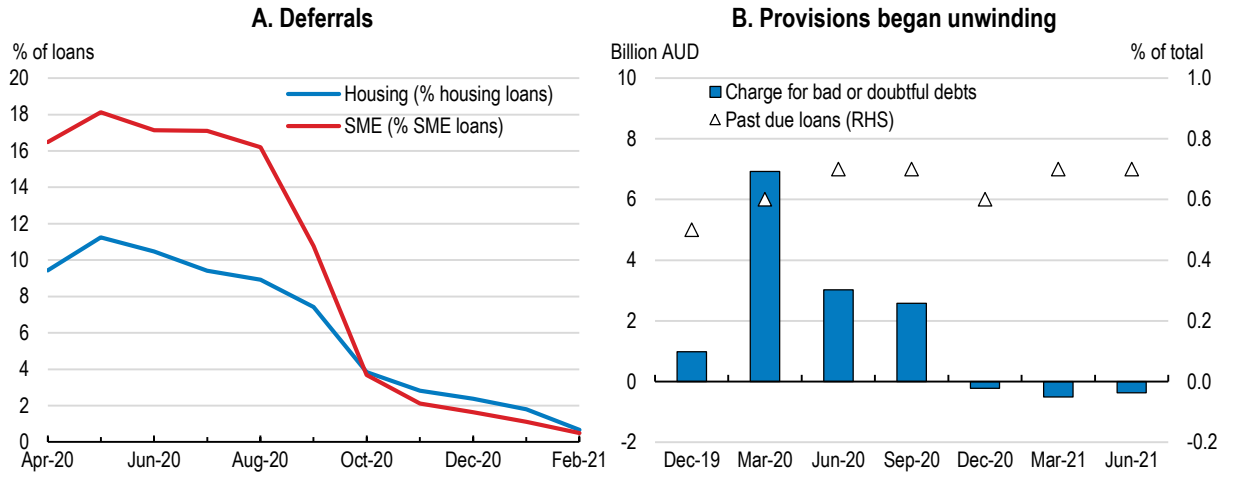


Note: Data in Panel A are at 30 June 2021. The additional allowance for SME lending was equivalent to five times additional SME lending while the allowance for large business lending matched additional lending. Panel B shows yields on 3-year non-financial corporate bonds rated A by S&P; the four-largest banks are rated A-.
Source: RBA.

StatLink https://stat.link/fclbak

Two further measures provided far-reaching liquidity support for households: loan deferrals and early access to superannuation savings. The loan deferrals recognised the damaging spillovers if widespread defaults due to COVID-related measures led to foreclosures and firesales. At the peak, in May 2020, loan deferrals represented 11% of outstanding housing loans and 18% of SME loans. With debt-servicing accounting for 15% of household incomes before the pandemic, this relief provided a large buffer. Loan relief was especially useful for firms: prior to the pandemic around half only had enough cash for one month's worth of expenses (RBA, 2020a). The deferrals unwound as the economy bounced back (Figure 2.7, Panel A). In late 2020 and early 2021, banks reduced their provisions in anticipation of lower-than-expected losses (Figure 2.7, Panel B). The Australian Banking Association signalled that banks will work with borrowers who cannot return to full repayments to restructure loans, accommodate partial payments or assist them through financial hardship processes. Following the re-imposition of COVID-19 restrictions in July 2021, the sector again offered loan deferrals for affected customers and APRA has again offered regulatory relief.

Figure 2.7. Most deferrals from the initial phase unwound at an orderly pace



Note: In Panel A data prior to June are from the largest 20 authorised deposit-taking institutions by loan size. Data from June to September do not include foreign branches. Data from October from all authorised deposit-taking institutions with over AUD20 million of loans subject to repayment deferral excluding foreign branches. Past due items are items that are 90 days or more in arrears but are not classified as impaired assets.
Source: APRA.

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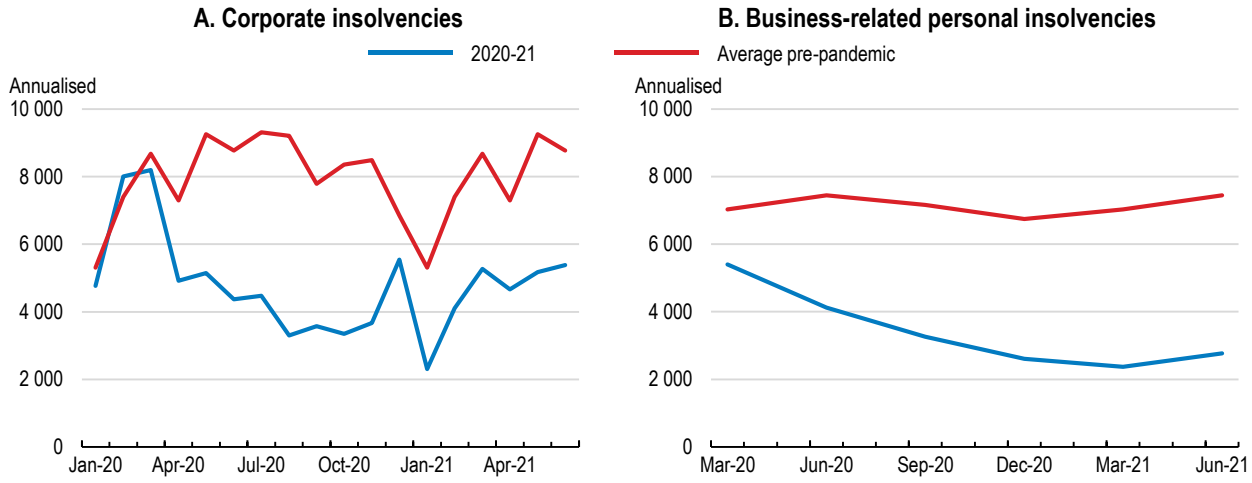
In March 2020 the government announced that affected individuals could supplement their income by withdrawing up to AUD20 000 (EUR12 000) (in two phases) from their superannuation savings if they were financially affected by the pandemic. Between April and January AUD36.4 billion was paid to over 3 million individuals, equivalent to 3.5% of household gross disposable income in that period. This represented 2% of total funds under management at end 2019 but over 5% for a large number of funds (RBA, 2021). During the first two weeks alone, AUD6 billion was withdrawn, which put pressure on funds but was handled smoothly overall (APRA, 2020b). There are also concerns that many individuals did not sufficiently evaluate their decision: in one survey around half of applicants underestimated or did not estimate the impact on retirement savings (Bateman et al, 2020). This was despite the availability of online tools such as the *Super Withdrawal Estimator* on the ASIC Moneysmart website. Although this was a source of liquidity during exceptional circumstances, further withdrawals should continue to be limited to cases of severe hardship as recommended by the OECD and International Organisation of Pension Supervisors.

Flattening the insolvencies curve

Notwithstanding the strength of the recovery up to mid-2021, insolvencies are expected to rise. Whether they rise beyond pre-pandemic levels remains highly uncertain. During 2020 there were over 6 000 fewer corporate and business-related personal insolvencies than “usual” thanks to temporary changes to insolvency laws and measures that boosted liquidity and maintained capital market functioning (Table 2.3; Figure 2.8). By contrast, the observed decline in revenues implies that the number of business insolvencies in the first half of 2020 would have been almost 1.3 times what was observed (RBA, 2020a). Many viable businesses and individuals were successfully prevented from being forced into insolvency, reducing the financial, economic and social costs of the crisis. Nevertheless, some businesses will need to close while others pivot to adjust to a post-COVID economy. Even if a wave of insolvencies is avoided, a return to more normal levels of insolvencies is almost inevitable. OECD research shows that efficient insolvency regimes facilitate exit of unviable firms or restructuring of viable firms facing temporary distress at an earlier stage, raising productivity (Andrews et al., 2017). Higher recovery rates should improve access to finance.

Figure 2.8. There have been far fewer business insolvencies than usual



Note: The pre-pandemic average is that for each respective month during 2017-19. Data in Panel A are for the first instance of an insolvency appointment to a company.
Source: AFSA; ASIC.

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Recognising that small businesses have been most affected by the pandemic and comprise most insolvencies, the government has created a special restructuring process and simplified liquidation process for incorporated SMEs (Box 2.2). The reform addresses the disproportionate cost faced by SMEs under the previous one-size-fits-all approach and brings Australia more in line with other countries (Figure 2.9). Because the owner retains control, the process encourages earlier action, which should preserve economic value and reduce the number of firms being liquidated (OECD, 2020b). It should also reduce personal insolvencies associated with business owners using personal assets as collateral or personal guarantees. Simplified liquidation will facilitate higher recovery rates. The changes also allow more processes to be performed digitally and to hold meetings virtually. With three-quarters of firms entering administration in 2018-19 having liabilities below the AUD1 million (EUR620 000) threshold for this regime, the reform could reduce liquidations considerably (Australian Government, 2020). The reforms should increase access to finance if recovery rates improve as hoped.

Box 2.2. Overview of changes to Australia's insolvency laws

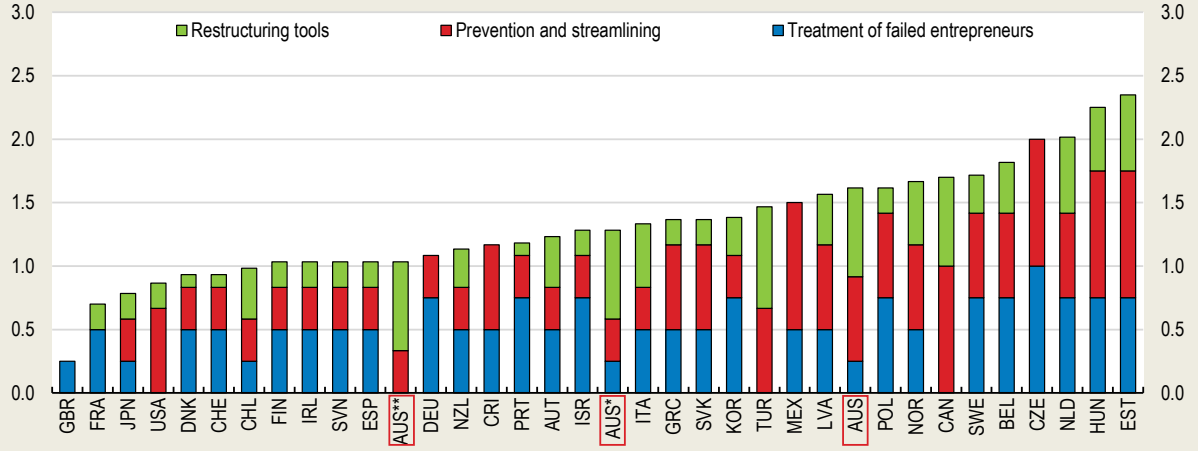
At the beginning of the pandemic, temporary changes to corporate and personal insolvency laws raised various thresholds to prevent otherwise viable firms being forced into insolvency and individuals being forced into bankruptcy due to circumstances beyond their control (Table 2.3). These expired on 31 December 2020 and were immediately followed by permanent changes to make the regime more debtor-friendly and simplify the insolvency process. The minimum amount of debt that can trigger personal bankruptcy was raised to AUD10 000 (from AUD5 000; EUR6 200 from EUR3 100). As part of the 2021 Budget, the Government announced an increase in the equivalent minimum threshold for a company from AUD2 000 to AUD4 000. Eligible incorporated small businesses (with less than AUD1 million in liabilities) now have access to two new processes:

- A formal debt restructuring process with a debtor-in-possession model. A "small business restructuring practitioner" will support the development of a restructuring plan, certify it and manage disbursements.
- A simplified liquidation pathway with reduced investigative and reporting requirements for liquidators. This aims to reduce liquidation costs, preserving more of the company's value.

These changes enhance the prevention and streamlining toolkit thereby rationalising the insolvency framework, which was previously more restrictive than most OECD countries (Figure 2.9).

To increase the supply of practitioners the government is waiving registration fees for registered liquidators for around two years, adjusting some registration requirements for insolvency practitioners, and creating a separate sub-classification of practitioner which can only perform small business restructuring.

Figure 2.9. Australia's insolvency laws have become more friendly to entrepreneurship



Note: A lower value indicates a regime that is less punishing for entrepreneurs, has more measures for prevention and with fewer barriers to restructuring. Data are for 2016 unless otherwise indicated. A number of countries introduced reforms during the crisis. AUS* denotes Australia's score at the beginning of 2021. AUS** allows for proposed changes to personal bankruptcy laws.
Source: OECD

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The government is also clarifying the treatment of trusts with corporate trustees under Australia's insolvency law and consulting on further reforms, including:

- Reducing the default period of personal bankruptcy from three years to one year, along with some other time periods. It would be accompanied by extended income contribution obligations for discharged bankrupts.
- Ways of increasing the uptake of debt agreements and personal insolvency agreements, which are alternatives to personal bankruptcy.

Schemes of arrangement (a procedure allowing a company to reconstruct its capital, assets or liabilities with the requisite approval of affected parties) processes to better support businesses, including by introducing a moratorium on creditor enforcement while schemes are being negotiated

Source: Australian Government (2020), "Insolvency reforms to support small business", Factsheet

The government can enhance the effectiveness of the new processes in several ways. First, it should closely monitor the number of registered practitioners; the number of registered liquidators (most of the insolvency practitioners) declined steadily during the 2000s to around 650 currently. The reforms would likely increase demand for these services. The government should react quickly if insolvencies rise sharply and bottlenecks emerge (Box 2.2). Second, it should address problems with the Personal Property Securities Register (a register of secured interests in personal property offered as collateral) raised by the small business ombudsman and earlier reviews to ensure certainty over security interests, discussed further below (ASBFEO, 2021; PMC, 2020; Whittaker, 2015). Third, pre-emptive action should be encouraged by promoting existing services for businesses and individuals such as early warning tools, the

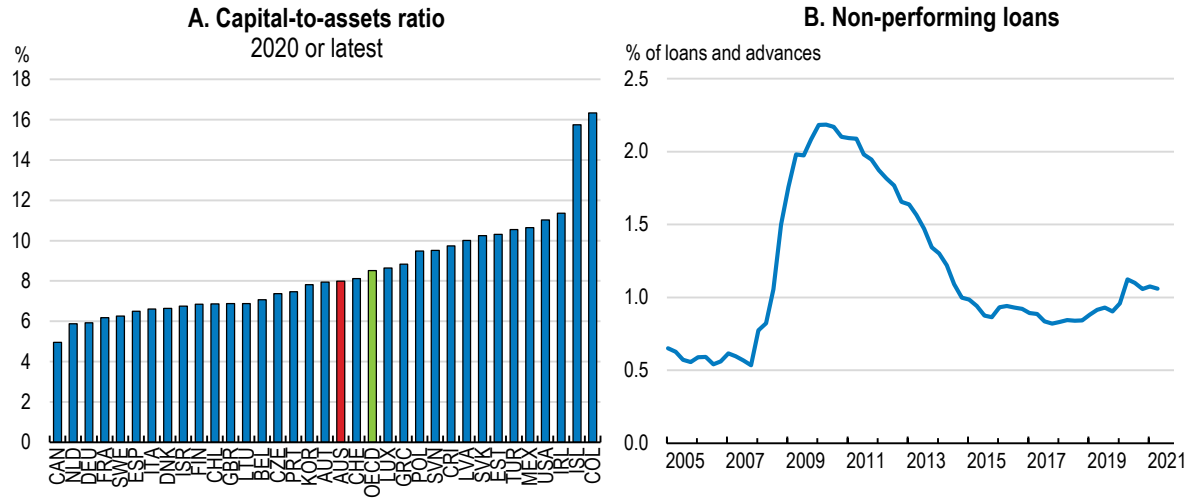
National Debt Hotline and free financial counselling services. The pre-existing shortfall in financial counsellors should also be addressed (Sylvan, 2019). While the economy is still recovering from the pandemic, vouchers for a "business viability review" – suggested by the small business ombudsman – could be offered to particularly hard-hit SMEs. Before doing so, it should be ensured that there is adequate availability of suitable professionals to undertake them based on coverage and expected take-up.

There is scope to further align the insolvency regime with efficient regimes in other countries, particularly by lowering barriers to restructuring. Allowing management to retain control of the company during restructuring could better align private incentives of managers with those of owners so that initiation of solvency is not delayed. The "debtor-in-possession" model in the new small business debt restructuring process is a positive development in this regard. However, Australia and Israel are the only OECD countries where management loses control during restructuring (Adalet McGowan and Andrews, 2018). Many other OECD countries also allow creditors to initiate restructuring, whereas only secured creditors can in Australia. In early 2021, the government consulted publicly on possible changes to the personal insolvency regime, including to allow discharge after one year rather than three. The possibility of a "fresh start" for honest entrepreneurs could foster productivity growth by increasing firm entry, allowing failed entrepreneurs to implement lessons from their previous business and attracting better quality entrepreneurs (Adalet McGowan and Andrews, 2018). The unusual cause of the recent recession may justify trialling the regime to limit the scarring effects of the pandemic.

Maintaining financial stability

The strong recovery in 2020 reduced risks to financial stability compared to expectations in the early stages of the pandemic. Bank profitability declined sharply in the first half of 2020 with the overall return on equity falling by around 4 percentage points (RBA, 2021). But in the second half of the year, around half of the fall was unwound. While banks have benefited from lower funding costs including via the Term Funding Facility, net interest margins of the major banks have come under some pressure from higher liquid asset holdings and lower returns on bank assets, including due to strong competition in the home loan market. As mentioned above, measures taken by regulators had buttressed bank capital ratios going into the crisis. During 2020, regulators ensured that banks accumulated capital by reducing dividend payments. This was also achieved through dividend reinvestment plans and (in one case) by raising equity. The ratio of capital to assets across all banks was around the OECD median in 2020, up from one of the lowest five years earlier (Figure 2.10, Panel A). This reflects the abovementioned efforts to strengthen bank balance sheets after the 2014 Financial System Inquiry. Liquidity ratios rose during 2020 as a result of the Term Funding Facility, strong deposit growth and lower demand for credit (RBA, 2021). Although non-performing loans have ticked up, they are relatively low (Figure 2.10, Panel B) due to the pandemic policy measures that supported borrowers' liquidity and lowered insolvencies and macroprudential interventions prior to the crisis that improved lending standards.

Figure 2.10. Asset quality has only deteriorated modestly



Note: In Panel B there is a break in June 2019 due to changes in data collection. Loans affected by the COVID-19 loan repayment holidays from March 2020 to 2021 were permitted to be classified as performing.
Source: APRA; IMF, *Financial Soundness Indicators* database.

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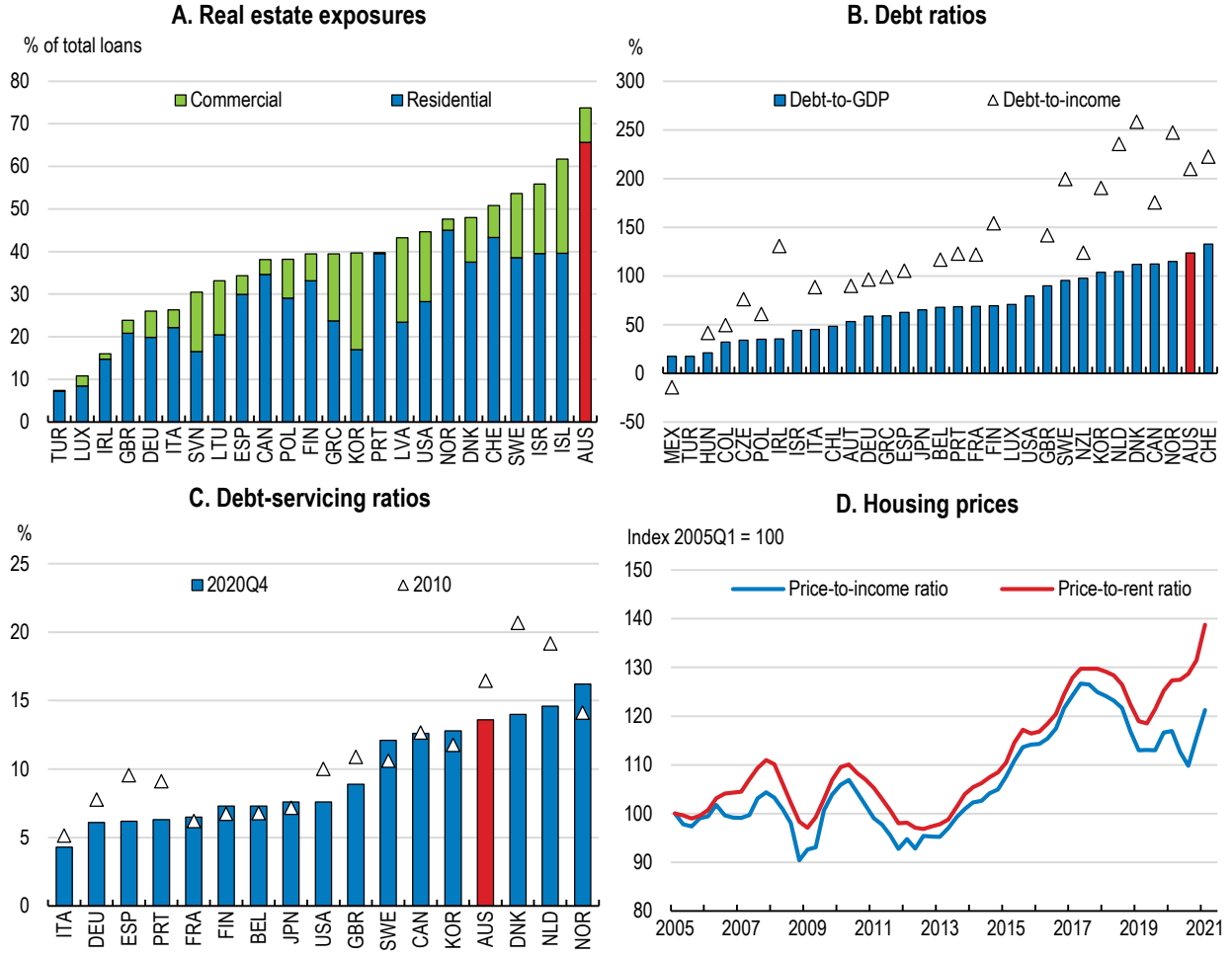
As highlighted by past *Economic Surveys* of Australia, banks' high exposures to real estate together with high level of household indebtedness are a potential economic and financial stability risk (OECD, 2018a, 2017a). Real estate exposures are the highest in the OECD (Figure 2.11, Panel A). Household debt ratios - measured by the ratio of debt to income or to GDP – are amongst the highest (Figure 2.11, Panel B). Declining interest rates have reduced the household sector's debt-servicing burden, although it is still comparatively high (Figure 2.11, Panel C). This debt is mirrored by high holdings of housing assets, both as owner-occupiers and investors, with total real estate assets equivalent to 59% of household assets on average in 2018 (Wilkins, 2020). Rising house prices are now reducing the leverage of existing borrowers but raising borrowing requirements for new ones (Figure 2.11, Panel D). Around half of all mortgages had accumulated prepayment buffers equivalent to at least three months of repayments in early 2021, but around 40% had one month or less, with relatively riskier loans accounting for 10% of total mortgages (RBA, 2021). Notwithstanding the deterioration in the economic outlook in recent months, risks are somewhat moderated by the reduction in negative equity and the improvement in lending standards in recent years. New lending with high loan-to-valuation ratios has been concentrated in owner-occupier debt, which is considered less risky than investor debt.

Figure 2.11. Household debt and bank exposures to real estate are high



Note: Data in Panel A and B are for 2020 or latest available. In Panel B the debt-to-GDP ratio refers to loans, debt securities, currencies and deposits; the debt-to-net-disposable-income ratio is from the national accounts, which is slightly broader.
Source: BIS; IMF, *Financial Soundness Indicators* database; OECD, National Accounts database; OECD, *Housing Prices* database.

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Commercial property appears to be a greater source of near-term risk. The pandemic accelerated the structural change in retail shopping, while changed working habits have reduced demand for office space. In both sectors vacancy rates have risen. In some cities office vacancies reached two-decade highs at end 2020 (RBA, 2021). Exposures amounted to 8% of banks' loans in 2020, compared to around 10% in OECD countries with available data. But at some banks exposures amount to 16% of total assets (RBA, 2021). Additional exposures arise due to businesses using their commercial property as security. Non-bank lenders are also exposed to the sector. Valuations of commercial property are only required annually (unless markets move significantly) and were suspended during 2020.

In its April 2021 review, the RBA considered near-term financial stability risks to be manageable (RBA, 2021). Bank stress tests in 2020 concluded that the system could weather a 15% fall in GDP, accompanied by a 13% unemployment rate, 30% fall in housing prices and 40% fall in commercial property prices (APRA, 2020a). The industry-wide capital ratio would fall by 5 percentage points and remain above the minimum capital ratio. While the stress test concluded the sector would be able to lend and support the economic recovery, in practice it would be weakened and may be unwilling to lend without policy support. The entity-

level stress test results were not released. In most OECD countries individual results are published, at least some of the time (OECD, 2020c). In a crisis this can be useful to address concerns that institutions may have adverse private information, if credible and complemented by measures such as remedial actions for poorly performing institutions and well-funded backstops to mitigate risks of destabilisation (Baudino et al., 2018). APRA should continue to monitor risks closely and ensure that banks are appropriately recognising risks on their loan books, particularly with commercial property. Supervisors should also ensure that they have sufficient data to understand the risks and interlinkages between banks and non-banks, which is a greater risk in commercial property.

Housing debt will remain a source of medium-term vulnerability for Australian banks and households. Low wage growth means that some highly indebted households will take longer to accumulate buffers than in the past, and therefore be exposed to adverse income shocks for longer. High nominal debts can also weigh on household consumption (Price et al., 2019; Mian et al., 2015). Lower interest rates reduce debt-servicing burdens for existing borrowers but also increase borrowing capacity. Lenders must apply a 2.5% minimum interest rate buffer when assessing loans. Nevertheless, there are risks of financial stress if interest rates were to rise faster than expected. A prolonged period of low interest rates would put further pressure on banks' net interest margins and incentivise faster credit extension or increased risk taking. In some other OECD countries where rates have been low for longer, such as Switzerland and Canada, housing prices and housing debt have risen notably. If credit growth accelerates and there are other signs of building risks, such as deteriorating lending standards, policymakers should implement targeted macroprudential measures to dampen the build-up of medium-term risks. The authorities successfully used various tools during 2014-18 to reduce risks associated with rising debt (Table 2.4).

The supervisor should continue to develop its toolkit of macroprudential interventions tailored to address emerging risks. Unlike in most OECD countries, Australia does not have a regulatory maximum loan-to-value ratio (Figure 2.12, Panel A). OECD research has found that limits on loan-to-value ratios can reduce the risk of crisis but may weigh on the recovery (OECD, 2021a). In Finland, a 2019 working group on limiting household indebtedness recommended that the maximum loan-to value ratio be combined with a debt-to-income ratio of 4.5 times that could be exceeded in 15% of loans (FIN-FSA, 2020). Other effective macroprudential options to consider include higher capital requirements, through sectoral counter-cyclical capital buffers or higher risk weights on highly leveraged loans. Risk weights appear relatively low in Australia, although in practice the regulatory minimum capital ratio also affects settings (Figure 2.12, Panel B).

APRA is progressing its crisis resolution and recovery planning work after delays caused by the pandemic. In 2019, APRA increased total capital requirements to boost loss-absorbing capacity. APRA aims to release a new prudential standard for recovery and resolution planning for consultation by early 2022, which will complete implementation of the reforms that started with the crisis-resolution legislation passed in 2018 and better prepare Australia in case of a severe downturn in the housing market. The 2018 *OECD Economic Survey* highlighted that a severe crisis could test the 2018 legislation as there are no explicit bail-in provisions on senior debt or deposits owned by financial institutions. The United States and European Union have such provisions. These provisions should be introduced to allow more flexible resolutions.

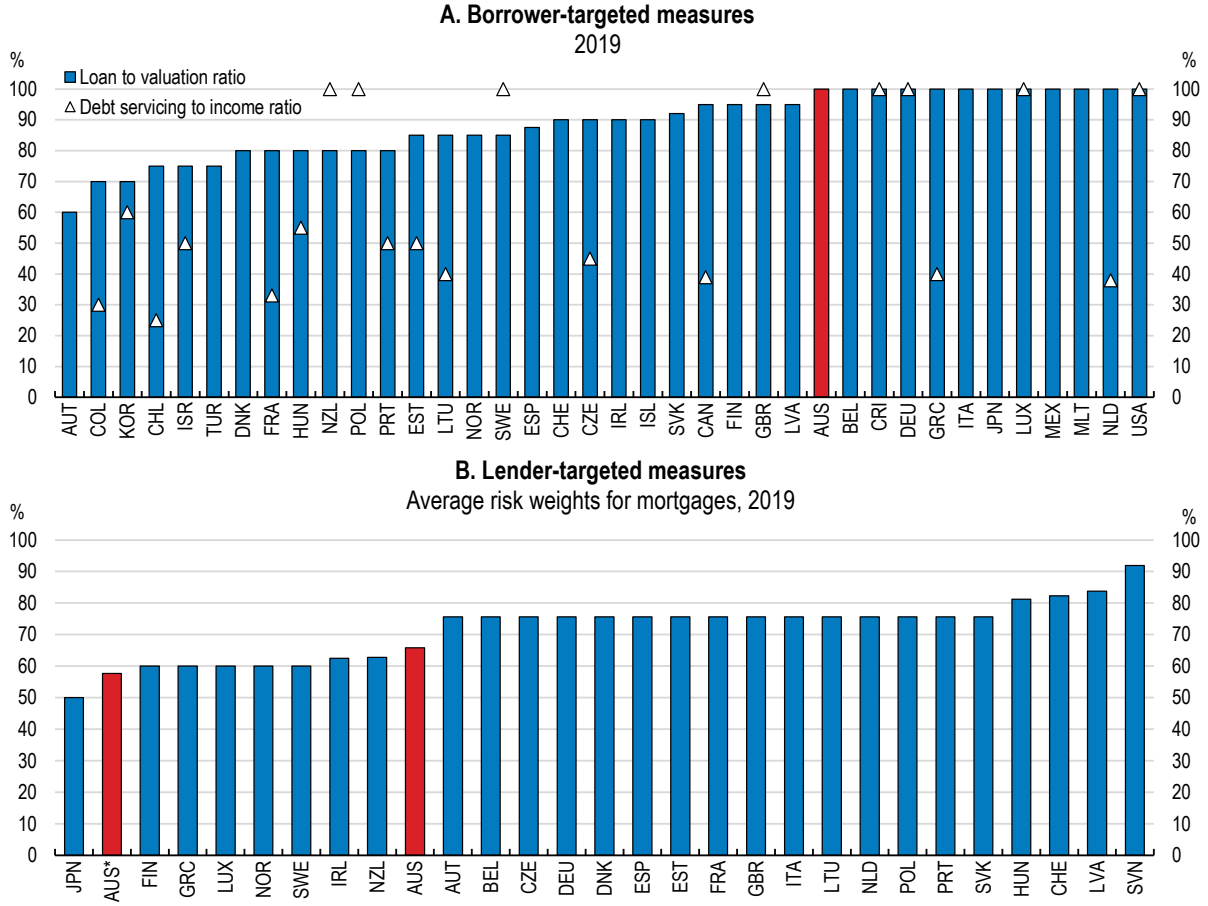
Table 2.4. The authorities have used a range of policies to reduce financial stability risks

Measure	Detail	Dates applying
Debt-to-income ratios	Bank boards were asked to restrict residential lending with debt-to-income ratios above 6 but it is allowed.	April 2018
Serviceability standards	2.5% interest rate buffer over current rate.	July 2019
Discontinued measures		
Investor lending benchmark:	10% of credit growth (more allowed but scrutinised)	Announced December 2014 Removed June 2018[(a)]
Interest-only loans benchmark	30% of new lending Instruction of strict internal limits on interest-only loans with LTV >80% and scrutiny if LTV>90%	Announced March 2017 Removed January 2019[(a)]
Serviceability standards	2% interest rate buffer over current rate with minimum rate of 7%.	Announced December 2014 Amended July 2019.

(a) Investor lending and interest-only benchmarks were only removed where banks met the speed limit, provided assurances on lending practices and maintained serviceability standards.

Source: RBA (2018), "Assessing the Effects of Housing Lending Policy Measures" in *Financial Stability Review,* October 2020; C. Dobson (2020), "Assessing the effects of housing policy measures on new lending in Australia", *BIS Papers*, No. 119.

Figure 2.12. Macroprudential policies could be tightened further



Note: In Panel A lower values denote more stringent measures. Australia and other countries with no maximum rate are shown at 100%. In Panel B, higher values denote more stringent measures. Risk weights are the average for loan-to-value ratios of 50-130%. The risk weights shown for Australia are for loans without lenders mortgage insurance. AUS* denotes the proposed average risk weight from 2023.

Source: OECD (2021), *Brick by Brick: Building Better Housing Policies*; OECD.

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Tackling structural factors that might skew Australian household balance sheets towards residential property investment could reduce vulnerabilities and improve household wellbeing. For instance, the tax treatment of savings incentivises leveraged investments into assets that are expected to enjoy capital gains over time (Henry, 2009). While the capital gains tax discount is available on all investments, leveraging real estate is easier than other assets (RBA, 2015). Capital gains tax discounts for an individual's main residence are well in excess of inflation, at 50% for investments held for over a year and 100% for owner-occupied housing. In addition, expenses associated with earning investment income, including interest payments, can be deducted from personal income ("negative gearing"). Because households can deduct expenses from income but can choose when to realise the capital gain – such as when they face a lower marginal income tax rate – the discount also facilitates tax planning and breaches principles of tax neutrality.

One reform would be to replace the capital gains discount with cost-base indexation. In the first four years, this could add AUD4.1 billion dollars to government revenue (0.6% of 2018-19 general government revenue) (PBO, 2019). Some studies have suggested reducing the discount but keeping it at a fixed rate (Henry, 2009, Daley and Wood, 2016). Reducing the discount would also lessen inequality given that wealthier households tend to hold a greater share of their wealth in second properties and may better take advantage of tax planning opportunities. As Australia does not have an inheritance tax, exemptions for inherited properties should also be reconsidered. Consideration could be given to ring-fencing the income base against which investment-related expenses can be deducted (Daley and Wood, 2016; Henry, 2009). Such a change should be carefully designed to avoid dislocating the property market and follow more fundamental reforms tackling supply-side drivers of high prices. These include reforming land zoning and planning approvals to allow more high-density development (Chapter 1). This would both improve housing affordability over the medium term and slow the pace of mortgage growth (OECD, 2021a).

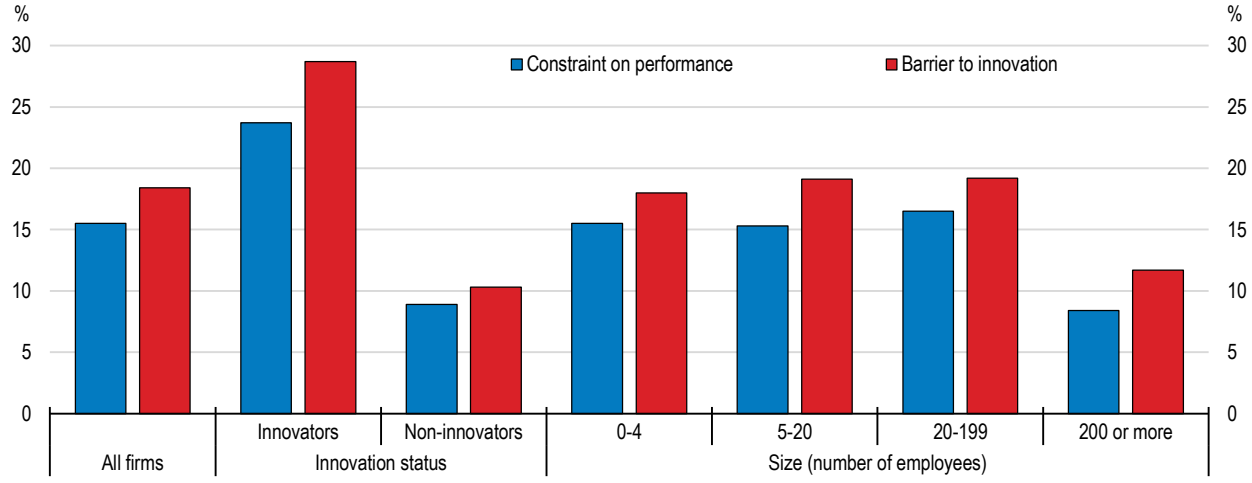
Channelling finance to viable and productive firms

The financial sector will play a key role in determining the strength of the economic recovery by supporting the emergence and growth of productive firms. This is particularly important after the decade of weak investment and low productivity growth in Australia preceding the pandemic. Tackling financial frictions can improve the supply of finance to productive firms when uncertainty fades. These frictions are typically high for innovative high-growth firms that drive job creation and productivity growth (Calvino et al., 2016; Criscuolo et al., 2014). Screening and monitoring costs arising from information asymmetries impede finance for firms that lack history or collateral, as is the case for young firms and intangible investment such as research and development and innovation (Demmou et al., 2019; Heil, 2017; Andrews and Criscuolo, 2013; Hall and Lerner, 2010). A well-developed financial system will meet the needs of firms at different stages of growth. In addition, adjusting to the post-pandemic economy, including the acceleration of the digital transformation, will require a reallocation of resources across the economy and firms. The financial system can facilitate this.

Access to external finance has not been considered to be a general problem for Australian firms because they do not need additional funds, can use internal finance, or are able to access it (PC, 2018; Connolly and Jackman, 2017). Nonetheless, there are longstanding concerns about financing constraints for small and young businesses that remain important in the economic recovery (Kent, 2021; Connolly and Bank, 2018). Survey data from 2018-19 show that financial constraints affect smaller and innovative firms more (Figure 2.13). More recent data show that large differences in rejection rates by firm size persist (Figure 2.14, Panel A). More firms seek debt rather than equity finance, particularly from banks. For those that sought finance, difficulties were higher for equity finance but have increased over the decade after the global financial crisis for both types (Figure 2.14, Panel B). Since these surveys do not capture firms that were not created due to a lack of finance or were dissuaded from seeking finance, they may underestimate the size of the barrier. Firm-level analysis suggests these barriers are more binding for small and young firms: their investment is more sensitive to leverage and liquidity compared to large firms, which weighs on investment as they are less likely to have internal financing (IMF, 2020b).

Figure 2.13. Access to finance is a barrier for innovative firms and innovation

Percentage of firms reporting access to finance as a constraint



Note: Firms were allowed to provide multiple responses. Data are for 2018-19.
Source: ABS

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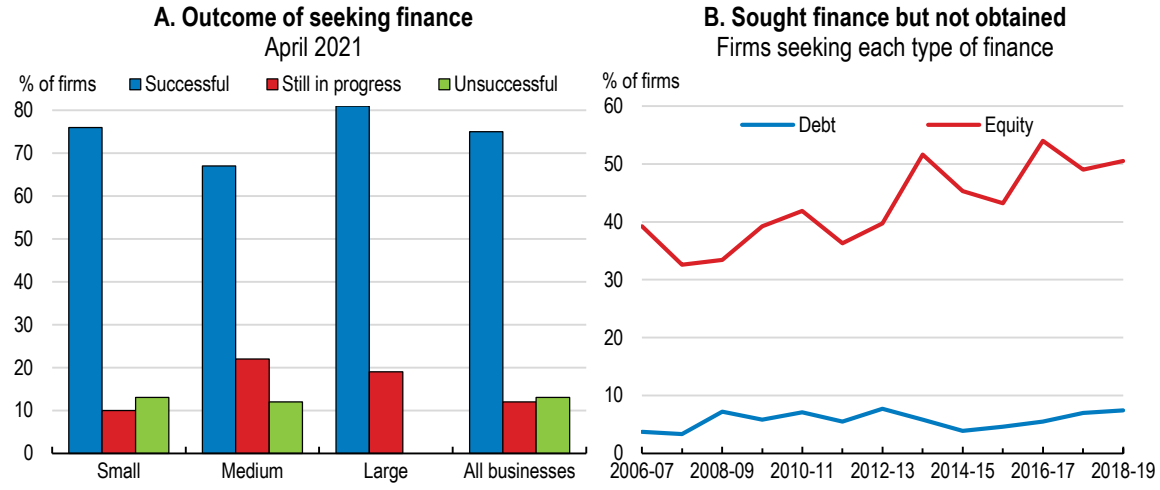
Figure 2.14. Obtaining finance has become more difficult



Note: In Panel B there is a break in 2009-10 when agriculture was included in the survey.
Source: ABS

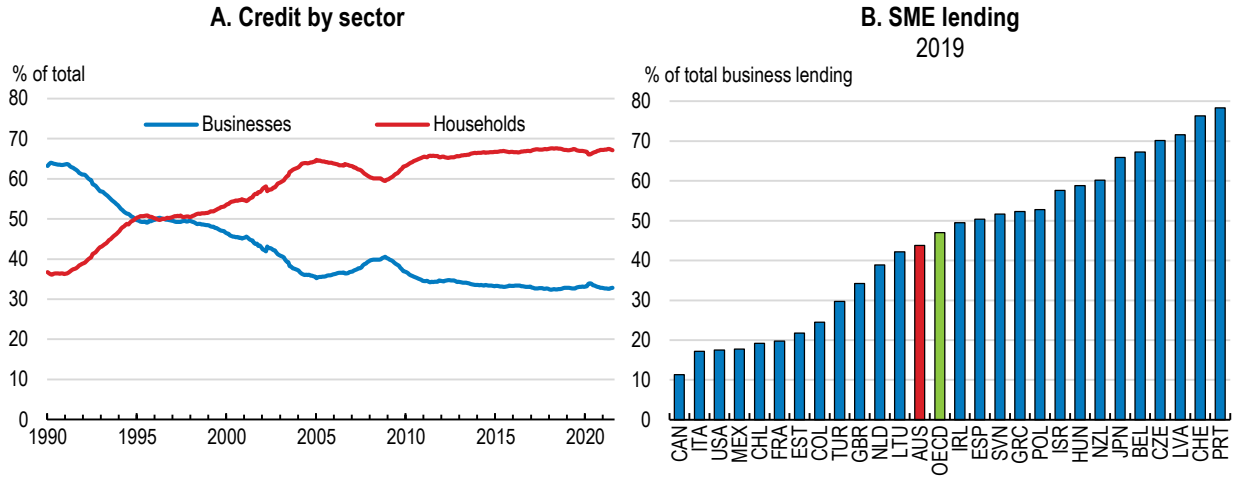
StatLink https://stat.link/h4u0dt

Improving access to credit

Across countries banks are a key source of external finance for business as their informational advantages and ability to pool credit risks allow them to provide finance at a lower cost and without firms relinquishing any control. Empirical research suggests that the productivity benefits of financial deepening are realised via business lending, rather than household lending (Beck et al., 2012). However, bank lending has shifted towards households in Australia (Figure 2.15, Panel A). The IMF *Financial Soundness Indicators* show that the share of bank lending to the household (and not-for-profit) sector exceeds that in other OECD countries, for which the median is around 36%. A range of factors have driven the demand and supply of lending in each sector. The role of policies is discussed further below.

Prior to the crisis, Australian entrepreneurs and start-ups reported difficulties accessing bank credit, as in many countries (Connolly and Bank, 2018). SME credit – an indicator of credit availability for young and innovative firms - amounted to 44% of business lending in 2019 compared to 47% in the average OECD country (Figure 2.15, Panel B). The gap for small firms (AUD1-AUD20 million in turnover) could be as high as AUD94 billion, or 10% of business credit outstanding (East and Partners, 2021). The equivalent gap for firms with AUD20-50 million in turnover is slightly larger. The cost of credit is also higher for SMEs, with the differential vis-à-vis large firms persistently elevated since the 2008-09 crisis and above the OECD median country (Figure 2.16). Furthermore, banks' preference for security, particularly real estate, constrains businesses without acceptable collateral. This is more likely to affect high-growth firms rich in intangible assets. RBA data show that 95% of all SME loans are secured, and half of all small business loans are secured by residential property. In the median OECD country for which data exist, around 60% of SMEs report being required to provide collateral on their latest bank loan (OECD, 2020d).

Figure 2.15. Lending is highly skewed towards households



Note: In Panel A there are series breaks in July 2019.
Source: OECD, Financing SMEs and Entrepreneurs: An OECD Scoreboard database; RBA.

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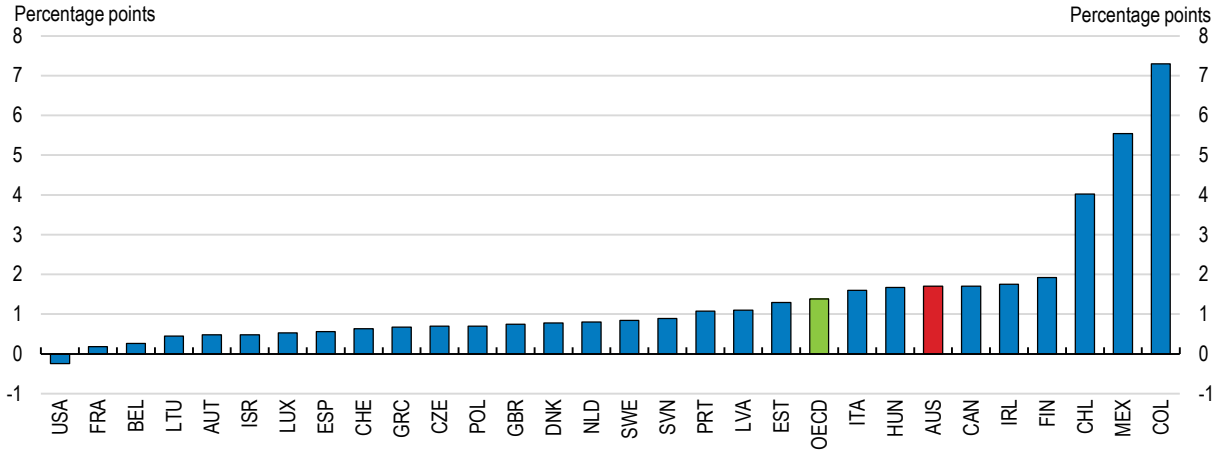
Figure 2.16. The interest rate spread on SME loans is relatively wide

Interest rate spread between SME and large firm loans, 2019



Source: OECD, Financing SMEs and Entrepreneurs: An OECD Scoreboard database.

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Policy and regulations affect the allocation of capital and can create stronger incentives for banks to extend mortgages than business loans. First, for all banks using the standardised risk weights for calculating regulatory capital, weights for housing lending are considerably lower than for small business lending unless the loan is secured by residential property (Table 2.5). Lending to smaller businesses is risker on average but the Australian risk weights are higher than in other countries (PC, 2018). From 2023 when revised prudential standards take effect, risk weights on unsecured SME loans will be aligned with Basel III which is also taking effect in 2023 and commercial property will be recognised as collateral (also consistent with Basel III; Table 2.5). Second, funding costs for mortgages are lowered by the ability to self-securitise residential mortgage-backed securities for use as collateral in repurchase agreements with the RBA, for example for the Term Funding Facility. In addition, mortgages are more profitable because screening and monitoring costs are lower and assessment is more formulaic compared to heterogeneous business loans (PC, 2018). Taken together these factors weigh on the supply of lending for firms.

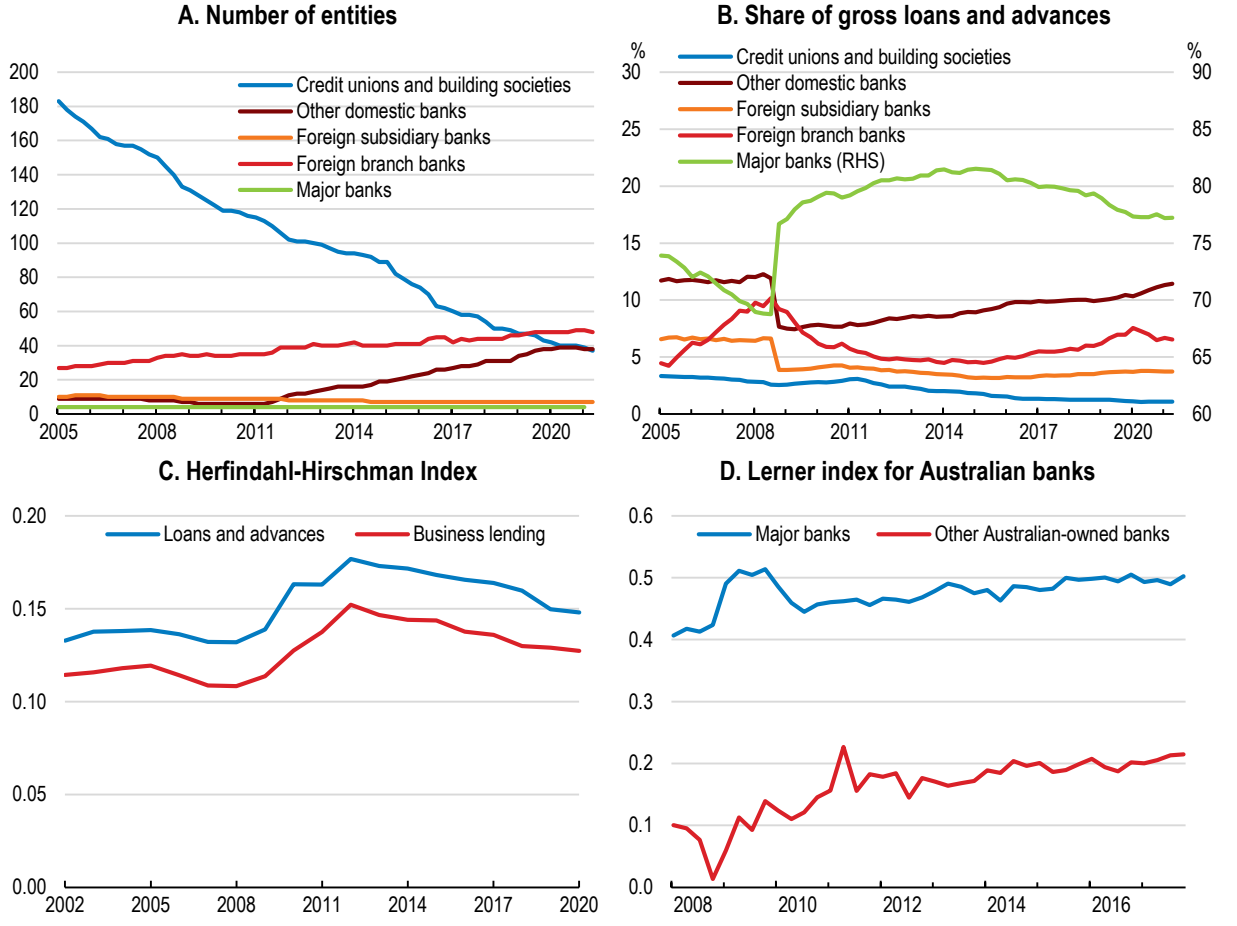
Table 2.5. Risk weights are high for SME loans unless secured by residential property

	Standardised approach		
	Current	Basel III	Proposed
Unsecured - retail	100	75	75
Unsecured - corporate	100	85	85
Secured by commercial property used by business	100	70-110	70-110
Secured by residential property	35-100	20-70	25-105
Memo: owner-occupier mortgage	35-100	20-70	20-85

Note: An SME is currently defined as having annual revenue of AUD50 million, or EUR50 million under Basel III and AUD75 million in the proposed revised standards. A retail SME loan will be up to AUD1.5 million. The risk weights for "Unsecured-corporate" reflect those for unrated corporate SME exposures. For loans secured by property the risk weight varies by loan-to-value ratio over the range shown.
Source: Productivity Commission (2018), *Competition in the Australian Financial System,* Productivity Commission Inquiry Report, No. 89; Bank for International Settlements; APRA (2020), *Draft Prudential Standard APS 112: Capital Adequacy: Standardised Approach to Credit Risk.*

A lack of competitive pressures can restrict access to finance via cost, product availability and the terms on which finance is offered. The Productivity Commission found that large banks' market power results from (i) an established presence; (ii) regulatory arrangements; (iii) funding advantages and operational efficiency; (iv) horizontal and vertical integration; and (v) lack of switching by customers (PC, 2018). In the mortgage market, they have wielded sufficient power to pass on costs of new regulations (ACCC, 2018; PC, 2018). Consolidation may have benefitted competition through mergers between smaller players that allow them to better compete with larger banks (PC, 2018; Figure 2.17, Panel A). Nonetheless, the largest banks still account for 77% of all lending by authorised deposit-taking institutions, more than before the 2008-09 crisis (Figure 2.17, Panel B). Concentration is also high by international comparison (Figure 2.3). Measures of market structure suggest that business lending is somewhat more competitive (Figure 2.17, Panel C). However, this largely reflects foreign banks' lending to large businesses; over 80% of SME lending was with the major banks in 2017 (PC, 2018). Although it may be too small to affect these metrics, the 2019 entry of an SME-focussed bank should improve conditions in SME lending. Under the SME Recovery Loan Scheme, around 40% of lenders approved to participate to date are non-banks. There are signs the power differential between large and small banks narrowed over the past decade but it is still large (Figure 2.17, Panel D).

Figure 2.17. The major banks have remained entrenched



Note: In Panel C data are at December. The Herfindahl-Hirschman index measures concentration. A higher value indicates a more concentrated market. The Lerner index shows the extent to which interest rates exceed marginal cost. A higher value indicates more market power.
Source: APRA; Productivity Commission (2018), *Competition in the Australian Financial System,* Productivity Commission Inquiry Report, No. 89; OECD calculations.

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This policy landscape and competition dynamics are potential explanations for the wider credit spreads and tougher financing terms facing smaller businesses described above, with the pandemic worsening conditions during 2020. However, monitoring developments and disentangling supply- and demand-side factors to understand the financing gap is challenging given available data. The main publicly available data sources are: (i) the statistics office's annual Business Characteristics Survey (depicted in Figure 2.13 and Figure 2.14); (ii) a proprietary small business survey with a question on perceptions of the availability of finance that was discontinued at end 2020; and (iii) official bank lending data, which include interest rates and lending by sector and firm size after the dataset was expanded in 2019. Establishing a comprehensive survey in Australia like the European Central Bank and European Commission Survey on Access to Finance of Enterprises would help close the data gap. Likewise, a survey of bank credit conditions could be published, as in many other OECD countries, including Canada, euro member countries, New Zealand, the United Kingdom and the United States (OECD, 2018b).

Fostering greater competition

In recent years the authorities lowered barriers to entry by creating a "restricted banking licence", broadening usage of the word "bank" to all authorised deposit-taking institutions and increasing the ownership threshold from 15% to 20%. After two years a restricted licence holder must meet prudential requirements or exit. From 2018 to 2020, APRA granted restricted licences to six Australian-incorporated banks (of which one remains a restricted bank), five branches of foreign banks and one provider of purchased payment facilities. Two more restricted banking licences were issued in July and August 2021. This compares with 10 banking licences (of all types) in the previous decade. However, only two graduated to full licences. In early 2021, one of these exited and another new entrant was purchased by a major bank. Challenger banks struggle with access to capital, customer acquisition and recruiting staff (APRA, 2020c). APRA plans to raise the bar slightly for gaining a full banking licence (e.g. launching an income-producing product and a deposit product beforehand) to make these banks more sustainable. It could further streamline authorisation and the compliance burden during the initial transition phase as well as devoting more resources to supporting newly accredited banks. Allowing small specialised banks to apply for a restricted licence with lower levels of capital, as in the United Kingdom, could attract more entrants without jeopardising financial stability (Box 2.3).

Box 2.3. Lessons from the UK experience of reducing barriers to entry in the banking sector

In 2014 authorities in the United Kingdom implemented reforms to:

- Reduce capital and liquidity requirements for new banks, including providing new banks with regulatory relief for 3-5 years and introducing a "Small Specialist Bank" model to allow niche banks to start up with lower capital requirements. Small Specialist Banks must carry out at least one of three activities, one of which is lending to SMEs.
- Increase the transparency and availability of support prior to and during the authorisation process and reducing information requirements. This also included a more flexible "mobilisation" option for the authorisation process.

A formal evaluation of the reforms found that:

- Lowering barriers to entry positively impacted entry and benefited consumers via better offerings of specialised products.
- There has not yet been a substantial effect on market shares and competition. This may be because of other barriers to expansion such as "sticky" customers.
- A shift from a perceived "black box" around the authorisations process to a clearer simplified process had a positive impact on entry.

Some UK challenger banks have also benefitted from government financial support (mostly guarantees and public investments) via the British Business Bank.

Source: Baker, R. et al. (2018), "An evaluation of reducing barriers to entry into the UK banking sector", *FCA Evaluation Papers*, No. 18/3, Financial Conduct Authority, London; OECD (2020), "Recent trends in SME and Entrepreneurship Finance", Chapter 1 in *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard*.

The regulatory balance between a level playing field and proportionality affects the ability of smaller banks to compete. Regulatory settings, such as capital requirements, advantage larger banks because they can invest in models to calculate risk weights (under the internal ratings approach), which reduces their costs, and the fixed component of compliance costs is proportionately smaller (Carletti and Smolenska, 2017; PC, 2018). APRA estimated banks using internal ratings models saved AUD1 billion (EUR 0.6 billion) in 2017 (PC, 2018). These advantages are somewhat mitigated by other regulatory measures. Those banks using the internal ratings approach that are "domestic systemically important banks" must hold an additional 1 percentage point of Common Equity Tier 1 capital and, along with the fifth-largest bank, they are subject to a levy of 0.06% of relevant liabilities. Banks using the internal ratings approach also have a risk weight floor for residential mortgage exposures. Some past regulatory decisions have had anti-competitive effects (PC, 2018). Plans to reduce risk weights for SME lending will more closely align Australia with the Basel standards and may help second-tier lenders using the standardised approach better compete in this market. Likewise, plans to simplify reporting requirements and some capital treatment for smaller banks from 2023 will lower their compliance costs. APRA has also encouraged mutual banks to lower operating costs through undertaking collective initiatives that promote scale efficiency (Byres, 2019). As in some other OECD countries, such as Switzerland, one approach is for smaller financial institutions to share back office services and co-operate in raising capital. There is already an APRA-regulated entity (Cuscal Limited) that provides transactional banking, liquidity and capital management to institutions including credit unions, mutual banks and superannuation funds in Australia.

Policymakers can improve the balance of competition in several ways. Until the new capital requirements are in place APRA should consider providing temporary relief on small business lending for banks using the standardised approach. In bringing forward this element of the new capital requirements in isolation, any unintended consequences for other parts of the system should also be evaluated. APRA could also allow banks using the standardised approach to apply to vary risk weights for SME lending based on their loan performance data and sufficiently rigorous risk management, as recommended by the Productivity Commission (2018), with care not to underestimate underlying risk. It could streamline the pathway for accreditation of internal ratings models, as in the United Kingdom. As part of its aim to increase competition in lending, the UK Prudential Regulation Authority changed its application processes for accreditation of internal ratings models to facilitate applications from smaller lenders (PRA, 2018). Australia's financial regulators now all have competition within their mandate and APRA and the ACCC have also undertaken to, *inter alia*, consult and collaborate in developing policy on overlapping activities. Over time APRA will build expertise in competition matters. The ACCC has been reporting on pricing in mortgage markets annually. This could be extended to annually reporting on competition in retail banking to the Council of Financial Regulators and making policy recommendations.

A market for securitised SME loans could lower funding costs for smaller banks and non-bank lenders and prove attractive for institutional investors. The market for securitised SME loans is small and almost entirely comprised of secured loans, reflecting the structure of SME lending (Department of the Treasury, 2018). The government established the Australian Business Securitisation Fund in 2019 to develop the market by investing in securitised assets and in warehouses backed by loans issued by non-bank lenders and smaller banks. Its activity paused due to the disruption in financial markets due to the pandemic. The first securitisation involving the Fund was launched in early 2021. The issuing bank – a new small business-focussed bank - intended to use the funds as collateral in repurchase agreements with the RBA to access lower cost funding.

Other OECD countries' experience suggests that a key challenge will be overcoming the information asymmetries facing investors due to the heterogeneity of SMEs and inadequate credit information (Nassr and Wehinger, 2014). Through the Australian Business Securitisation Fund the Australian Office of Financial Management is supporting the development of a clear track record for the asset class and is also working with industry to help standardise data collection and reporting for SME loans. OECD experience suggests that a centralised data platform will be beneficial for developing the market. Policymakers should facilitate faster implementation, drawing on international experience. Including information on the credit quality of the borrower could also help investors. In France data sharing is a feature of the Euro Secured Notes Issuer Initiative, which is a joint public-private initiative that draws on the Banque de France's credit assessment of SMEs from its database of firms' financial information and banks' internal ratings (Boschmans and Pissareva, 2018). Other countries including Japan also have large databases with SME credit ratings. The fast-moving developments in data and technology discussed below could facilitate a similar service.

Reducing information asymmetries to support lending

To help improve access to credit, and lower its cost, the government introduced the Personal Property Securities Act in 2009 (which commenced in 2012) and created the Personal Property Securities Register. It covers a range of personal property including intangible assets such as intellectual property. As such, it could be particularly useful for innovative firms with intangible assets and entrepreneurs without housing collateral. In principle the register should also help businesses protect their security interests. Yet, reviews have found that its design was too complex and awareness among businesses is low (ASBFEO, 2021; PMC, 2020; Whittaker, 2015). The independent statutory review of the Act highlighted the need to simplify the Act to generate more predictable outcomes, which would give lenders greater confidence (Whittaker, 2015). The government is considering its response to the 2015 statutory review. It should move ahead with reforms in consultation with stakeholders. A new project aims to improve the website to reduce errors during registration. Streamlining the system, reducing compliance costs and making better use of available technology (including regtech) would help realise its potential. Policymakers should work with key users such as lenders, businesses and accountants to help them understand the register.

Given the growing importance of intangible assets, particularly for high-growth SMEs, and the challenges such firms face in obtaining finance, a number of governments are considering how to address market failures in recognising intangible assets as collateral (Brassel and Boschmans, 2019). Lenders face challenges including valuation, high transaction costs and an uncertain liquidation value in case of default. Australia's Personal Property Securities Register provides a good foundation, by allowing for such assets. Policymakers should also work with lenders to improve valuation of intellectual property and other intangible assets to facilitate their use as collateral. For example, in Japan, the patent office led a two-pillar strategy to reduce market failures associated with lending to SMEs against intellectual property by funding up to 150 independent valuation reports annually and educating smaller regional lenders on how to use evaluation reports to value intellectual property (Brassel and Boschmans, 2019).

The digital revolution in financial services with progress in big data analysis can improve lenders' ability to assess credit risk, lowering screening costs and expanding access to finance. Firms with non-traditional business models, such as young innovative businesses with a high share of intangible assets, will benefit. Information on creditworthiness has been expanded through the transition from negative credit reporting to mandatory comprehensive (positive) credit reporting from 2014 to 2021. Information including open accounts and repayment history will be available to prospective lenders. Research across a range of countries shows that positive credit reporting improves credit risk assessments compared with only negative credit reporting (World Bank, 2019). Because an owner's history helps assess risk, it should benefit small and young businesses. Coverage could be extended to SMEs, as in many countries (Koreen et al., 2018). It would benefit young firms and firms with intangible assets by "thickening" their credit files by including additional information such as loans outstanding and utilities payments. The UK required large

banks to share SME data with designated credit agencies to improve the reliability of credit scores for use by all lenders (OECD, 2018b). As mentioned above, in France and Japan the public sector produces a credit score. Education campaigns should make individuals, and businesses if extended, aware of how to maintain a good credit score.

Open banking – the first step in Australia's consumer data right – could be transformative. Initial benefits are likely to include stronger competition by allowing comparison websites to provide tailored information on product offerings and improved financial record-keeping to ease credit access through fintech companies that provide financial management tools. Its rollout is scheduled to be completed by February 2022 (Box 2.4; Figure 2.18). The design draws on lessons from elsewhere, with interoperability assured by government-determined standards and a focus on securing trust. To date the launch has been low-key as the industry adjusts. There are seven active accredited data recipients and not all data holders are fully compliant with their data access obligations. After these wrinkles are ironed out government and business groups should raise awareness amongst consumers. Other countries' experiences also suggest awareness is important (OECD, 2020e). Because customers' barriers to switching providers are high, the scheme should ultimately allow a third party to initiate actions such as making payments and opening or closing an account with the customer's consent (known as "write access" or "action initiation"; Farrell, 2020). However, it is important that such changes are accompanied by appropriate protections. In the United Kingdom, where open banking was launched in 2018, the share of small businesses switching current account providers has increased from 4% in 2016 to 10% in 2020 (OBIE, 2020).

Box 2.4. Australia's Consumer Data Right and open banking

Australia's consumer data right aims to given consumers control over their own data, ultimately delivering more choice and better services. It launched in the banking sector in 2020 and is being implemented in phases until February 2022 (Figure 2.18). Energy has been designated as the next sector, followed by telecommunications. Other sectors will follow, as designated by the responsible Minister.

Open banking gives customers greater access to, and control over, the data their banks hold on them. Key design features of the system include:

- "Accredited data recipients" are approved to receive data from a "data holder" (bank) after a consumer's request. Recipients then use it for the requested purpose.
- Consent may be withdrawn at any time and data can be deleted on request.
- "Accredited intermediaries" may collect data on behalf of third-party data recipients after a consumer's consent. In practice this means an accredited business (e.g. a fintech) can use the IT infrastructure and software of an accredited intermediary.
- There is "read-only" access, that is, data sharing. By contrast the UK and EU approaches also allow payments initiation (a form of "write access").
- Banks must share data in an interoperable format set by the Data Standards Body. Data standardisation is left to the private sector in some other regimes, including in Europe. In the United Kingdom banks were tasked with creating, adopting and maintaining common standards.

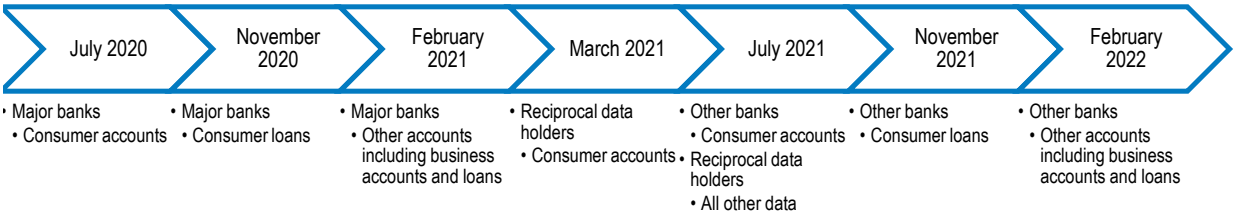
Proposed amendments to the rules aim to broaden participation, for instance by introducing a sponsored tier of accreditation (by an unrestricted accredited sponsor) and allowing consumers to share their data with professional advisers such as accountants.

The Treasury has overarching responsibility for the Consumer Data Right (initially it was the ACCC). The ACCC and Office of the Australian Information Commissioner are responsible for enforcing consumer data rights and protections.

As at beginning September 2021 31 companies were able to share data ("data holders"), almost all of which are banks. In addition, some of these banks offer products under additional brands which are also covered. There were 13 "data recipients" accredited to offer services under the CDR, including two banks. Seven of these services were active.

Source: OECD (2020). "Open Banking", chapter 2 in OECD (2020), *Financial Markets, Insurance and Pensions: Digital Technologies and Finance*, www.oecd.org/finance/financial-markets-insurance-and-pensions-report.htm ; Farrell, S. (2020), *Inquiry into Future Directions for the Consumer Data Right*; www.cdr.gov.au

Figure 2.18. Open banking is being phased in



Source: Australian Government (2020), *Consumer Data Right: Phasing*, available at www.cdr.gov.au/rollout

Open banking and digitalisation more broadly promise to increase contestability of banking through non-banks providing some banking services (although the long-run effects will depend on regulation) (OECD, 2020a). Fintechs may drive down the rents in financial services (OECD, 2020e). Some payment services providers have begun offering credit to their customers. The insights these firms gain from processing payments can assist with credit risk assessment. Buy-now, pay-later products are being offered to SMEs and some accounting software companies are partnering with fintechs to offer invoice financing. One digital bank is offering "banking as a service" to allow its non-bank customers to offer banking services.

To support fintech entrants ASIC established an Innovation Hub, which provides support services, and a regulatory sandbox. In 2020 the sandbox was broadened and the maximum duration lengthened to two years. A UK-Australia Fintech Bridge established in 2018 aims to reduce regulatory barriers to entry between the two markets. In 2019 a Senate committee on financial and regulatory technology was tasked with examining the opportunities and barriers presented by these new technologies. Its recommendations in two interim reports span tax policy, regulatory settings, access to capital, skills, the consumer data right and blockchain (Select Committee, 2021, 2020). Many barriers, such as access to finance and to skilled workers, are common to innovative start-ups. In that context, the Committee has recommended adjusting public equity regulations to make it easier for company founders to scale back their investment (such as in the United States, with sufficient safeguards) and to increase retail investor participation. It also finds that uncertainty around eligibility of software for research and development tax incentives limits their effectiveness; this should be addressed. Shifting from annual to quarterly payment of rebates, as recommended, would better buttress firms' cash flow. Increasing visibility of the regulatory sandbox and Fintech Bridge may increase take-up. In May 2021 the government announced two new visas for high-skilled workers and plans to modernise the tax treatment of employee share schemes.

Regulators are also grappling with how to maintain competitive dynamics after entry. Incumbent banks often partner with new entrants, acquire them or invest in them (Lumpkin and Schich, 2020). Acquisition can provide an incumbent with the new technology more economically than internal investment and can improve overall efficiency through more widespread distribution, for example. But it may also stifle competition. The ACCC has so far allowed such transactions but warned that it will scrutinise takeovers by any of the four major banks more closely than smaller banks (ACCC, 2021). In several countries competition agencies have adjusted merger notification thresholds to allow them to investigate cases

where an incumbent might purchase a start-up to limit potential competition (OECD, 2020e). Appropriate regulations for big tech are particularly challenging (OECD, 2020a, 2020e). Authorities should also continue to strive for technologically-neutral regulations and minimise opportunities for regulatory arbitrage. For instance, because of the structure of their contracts some credit-like services are not regulated as credit. Likewise, less data will be available to measure their growth.

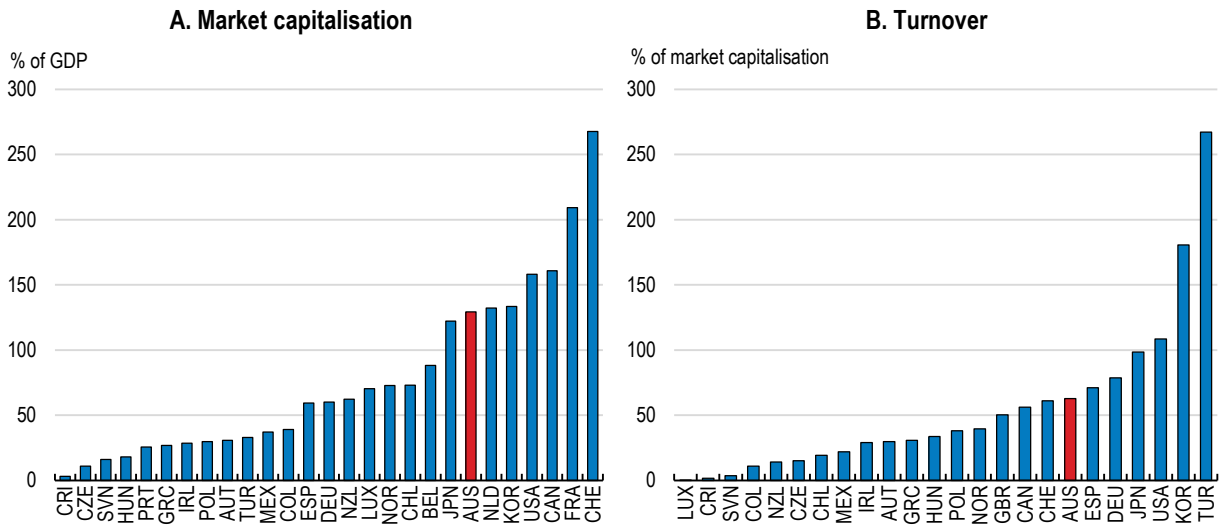
Broadening sources of finance beyond banks

There has been a trend across OECD countries since the global financial crisis to develop alternatives to bank lending for small and young firms. However opportunities for these firms to access non-intermediated debt markets are likely to be limited. This is especially the case in Australia where the corporate bond market is comparatively small (which is currently the subject of a parliamentary committee inquiry). Consequently there has been more focus on equity instruments in practice (Boschmans and Pissareva, 2018). Moreover, equity finance can better suit some young firms without collateral or a track record of good performance, and firms planning intangible investments.

Empirical research links equity financing to innovative activity, particularly in high-tech sectors (Brown et al., 2012; Hsu et al., 2014). Developing public equity and venture capital markets can fuel productivity growth by financing intangible capital (Demmou et al., 2019). Venture capital is empirically associated with faster growth of young firms and investment in knowledge-based capital (Calvino et al, 2015; Andrews et al., 2014). Research from the United States suggests that early-stage engagement yields the greatest productivity gains (Heil, 2017). However, across countries, the obstacles to finance are largest for high-risk, high-return equity-type instruments that best serve young firms and innovative and fast-growing SMEs (Boschmans and Pissareva, 2018). On the demand side, small and young firms can be reluctant to relinquish control. Further hurdles to overcome include valuing the company, fixed costs of raising equity and the supply of investors (Nassr and Wehinger, 2016). Opportunities to improve access to public equity, venture capital and crowdfunding are discussed below.

Public equity markets offer numerous benefits beyond the initial capital raising, including access to further capital and increased creditworthiness, transparency, visibility and improved corporate governance induced by listing (Nassr and Wehinger, 2016). There are four exchanges in Australia: the Australian Securities Exchange (ASX – the main stock exchange), the National Stock Exchange, the Sydney Stock Exchange and Chi-X Australia (which is for trading only). The overall level of capitalisation and liquidity on the ASX compares well to other countries (Figure 2.19). Liquidity declines with company size, as expected. The amount of capital raised through initial public offerings (IPOs) compares well, though it is small relative to credit: in 2018-2020 IPOs by non-financial companies amounted to around 0.2% of GDP on average (Figure 2.20). Secondary public offerings have been much larger than IPOs and particularly large compared to other markets. Australia's IPOs tend to be smaller than in other countries: around 80% of listings have been below AUD50 million compared to around 50% globally below USD50 million (AUD68 million) (Figure 2.21, Panel A; Nassr and Wehinger, 2016). Listings have been dominated by the resources sector, reflecting the high share of resources companies in the overall market (over one-quarter of capitalisation) (Figure 2.21, Panel B). However, there are signs of greater diversification in recent years.

Figure 2.19. The stock market is sizeable and liquid



Note: Market capitalisation is at 2020. Turnover is the average over 2018-20.
Source: World Bank World Development Indicators database.

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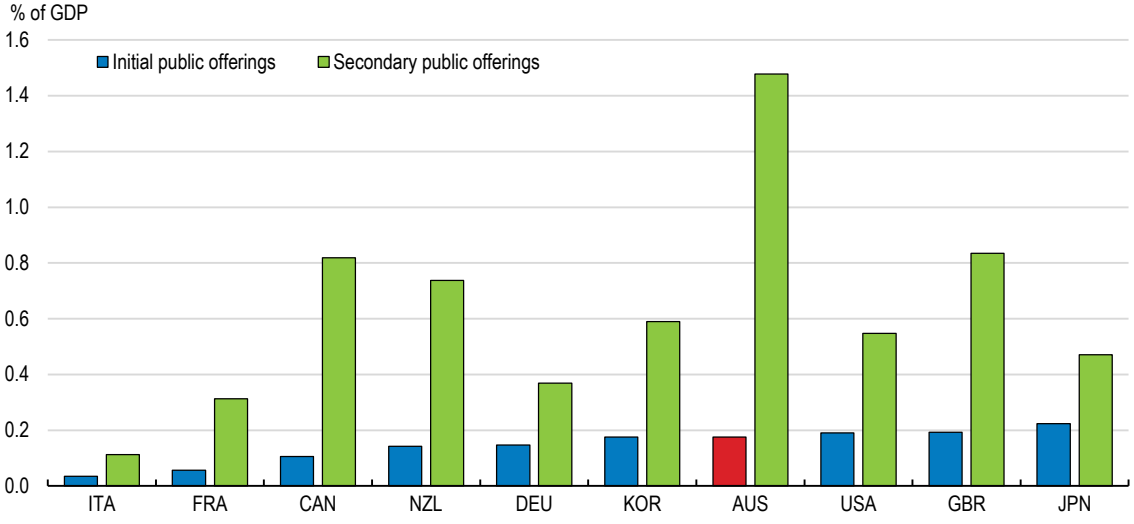
Figure 2.20. Public equity raising has been comparatively strong

Non-financial companies, 2018-20 average



Note: Countries are ordered according to size of initial public offerings.
Source: OECD Capital Market Series dataset; OECD, Economic Outlook database.

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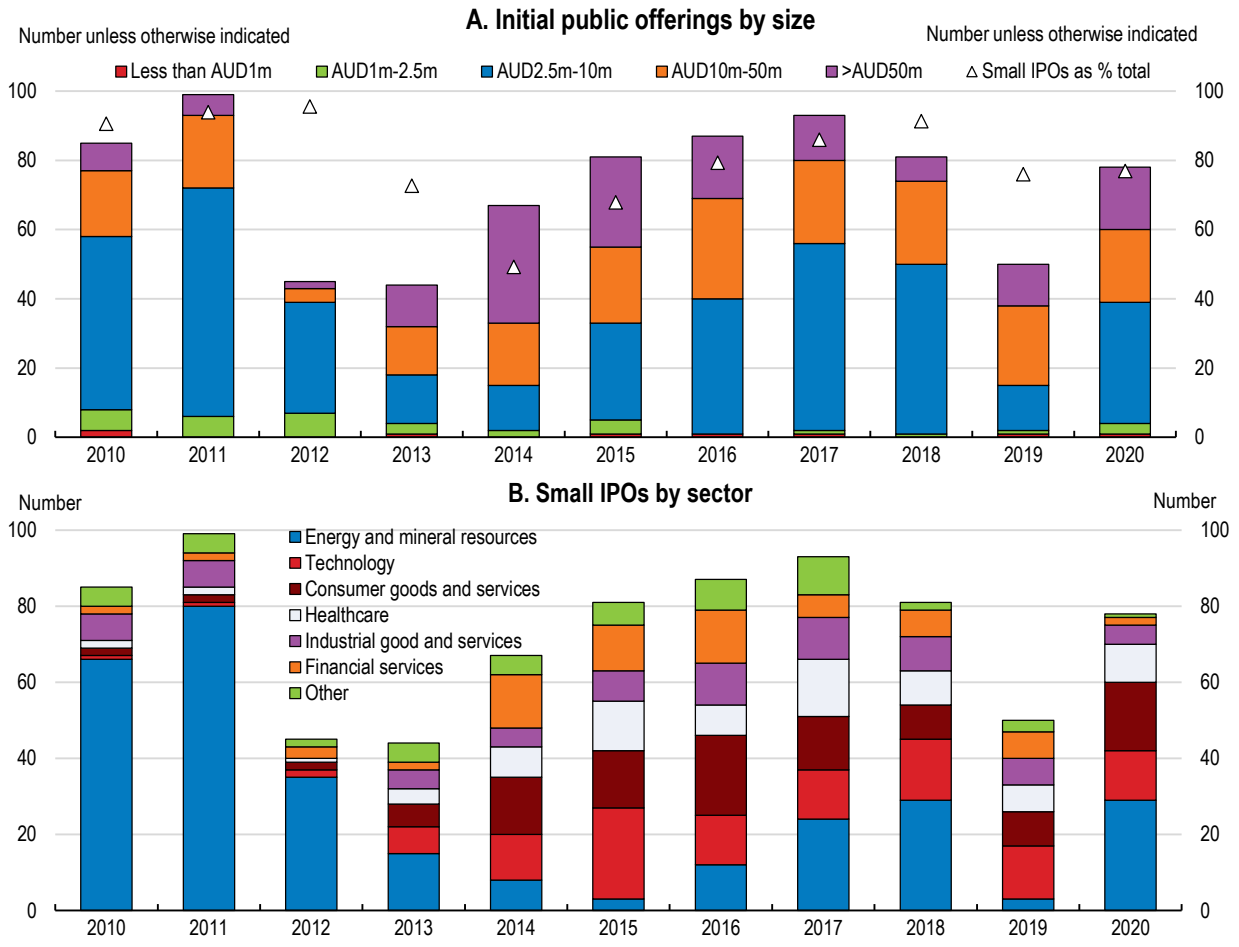
Many other OECD countries have established junior boards and growth segments in public markets to ease capital-raising for smaller firms following the 2008-09 financial crisis. They have also enhanced flexibility and proportionality in disclosure requirements (OECD, 2018c). Junior boards and growth segments typically offer more flexible listing criteria, simplified disclosure and lower costs (Nassr and Wehinger, 2016). By contrast, the ASX has a one-size-fits-all approach. However, it promotes awareness of listed smaller companies through its Equity Research Scheme that subsidises broker reports on eligible companies and a bi-annual small-to-mid caps investor conference. Older research suggests that, despite the one-size-fits-all structure, the ASX was relatively hospitable for small listings because of larger tick sizes (i.e. the minimum price change between different bid and offer prices; Weild et al., 2013). The National Stock Exchange (NSX) and Sydney Stock Exchange have simplified listing rules, including lower thresholds, to attract smaller companies. The NSX is larger but nevertheless has only around 50 listings, low liquidity (falling to an average of two trades a day in 2019 but increasing since), past governance concerns and little visibility (Dwyer and Kotey, 2015; ASIC, 2017). Consultations in 2012 and 2015 found no support for a junior board on the ASX (ASX, 2012; PC, 2015). Since then, however, the ASX has raised listing thresholds and has taken a more stringent approach to reverse takeovers (known as back-door listings), which have previously been used by small companies to list with less paperwork.

The authorities should again revisit the idea of introducing a junior board, in consultation with stakeholders such as investors, private capital and business representatives, given the spillover effects from equity markets and alternative financing options for growth prospects of start-ups and SMEs. Although listing requirements on the ASX are lower than some main exchanges in other countries, some requirements appear higher than the junior boards. Different models that have been adopted abroad should be considered. For instance, the London Stock Exchange's junior exchange (AIM) has minimal listing requirements and disclosures but requires firms to work with an approved Nominated Advisor ("Nomad") which, *inter alia*, undertakes due diligence and provides guidance (OECD, 2015a). Australia could consider following the UK, German and US approach of a growth segment in the main market, which also has easier listing rules but targets a different type of firm. A further possibility is to develop one or both of the existing exchanges that have simplified rules and better incorporate them into the overall equity ecosystem. This would require working with all stakeholders to build trust, visibility and liquidity to gain buy-in from investors.

Regulators and the ASX should also explore ways of introducing greater flexibility and proportionality in existing listing and disclosure requirements, while preserving market integrity. This should target aspects of laws and regulations that particularly affect young companies and new business models. An alternative to a specific segment is the US approach to "Emerging Growth Companies", whereby companies are allowed regulatory relief during a period of transitioning from a private to public company that can last five years (OECD, 2018c). Investors are informed in the prospectus that the company will face simplified disclosure requirements.

Figure 2.21. Small IPOs are relatively common

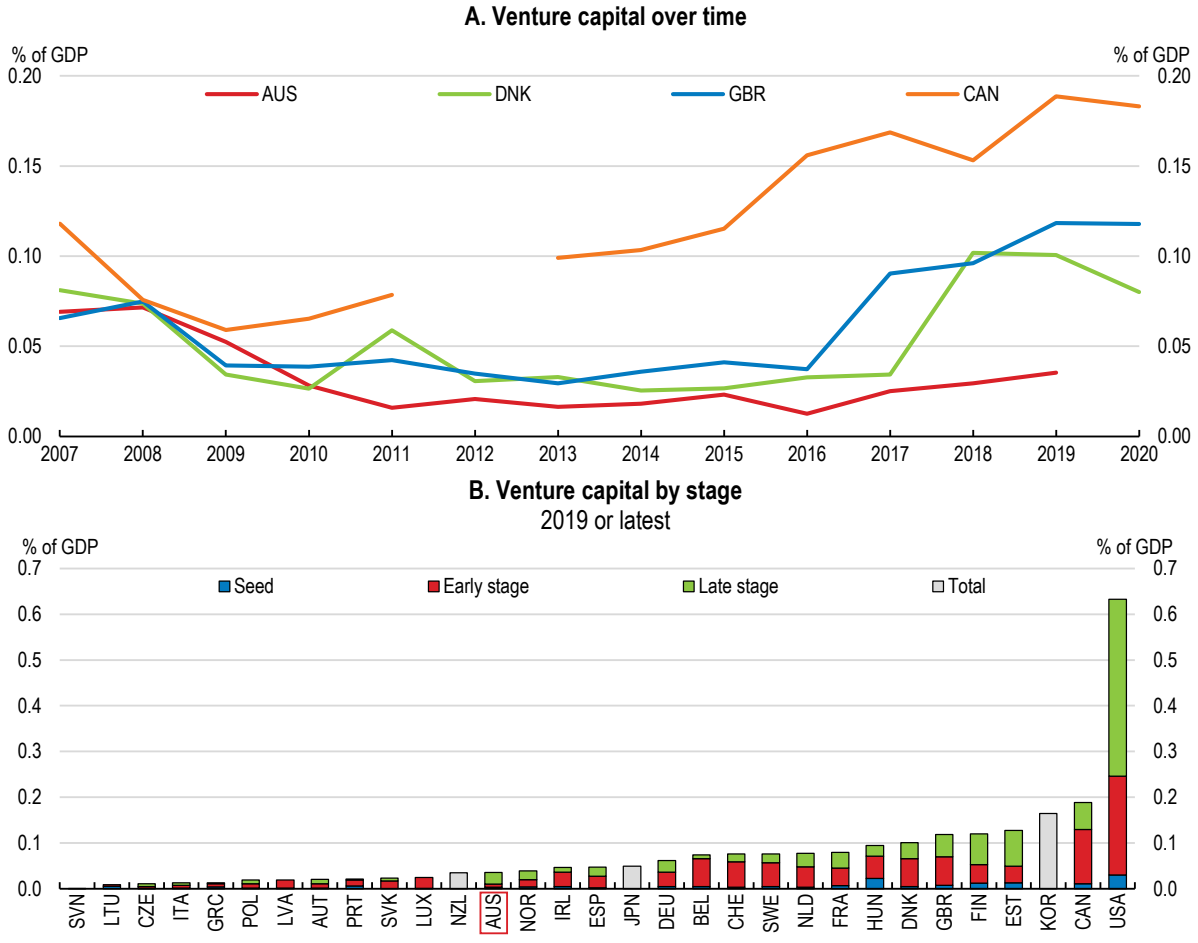


Note: Data are shown by the listing date. Small IPOs are defined here as those below AUD50 million. Real estate investment trusts, collective investments, investment holding companies and unit trusts are excluded.
Source: Refinitiv; OECD

StatLink https://stat.link/snetki

Australia's venture capital market is still recovering from the global financial crisis (Figure 2.22, Panel A). Seed and early-stage capital is especially low (Figure 2.22, Panel B). As in many OECD countries, there are tax incentives to attract capital: Early-stage Venture Capital Limited Partnerships and Venture Capital Limited Partnerships. Both provide tax benefits, including income tax exemptions on some income and gains. To avoid double taxation, the partnership does not pay tax but income and gains flow through to investors ("flow-through tax treatment"). There is also an "Early Stage Innovation Company" tax incentive that provides domestic investors in qualifying companies with a non-refundable income tax offset based on their investment and capital gains tax relief. Usage of the early-stage partnerships approximately doubled in 2016-17 after reforms made them more attractive. Most of the growth has been in investment in information, media and telecommunications, health care and services businesses. However, they are small relative to the market: at June 2020, they were associated with AUD2 billion in committed capital compared to AUD12 billion for the later stage partnerships and investments totalled AUD0.4 billion. The two incentives are currently undergoing a statutory review. The Productivity Commission has previously recommended that the Venture Capital Limited Partnerships be closed but the early-stage partnerships be continued and evaluated (PC, 2015).

Figure 2.22. Venture capital is low and has not recovered since the global financial crisis



Note: A breakdown of venture capital investment is not available for Japan, Korea or New Zealand.
Source: OECD, Venture Capital Investments database

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There are strong grounds for government support given the evidence linking venture capital with innovation and productivity growth, combined with market failures relating to a lack of information affecting young, innovative firms. In the decade since the financial crisis many OECD countries, including the United Kingdom, Canada and Denmark, have established co-investment funds to leverage private sector capital and help build a stronger early-stage venture capital market (OECD, 2019a). Co-investment may mean government funds are better disciplined by private capital. Evidence from Europe, where the market is less developed than in the United States, suggests that government co-investment can augment, or crowd in, private investment (Kraemer-Eis et al., 2016; Brander et al, 2015). Nonetheless, it should be noted that government investment in venture capital has had mixed results in many countries, often when such structures are in their infancy and the model is still being tailored to local conditions (Murray, 2021). Early-stage financing via the European Investment Fund (which manages funds-of-funds that invest in majority private-sector funds) has been found to boost firm performance (Pavlova and Signore, 2019). Government-controlled venture capital tends to be different in character, with recent OECD research suggesting it is most successful when targeting new technology-based firms linked to academic research (Dechezleprêtre and Fadic, forthcoming). In Australia, both types of funding are small; for example OECD data suggest that government venture capital funds represent just 1% of total venture capital investment, compared to the OECD median of 4%.

The government has been building the venture capital eco-system. As part of the National Innovation and Science Agenda it created two industry-specific, government-led co-investment funds: a AUD500 million Biomedical Translation Fund (AUD250 million is public money) and a AUD240 million CSIRO Innovation Fund (AUD100 million is public money). The CSIRO Innovation Fund attracted more investment than anticipated in its first year, including from superannuation funds, pointing to its potential. In 2020 the government launched the AUD540 million Australian Business Growth Fund with AUD100 million of public funds and the remainder from six banks (which receive favourable capital treatment on their investment). The fund aims to ease financing constraints for SMEs through equity investment of up to AUD15 million and up to a 49% stake. However, its focus is on SMEs with a track record, rather than riskier high-growth start-ups.

A deeper venture capital sector may be beneficial in attracting more conservative investors such as superannuation funds in the longer term. Policymakers should evaluate existing support programmes and work with stakeholders to identify potential interventions to support the development of venture capital markets. One option is for the government to complement existing mechanisms with the development of a private-led early-stage co-investment fund. Such a fund has been called for by the venture capital industry, suggesting that it would not displace private capital. Many other countries, such as Denmark and Canada, now have co-investment via funds-of-funds as part of their overall plan (Table 2.6; OECD, 2020d). Funds-of-funds provide additional diversification and further distance the government from investment decisions. However they add additional fees, thereby lowering returns. Private sector concerns about low returns and high fees were found to have slowed the implementation of Canada's Venture Capital Action Plan (OAG, 2016), highlighting the importance of developing any initiatives in conjunction with other actors in the venture capital ecosystem.

Table 2.6. Examples of government venture capital initiatives

Country	Initiative	Description
Canada	Venture Capital Action Plan	The plan was announced in 2013 with CAD400 million to reinvigorate the sector. CAD340 million was used to recapitalise four large scale private sector-led funds of funds. These funds raised CAD904 million from private investors. At December 2019 7% of commitments were seed and 50% were early venture.
Denmark	Danish Growth Fund	The Danish Growth Fund was created in 1992 but venture and growth capital has expanded dramatically since 2016. Its instruments include: direct investments, fund investments, fund-of-fund investments through Danish Growth Capital and syndication loans. The objective is to address underinvestment in innovative ventures. Danish Growth Capital is highly independent and all investments are made on private terms with private investors.

Source: OECD (2020), *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard;* Government of Canada www.ic.gc.ca/eic/site/061.nsf/eng/03129.html (accessed 6 April 2021).

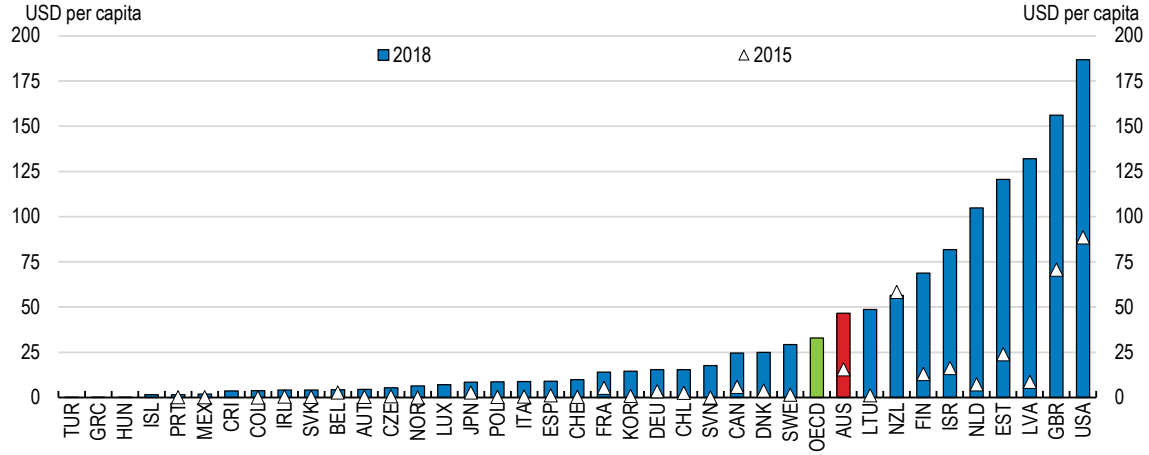
Potential barriers to investment by superannuation funds and foreign investors should be investigated. The market disruptions in 2020 and early withdrawals of superannuation risk incentivising funds to keep more money in liquid assets. Some industry participants have expressed concerns that the penalties associated with new performance benchmarks (which aim to improve fund performance through greater transparency and accountability) could unintentionally lead to more conservative strategies that replicate benchmarks. At the same time, others highlight that the new rules should result in lower superannuation fees for account holders and may improve superannuation fund performance overall (Coates, 2021). Funds that underperform their benchmark (which incorporates asset allocation) by 0.5% in two consecutive years will be closed to new members until performance improves (and labelled as underperforming). The superannuation industry has proposed a wider margin and a trial period. While steps to address underperformance are warranted, the changes should be evaluated once they have had time to come into effect, in relation to any unintended consequences that undermine the potential of superannuation as a source of patient capital as well as the net returns received by fund holders. Other potential regulatory

barriers should also be explored with industry. Complex foreign investment rules may dissuade foreign investors (Allens, 2021), who typically contribute expertise in addition to funding (Bradley et al., 2019). As such, the potential for removing barriers to their investment should be explored to further develop the venture capital eco-system. Greater transparency around returns could provide superannuation funds and foreign investors alike with greater confidence (*ibid.*).

Crowdsourcing equity is another potential source of seed or early-stage financing for start-ups. It is part of the fast-growing online alternative finance market, but is only a relatively small segment, accounting for 3% of global online alternative finance (OECD, 2020d). Australia's online alternative finance has grown rapidly, with around three-quarters representing business finance, but at AUD858 million, this was only equivalent to 1% of SME lending in 2018 (Figure 2.23; CCAF, 2020). In 2017 the government created a legal framework for "crowd-sourced funding". It provides investor protections through features such as requiring intermediaries to hold an Australian Financial Services licence and limiting annual investments by retail investors. ASIC has published guidance notes for intermediaries and companies and a template offer document. In 2020 AUD30 million was raised from 49 deals (Birchal, 2021). The typical investment since inception is small at AUD1 300 (*ibid)*. The market is still small relative to other countries. It is still early to assess the potential of crowd-funding, with factors such as exit possibilities likely to influence its success (Nassr and Wehinger, 2016). ASIC should maintain its constructive approach to ensure regulatory settings evolve appropriately over time.

Figure 2.23. Alternative finance is still in its infancy

Online alternative finance



Note: 2015 data for Austria, Belgium, Czech Republic, Denmark, Estonia, Ireland, Lithuania, Portugal, Slovakia, Slovenia and Switzerland are for credit only.
Source: Cambridge Centre for Alternative Finance (2020), The Global Alternative Finance Benchmarking Report; G. Cornelli et al. (2020), "Fintech and big tech credit: a new database", BIS Working Paper, No. 887; OECD, Population Statistics database.

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Supporting the green transition

The financial sector can directly and indirectly support a climate-resilient and sustainable recovery. Investment is needed to meet climate change mitigation commitments as well as for adaptation. In 2017 the OECD estimated that to limit warming to 2 degrees by 2050 global infrastructure investment would need to be 10% higher than the baseline (OECD, 2017b). Modelling for Australia points to significant near-term opportunities associated with meeting the limit in carbon sequestration, manufacturing and transport (IGCC, 2020). Investment is also needed for adaptation. For example, investment of up to AUD3.5 billion

(0.2% of 2020 GDP) annually may be needed for natural disaster resilience to avoid spending AUD39 billion annually on ex-post repair by 2050 (Summerhayes, 2020). But externalities associated with these investments mean that new processes, products and technology will be underdeveloped, particularly in the absence of carbon pricing. Meanwhile key climate-related risks – damaged or stranded assets, a disorderly transition, and litigation – remain. There have already been high-profile court cases involving a bank and a superannuation fund related to their disclosure and management of climate-related risks. Recent legal opinions have highlighted the growing legal responsibilities for company directors and superannuation trustees (Hutley and Davis, 2019, 2021; Hutley and Mack, 2021). With Australia's economy being the second-most carbon-intensive in the OECD, the importance of an orderly transition cannot be overstated.

Enhancing risk disclosure

Widespread early and science-based disclosure can be a powerful tool in improving the efficiency of private financial flows and supporting a smooth transition to a low-carbon and climate-resilient economy for the financial and non-financial sector alike (OECD, 2021b; OECD, 2017b; Boissinot et al., 2016). This is particularly so for Australia given the scale of the challenge and policy uncertainty documented in previous *Surveys.* The Australian equity market is comparatively carbon-emissions intensive, with half of the estimated emissions intensity from the materials sector, which is one-fifth of the S&P/ASX200 index (MSCI, 2021; Gocher et al., 2021).

Australia has robust periodic and continuous disclosure requirements for material risks under the *Corporations Act*. While disclosure of climate-related risks has been increasing under this framework, it is mixed. In 2020, 78% of the top 100 listed companies clearly acknowledged climate change as a business risk in their reporting but only 58% used the Task Force on Climate-related Financial Disclosures framework (encouraged by ASIC) and one-third of them included climate risk in their reporting (KPMG, 2020). Nonetheless, all of these figures rose significantly from 2017 and they compare fairly well against other countries (*ibid.)* However, Australia's large listed companies are lagging international peers in using scenario analysis in reporting and setting science-based carbon targets (such as consistency with the Paris Agreement; *ibid*). ASIC's 2017 survey of listed companies showed that, as in most countries, small companies lag behind larger companies considerably in including "climate change content" in annual reports (ASIC, 2018a). There is also dispersion within the financial sector: a 2018 survey by APRA revealed that a majority – but, not all – banks considered climate-related financial risks as part of their risk management frameworks (APRA, 2019). Varying take-up of disclosure hampers financial institutions' and investors' ability to compare risks across businesses and sectors.

A key element in achieving greater and more effective disclosure will be consistent and comparable international standards and quality data to support such disclosure. Australian regulators are active in international working groups and aim to ensure that Australian developments in this area are in line with international standards. Over 2016-19 Australian regulators strengthened calls for better disclosure through the existing legal framework, notably the risk management and disclosure requirements for listed companies under the *Corporations Act*, regulatory requirements for prospectuses, and through prudential reporting for supervised financial institutions. During 2019 they strengthened their expectations, signalling that the Task Force on Climate-related Financial Disclosures recommendations are a useful way of reporting, and that they would be increasing scrutiny over companies within their remit. ASIC has published high-level guidelines for company directors. In response to requests from industry. APRA is preparing a prudential practice guide covering governance, strategy, risk management, scenario analysis and disclosure of climate-related financial risk. APRA released a draft for consultation and plans to finalise it by end 2021. To fill data gaps and build capability, APRA is also co-ordinating a climate vulnerability assessment with the largest banks, RBA and ASIC. The exercise aims to leverage international experience and banks' experience to date. It includes scenarios and quantification of physical and transition risks on

bank balance sheets and qualitative assessments of market, liquidity and operational risks (APRA, 2021, 2020d). This could accelerate the take-up of scenario analysis in disclosures by companies.

Recognising growing risks and international momentum, the financial services industry formed two initiatives to co-ordinate its approach to measuring and reporting climate risks. Institutions created the "Climate Measurement Standards Initiative" to establish how to interpret the Task Force on Climate-related Financial Disclosures' recommendations in an Australian context and produce voluntary standards that will lead to consistent and comparable reporting between insurers, banks and asset owners (CSMI, 2020). In 2020 the Initiative published draft scientific scenario specifications and financial disclosure guidelines for scenario analysis of physical risks. Transition risks, which could be sizeable given Australia's economic structure, are on the agenda but not imminent. The second initiative is the Australian Sustainable Finance Initiative, created in recognition of the role of the financial system in: managing shocks like climate change; improving risk management and financial performance by considering ESG risks and opportunities; aligning with consumer expectations; and enhancing the financial system's competitiveness (Herd et al., 2018). In 2020 the Initiative published a Sustainable Finance Roadmap, drawing on technical advice from experts (ASFI, 2020).

Financial institutions have also taken concrete action to reduce their exposures to climate-related risks, partly due to growing pressure from shareholders and investors. For instance, nine superannuation funds managing a combined AUD500 billion (EUR 310 billion) in funds have divested, or begun divesting in one case, from thermal coal mining companies (Market Forces, 2021). The largest banks have announced plans to limit their exposures to fossil-fuel intensive companies, to varying degrees, through a combination of caps on new customers' exposures, divestments and working with existing customers to reduce their emissions. For instance, each intends to have no exposure to thermal coal mining by 2030 or 2035. In 2019 the four largest banks lent a combined AUD7.6 billion (EUR4.7 billion) to fossil fuel projects (Market Forces, 2020). There is also a risk that market valuations move faster than assumed. While the transition plans can in principle smooth the adjustment path for affected borrowers and the economy, assessing and monitoring these plans will be a challenge for supervisors and banks alike.

Australia should prepare a roadmap for improving the consistency, comparability and quality of reporting of climate-related disclosures within its legal framework. Disclosures should be aligned with recommendations of the Task Force on Climate-related Financial Disclosures (Box 2.5). This would provide certainty to the private sector and assure more uniform progress. Such disclosures can also include opportunities, as well as risks. Given the progress already made and growing legal risks, it should cover listed companies and the financial sector. It could also cover large unlisted companies as in the United Kingdom. Such a roadmap should be proportionate in its requirements to avoid overburdening newly-listed and small companies. Disclosure by smaller institutions and non-bank lenders should be proportionate but assure a level-playing field. A roadmap would help co-ordinate efforts of all stakeholders to improve the quality of disclosure, including that it is verifiable against science-based targets as recommended in OECD (2021b). Accordingly, regulators should work with stakeholders to develop capacity and understanding. Meaningful disclosure will assist banks and fund managers to better manage their own transition risk, facilitate a better allocation of capital and reduce the risk of a disorderly transition. Sharing data and models could alleviate some of the compliance burden. The Reserve Bank of Australia could also consider reporting on its own climate-related risks as the Bank of England recently did.

Box 2.5. The Task Force on Climate-related Financial Disclosures

The Task Force was established by the Financial Stability Board "to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders". In 2017 it published 11 voluntary recommendations grouped into four areas:

- **Governance:** Disclose the company's governance around climate-related risks and opportunities.
- **Strategy**: Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material
- **Risk management**: Disclose how the organisation identifies, assesses, and manages climate-related risks.
- **Metrics and targets**: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

There is supplementary guidance for specific sectors, including banks, insurance companies, and asset managers.

An increasing number of companies have been supporting the Task Force and adopting its recommendations, as are governments. For instance:

- **New Zealand's** government has published draft legislation to introduce mandatory Task Force-aligned disclosure of climate-related risks for banks, investment schemes, insurers, and government-owned financial institutions with assets or assets under management above NZD1 billion and all companies with equity or debt listed on the national stock exchange.
- The **United Kingdom** has published a roadmap towards mandatory, Task Force-aligned disclosures across the non-financial and financial sectors of the economy by 2025.
- The **Swiss** government announced its support for the Task Force and its intention to make the recommendations mandatory for companies across all sectors of the economy. Disclosure will be mandatory for large banks and insurers from July 2022 and large Swiss firms from 2024.
- The **European Commission's** Guidelines on Reporting Climate-related Information for companies incorporate the Task Force recommendations.
- France's Energy and Climate law has required non-bank financial institutions to disclose climate-related risks in line with Task Force recommendations since 2016. Listed companies are also subject to mandatory carbon-related disclosures. From 2022, information related to biodiversity-related risks must be disclosed.

In addition, in March 2021 the International Financial Reporting Standards Foundation announced that it will establish a new board for setting sustainability reporting standards, building on existing initiatives such as the Task Force's framework.

In Australia:

- The Australian Sustainable Finance Initiative recommended that financial institutions with revenue above AUD100 million and listed companies, beginning with the 300 largest companies, be required to adopt Task Force-aligned reporting on an "if not, why not" basis by 2023.
- In 2020 the ASX Governing Council encouraged listed companies to use the Task Force framework and recommendations for evaluating and reporting on climate risks.

- In 2021 three investor groups released a proposed plan to expand mandatory financial disclosure on climate risks. Coverage would begin with ASX300 and large unlisted businesses, and extend to all major financial institutions and companies by 2024.

Source: Australian Sustainable Finance Initiative (2020), *Australian Sustainable Finance Roadmap: a Plan for Aligning Australia's Financial System with a Sustainable, Resilient and Prosperous Future for all Australians;* TCFD Knowledge Hub, https://live-tcfdhub.pantheonsite.io/.

The financial stability risks associated with Australia's carbon-intensive economy have been a key focus of regulators. The forthcoming vulnerability tests will help financial institutions and regulators alike to better understand risks and standardise measurement. They are informed by the scenarios developed by the Network for Greening the Financial System, which the RBA joined in 2018. The assessments will cover physical risks, including extreme weather events, and transition risks caused by climate change under two scenarios. These will apply to banks' residential mortgage and business lending portfolios. APRA is co-ordinating with other regulators, with input from the Commonwealth Scientific and Industrial Research Organisation and Bureau of Meteorology. The exercise is expected to be completed during 2021, with aggregated results published in 2022. It may then be extended to other banks, insurers and superannuation funds although there is no timeline yet. Broadening future exercises will help institutions and regulators alike to better understand exposures and make a swifter, smoother transition. In future stress testing, a dynamic approach could be implemented to allow for opportunities, such as expected valuation increases stemming from renewable energy (OECD, 2021b).

Looking further ahead, banks and regulators should prepare for the possibility that international standards require climate-related risks to be incorporated in the measurement of capital adequacy. There is growing evidence that climate-related risks affect credit risk, which would therefore affect capital requirements (BCBS, 2021). The Basel Committee on Banking Supervision has highlighted that climate risks can also affect market risk, liquidity risk and operational risk and called for more research (BCBS, 2021). Scenario analysis is one way of generating data to help assess these risks. Indeed, the European Central Bank has indicated that climate scenario analysis and stress tests should explicitly feed into capital adequacy calculations and other central banks may follow (OECD, 2021b).

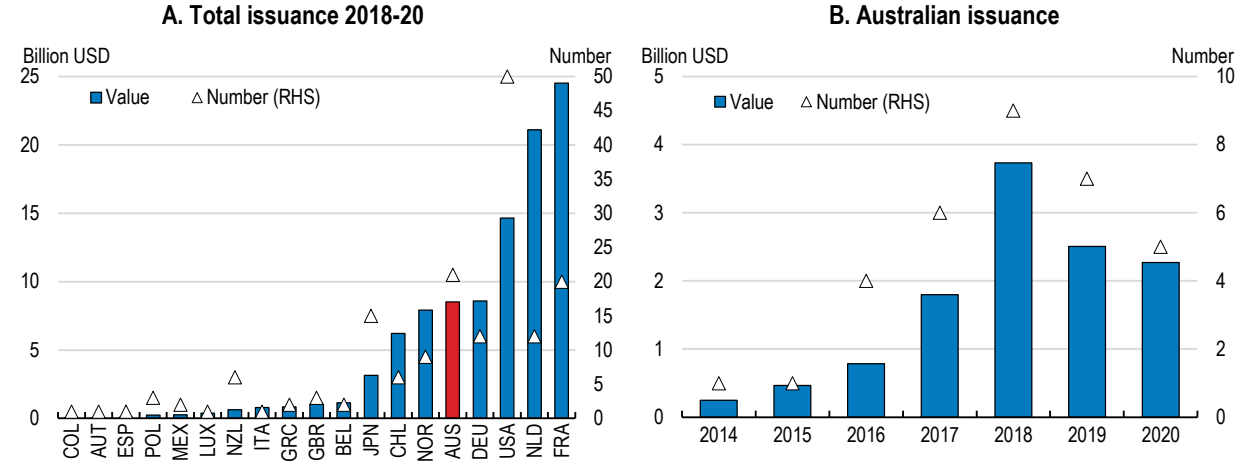
Funding the green transition

To address market failures related to the energy transition directly, the Clean Energy Finance Corporation (Australia's green bank) and the Australian Renewable Energy Agency (a fund that makes grants for early-stage projects) support finance for projects related to energy efficiency and new technologies related to reduced emissions and renewables (see Chapter 1). The Clean Energy Finance Corporation is especially noteworthy as it is one of only a handful of national green banks in OECD countries (OECD, 2019b). A recent statutory review found that it had leveraged AUD1.80 to AUD2.90 for every dollar invested since inception (Deloitte, 2018). The review also highlighted that the Corporation had helped develop debt and equity markets for clean energy investments, which had been a barrier to private investment. In 2020 a new investment mandate came into effect prescribing that the Corporation also invest in advancing hydrogen.

The government can also facilitate the financial flows needed for an orderly transition by strengthening the taxonomies and labelling of funds and financial instruments, and supporting the development of transition-related instruments and tools, such as benchmarks that can be used to create indices (OECD, 2021b). The OECD's *2020 Business and Finance Outlook* shows that ESG-scored investment is growing rapidly but that inconsistent ratings methodologies undermine this effort (OECD, 2020f). In Australia "responsible investment" funds that primarily integrate ESG factors had AUD1 trillion (EUR 620 billion) in funds under management at June 2019, up 47% from 2018 (Boele and Bayes, 2020). In 2020 the S&P/ASX200 ESG Index was created. There are now several exchange-traded funds with ESG or environmental themes. Various definitions and measurement of terms such as green and sustainable and apparent

inconsistencies in ESG ratings highlighted in OECD (2020g) create uncertainty and risks for investors. Likewise, the Australian market for green bonds (as well as other sustainability-linked instruments) is growing quickly with some issues oversubscribed (OECD, 2019b; Figure 2.24). But again there are multiple sources of validation and certification that hinder such instruments as a tool to improve efficiency of financing (OECD, 2020f).

Figure 2.24. Green bonds have grown rapidly



Note: Seven confidential transactions are not shown.
Source: Climate Bonds Initiative.

StatLink https://stat.link/cedyhx

Clearer definitions and labelling would enhance incentives and avoid greenwashing. Australian authorities should continue to work closely with international bodies to develop consistent global taxonomies for sustainable finance, including through participation in the G20 Sustainable Finance Working Group. In line with the Australian Sustainable Finance Roadmap (ASFI, 2020), Australia should form an expert group, with industry participants, to develop a plan to implement a taxonomy of sustainable finance in Australia. Japan, the European Union, United Kingdom and Canada all used expert groups in a similar context. The taxonomy should assess whether a companies' activities are "green" or "brown" as well as the extent to which it is undertaking verifiable actions to transition to low-carbon activities (OECD, 2021b). The expert group could also develop climate transition benchmarks that can be used to create reliable equity and debt indices, as in the European Union (Box 2.6).

More immediately, managed funds should also be required to regularly disclose their portfolios to assist investors and allow evaluation of claims related to a fund's investment strategy. Disclosure currently lags other developed financial markets (Morningstar, 2020). The requirement for superannuation funds to disclose their holdings semi-annually has been postponed repeatedly, with implementation now deferred to 31 December 2021. It should be implemented and broadened to other types of funds. APRA is currently updating its prudential standard and should take this opportunity to establish minimum expectations on ESG risk management and, for banks, due diligence in lending transactions in line with the OECD and UNEP standards.

Box 2.6. The EU climate benchmarks

In 2019 the European Commission implemented two climate benchmarks based on the EU Technical Expert Group on Sustainable Finance:

(i) an "EU Climate Transition Benchmark": with underlying assets that ensure the benchmark is on a decarbonisation trajectory; and

(ii) an "EU Paris-Aligned Benchmark": with underlying assets ensuring that the portfolio's greenhouse gas emissions are aligned with the Paris Climate Agreement goals.

In both cases benchmarks using these labels must be constructed in accordance with minimum standards. For the Transition Benchmark the minimum standards are to:

- Reduce the greenhouse gas emissions intensity of the index by 7% annually, using scope 1, 2, and 3 emissions for each company from inception. This aligns the index with carbon neutrality by 2050.
- Overweight companies with publicly disclosed science-based targets that meet specified thresholds.
- Maintain or improve the green-to-brown revenue share within the index over time.
- The Paris-Aligned Benchmark has stronger minimum standards for decarbonisation and the green-to-brown revenue shares over time.

Source: Adapted from OECD (2021), *Financial Markets and Climate Transition, forthcoming*; EU Technical Expert Group on Sustainable Finance (2019), *TEG Final Report on Climate Benchmarks and Benchmarks' ESG Disclosures*.

Maintaining well-functioning insurance markets amid more frequent climate-related natural disasters

The increasing prevalence of severe climate-related natural disasters will require adaptation to resulting loss and damages (Wolfrom and Yokoi-Arai, 2016). Australia's recent Royal Commission into Natural Disaster Arrangements highlighted that more frequent disaster events may reduce insurability or affordability of insurance coverage, thereby exacerbating the insurance gap that hampers the ability of economies to recover from natural disasters (Royal Commission into Natural Disaster Arrangements, 2020). Climate change is also complicating risk assessment for the insurance and financial services sector, as past experience is becoming less of a guide to future risks.

There are various public policy options for addressing constraints to the availability and affordability of insurance coverage for disaster risks. Effective public investment in resilience in disaster-prone areas will be important. In Australia, the government announced in the 2021-22 Budget investment of AUD209.7 million to establish the Australian Climate Service. This institution will bring together information and expertise on how to anticipate, manage and adapt to natural disasters. In addition, a National Recovery and Resilience Agency has been set up to co-ordinate resilience to, and recovery from, hazards and disasters, with a strong presence in local communities. The government has also announced AUD615.5 million for the Preparing Australia Program to provide grants for projects that support public and private disaster risk reduction and resilience.

Public support for coverage of disaster risks by private insurance markets may also be increasingly needed. To improve the accessibility and affordability of insurance in cyclone-prone areas, the Australian government also announced in the 2021-22 Budget that it would establish a reinsurance (i.e. insurance for insurers) pool covering the risk of property damage caused by cyclones and cyclone-related flood damage. By decreasing the cost of reinsurance, it is intended that the establishment of the pool will lower insurance premiums.

Strengthening households' resilience and mitigating inequality

Despite rising household indebtedness, measures of severe financial stress had been declining in the lead-up to the pandemic. Nevertheless, some types of households, including households qualifying for unemployment benefits and disability payments, had experienced greater rates of stress (Phillips and Narayanan, 2021). During 2020, pressures on household finances were alleviated by the abovementioned government income support and banks' loan repayment deferrals, as well as rent freezes. Consequently, financial stress did not rise as much as feared during 2020 and households accumulated savings buffers (RBA, 2021). Liquidity buffers for mortgage holders and renters began declining in late 2020 but remained elevated into 2021 (RBA 2021). Personal insolvencies have not yet increased, nor have debt write-offs, but they are expected to do so as households deplete their buffers following the withdrawal of some policy support for firms and individuals and the reimposition of COVID-19 restrictions. The pandemic has also accelerated the digital transformation of financial services, generating benefits and risks for consumers (OECD, 2020g, 2018d). Consumer protections combined with access to counselling services and targeted financial education can contribute to ensuring that the recovery does not worsen financial inequality.

Ensuring consumer credit protection is appropriate

Effective financial consumer protection laws help offset market failures such as information asymmetries and behavioural biases that can lead to over-indebtedness and other financial problems. These failures form the backdrop to the OECD *Recommendation on Consumer Protection in the Field of Consumer Credit*. Responsible business conduct of financial services providers and intermediaries grew in prominence globally after the 2008/09 financial crisis. In Australia various reviews into inappropriate lending and misconduct culminated in the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry, which released its findings in 2019 (Table 2.2; Annex 2.A). The Royal Commission's findings were wide-ranging, extending beyond banking to financial advice, insurance and superannuation. In relation to credit, it highlighted a range of breaches of responsible lending principles, poorly designed incentives and conflicts of interest that led to consumers' over-indebtedness and poor treatment by lenders (Annex Table 2.A.1).

The government released its response to the Royal Commission in February 2019, committing to act on all 76 recommendations. The authorities consider that of the 54 recommendations directed to government, 39 have so far been legislated or otherwise completed, though some have been implemented in a modified form. Legislation to implement a further recommendation is before the Parliament and another nine have undergone public consultation, including the release of draft legislation. The government allocated extra funding to regulators and passed legislation to strengthen their powers and increase the penalties available to them. While the government has made significant progress in implementing the reforms, several recommendations have not yet been addressed. These include removing an exemption from the National Consumer Credit Protection Act for retailers selling loans to consumers at the point of sale, which the government initially agreed to (Annex Table 2.A.1). Changes to mortgage brokers' commissions and regulation are less far-reaching than recommended. A national scheme for mediating farm debt is also outstanding, with the Commonwealth Government relying on the States to change legislation. The authorities should finalise the implementation of the outstanding reforms.

The government is currently undertaking reforms to the *Consumer Credit Act*. These involve replacing responsible lending obligations for most forms of consumer credit that are in the Consumer Credit Act with regulations overseen by APRA and ASIC. In doing so, extensive guidance accompanying the application of the obligations in the Act will be eliminated. These changes aim to support the flow of credit by ensuring that strong consumer protections do not come with an undue compliance burden for borrowers and lenders. Responsible lending obligations in the Act would continue to apply to consumer leases and small amount credit contracts ("payday lending"). If passed, APRA will continue to oversee bank lending standards, which will include an additional requirement that lenders should ensure borrowers can repay the loan without substantial hardship. ASIC will enforce a similar standard for non-bank lenders as it relates to the credit

assessment and approval process. Consumer groups and academics have expressed a number of concerns, including that APRA may not have sufficient expertise for consumer protection responsibilities and that too much responsibility shifts to borrowers (Bant et al., 2021; Consumer Action Law Centre, 2021; Davis, 2020). ASIC believes that the current obligations provide credit providers and intermediaries with flexibility in how they meet the requirements (ASIC, 2021a). If passed, it will be critical that the impacts of the changes are reviewed once they have been in operation for some time to ensure that they increase regulatory certainty and reduce compliance burdens while maintaining strong consumer protections, particularly in the current low-interest-rate environment which incentivises lending.

On the other hand, new "design and distribution obligations" accompanied by product intervention powers will strengthen consumer credit protections (as well as for other financial products, including superannuation and insurance). Issuers will be required to take into account their target consumers' needs, such as their stage of life and financial situation, when designing, marketing and distributing products. The changes will come into effect on 5 October 2021. They mark an important shift from the reliance on disclosure in combination with financial advice and financial literacy, recognising that more information does not necessarily lead to informed consumers or better outcomes (ASIC/AFM, 2019). The obligations follow the United Kingdom, Netherlands and European Union. These do not replace responsible lending because they apply at the product level but they do strengthen consumer protections. Because this is a principles-based approach and allows for proportionality, its enforcement will determine the impacts on consumer outcomes, compliance burdens and industry structure.

Small-amount credit contracts, a form of payday lending, and consumer leases will be more closely regulated recognising that they are high-cost forms of credit that tend to be used by vulnerable individuals. While payday lending can in principle increase financial inclusion for some consumers, it can add to risks of over-indebtedness and financial exclusion (OECD, 2019c). Late or missed payments damage the borrower's credit record. Debt can also spiral: survey data of borrowers' experiences suggest that 15% of borrowers will fall into a debt spiral (SDTA, 2019). The effective interest rate of a 12-month consumer lease could be 80% to over 200% depending on the type of lease provider and 112% on loans from a payday lender for a 12-month loan (ASIC, 2018b). The high cost of consumer leases reflects ineffective price competition rather than the risk of default (*ibid.*). Moreover, the gap with alternative forms of credit suggests that consumers are unaware of cheaper credit or unable to secure it. Digitalisation has increased accessibility of payday loans, with the share originated online rising to 86% in 2019 from 35% in 2014 (SDTA, 2019).

The combination of responsible lending obligations and design and distribution obligations is expected to strengthen consumer protections for consumer leases and small-amount credit contracts. The proposed amendments to the Consumer Credit Act would also prohibit some forms of unsolicited sales, limit the total cost of consumer leases (payday loans are subject to a cap), cap the share of income an individual can pay for these products at 20% for each product (with a 10% cap for customers receiving half of their income from social security benefits), and introduce additional disclosure requirements to assist customers in understanding the contract. While welcome, the new protections will be less stringent than what was recommended by an independent review of these products in 2016, given concerns over the viability of smaller lenders if fully adopted. For instance, that review recommended capping payments at 10% of income in all instances. The overall cap would include additional fees and charges, adding to the effective interest rate and incentivising up-selling (SDTA, 2021).Unlike most other OECD countries, there is no cooling-off period allowing a consumer to change their mind without penalty.

The proposed consumer credit reforms will also remove responsible lending obligations for credit cards from the Act and replace them with the strengthened lending standard overseen by APRA. Credit cards have historically been linked to financial distress for some households, with high interest rates when balances are not repaid (17% in mid 2021) (ASIC, 2018c). Assuming that the proposed reforms are passed, the impact of the changes across products should be closely monitored, especially regarding high-cost credit, and additional protections introduced if it is evident that consumer protections are insufficiently strong.

Raising access to, and awareness of, earlier interventions and alternatives to payday lending could improve outcomes for financially stressed individuals. Awareness of more affordable credit and free financial counselling services is too low. An advertising campaign launched in April 2021 by the National Debt Helpline was timely, given the end of several temporary forms of support, and a step in the right direction. Before the pandemic, just three in five people who sought assistance received financial counselling (Sylvan, 2019). Adequately resourcing these services during the recovery should be a priority. Affordable credit programmes, such as the No Interest Loans Schemes, should also be expanded and funding made more predictable. Together this could prevent vulnerable consumers, who are less likely to have the capability to make good financial decisions, turning to more expensive inefficient options. The 2019 review of financial counselling services also highlighted the need for consistent data collection and more analysis and co-ordination (Sylvan, 2019). Under newly enacted consumer credit reforms, debt management firms will be regulated more closely to address concerns of ASIC and consumer representatives, including that high fees for services such as debt negotiation can leave consumers worse off (ASIC, 2018b). ASIC should actively enforce these regulations. Narrowing gaps in financial literacy and capability, discussed below, would better equip those navigating complex decisions.

The Royal Commission also highlighted cases of inappropriate and conflicted financial advice associated with lending to self-managed superannuation funds, which are allowed to borrow for investment purposes using limited recourse borrowing arrangements. Almost 10% of self-managed superannuation funds do so, representing around 5% of funds' assets on average (CFR/ATO, 2019). Housing has been the most common asset acquired (61% of funds and 49% of assets by value), followed by non-residential real estate (46% by value), whereas equity investments were small (*ibid*). Although it is not a systemic issue, it poses a growing risk to individuals' retirement savings as loans have limited recourse but often have a personal guarantee. Funds that hold these assets typically have low balances (AUD200 000-AUD500 000). And for that group, around 85% of assets are held under these borrowing arrangements, raising concerns about asset concentration. While major banks withdrew from this market, less-regulated non-bank lenders have become more active (AFR, 2021). These risks could be mitigated by preventing funds from borrowing as recommended in Australia's *Financial System Inquiry* (Murray et al., 2014).

The digitalisation of financial services and accompanying innovation also entails regulatory challenges. For instance, there is a trade-off between maintaining a level-playing field and preventing regulatory arbitrage while providing a hospitable environment for innovation and new entrants. Most prominently, these challenges have been highlighted by rapid growth and development in "buy now, pay later" services. These are generally not treated as consumer credit in Australia (due to factors such as the fee structure or term of the credit) but are subject to broader consumer protection. However, amounts can be comparable to credit cards: for example, buy-now-pay later is available for healthcare costs with a limit of AUD10 000 (ABC, 2021). Research by ASIC showed rapid growth in products, providers and take-up (ASIC, 2020a). In June 2020, transactions were equivalent to 4.2% of personal credit and charge card transactions, up from 2.5% a year earlier. One-fifth of customers surveyed by ASIC in 2019 had missed payments during the previous 12 months. These were disproportionately aged 18-24 years relative to the distribution of transactions. Of further concern is that one-fifth of customers cut back on or went without essentials to make payments on time and 15% took out an additional loan to do so.

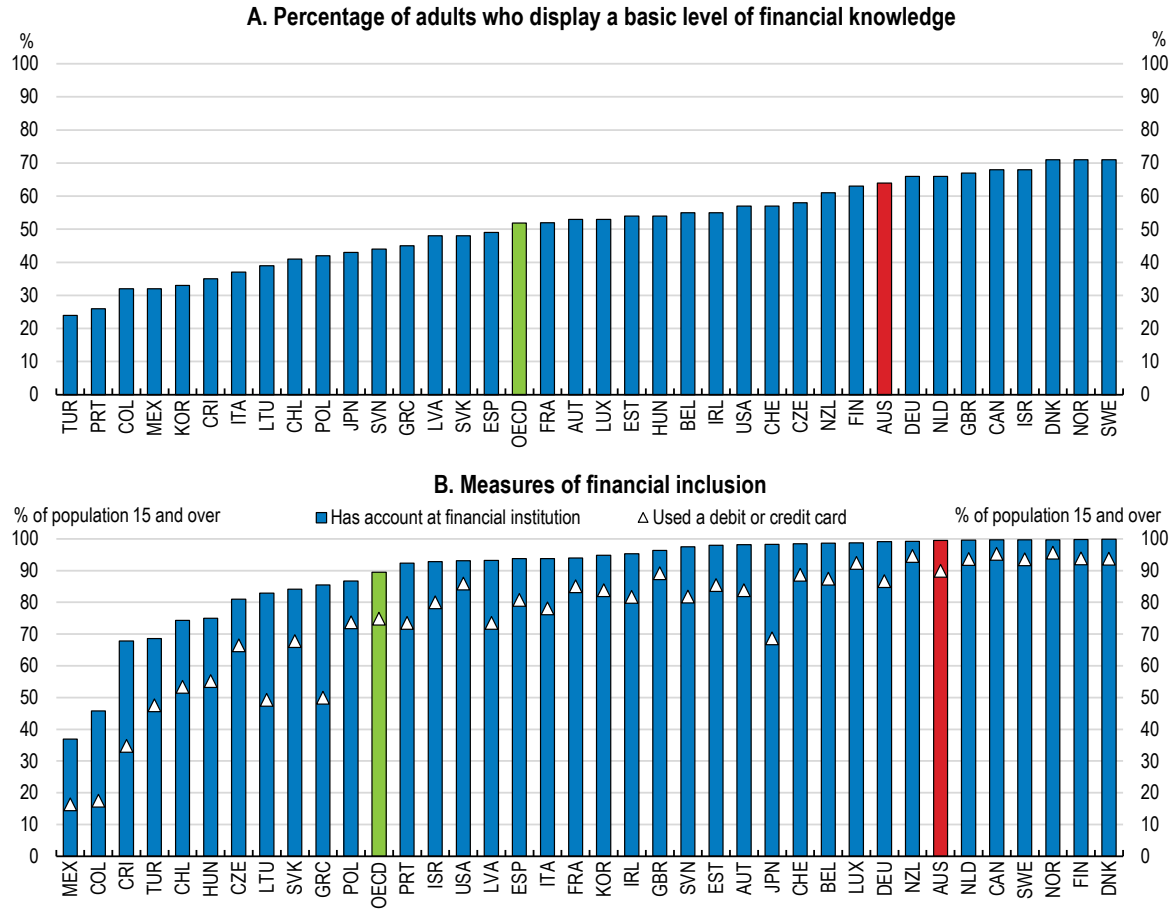
In response to pressure for regulation, the buy-now-pay-later industry has published a voluntary code of practice that includes additional checks (though not always with credit bureaus) and provides consumers access to an external dispute resolution mechanism via the financial services ombudsman. The industry is subject to ASIC's product intervention powers and, from October 2021, to the new design and distribution obligations. ASIC has signalled that it will watch closely how issuers and distributors adhere to their design and distribution obligations and will intervene if a product is significantly harming consumers (or likely to). The new and digitalised nature of these firms presents an opportunity to find regtech solutions to enhance monitoring and ease reporting burdens. Nevertheless, regulatory differences with other credit products will remain. For instance, providers of credit up to AUD15 000 do not need to perform a credit check, which also means that other lenders may not be aware of a borrower's repayment difficulties. By comparison, the United Kingdom is bringing buy now, pay later under the Financial Conduct Authority's responsibility in a proportional way, partly to ensure consistent outcomes across users of substitutable credit products. Given the rapid growth in the industry, regulatory differences with other credit providers should be closed,

for instance by regulating such products as consumer credit under *the National Consumer Credit Protection Act 2009*. This would strengthen consumer protections and ensure a level playing field with other more regulated forms of credit.

Narrowing gaps in financial literacy and inclusion

Even with stronger consumer protections, financial literacy will be an important determinant of financial inclusion and well-being. The empirical research shows that financial literacy affects economic decision-making, including savings behaviour and debt management (Lusardi and Mitchell, 2014; Lusardi and Tufano, 2015). Overall, measures of financial literacy and inclusion are comparatively high in Australia (Figure 2.25). Nevertheless, a large share of survey respondents – 36% – did not even demonstrate a basic level of financial knowledge. Data from the HILDA Survey show that financial literacy levels are uneven: controlling for other characteristics, being a woman, young, born in a non-English-speaking country, Indigenous and not completing high school are associated with lower levels of knowledge (Figure 2.26). The data also show that higher levels of financial knowledge are associated with better financial behaviours such as credit card repayment, seeking to understand financial contracts, setting long-term financial goals and saving. With the digitalisation of finance, digital access and knowledge will be increasingly important. Again, overall access is high but digital inclusion, including measures of ability, is lower for less educated, older, disabled and Indigenous Australians as well as those outside the labour force (Barraket et al., 2020).

Figure 2.25. Overall levels of financial knowledge and inclusion compare well



Note: The S&P Global Financial Literacy Survey measures financial knowledge based on four concepts: risk diversification, inflation, numeracy, and interest compounding. A person is defined as financially literate if they correctly answer three out of four topics.
Source: Klapper, L. et al. (2019), *Financial Literacy Around the World: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey*, Global Financial Literacy Excellence Centre; World Bank, G20 Financial Inclusion Indicators Database.

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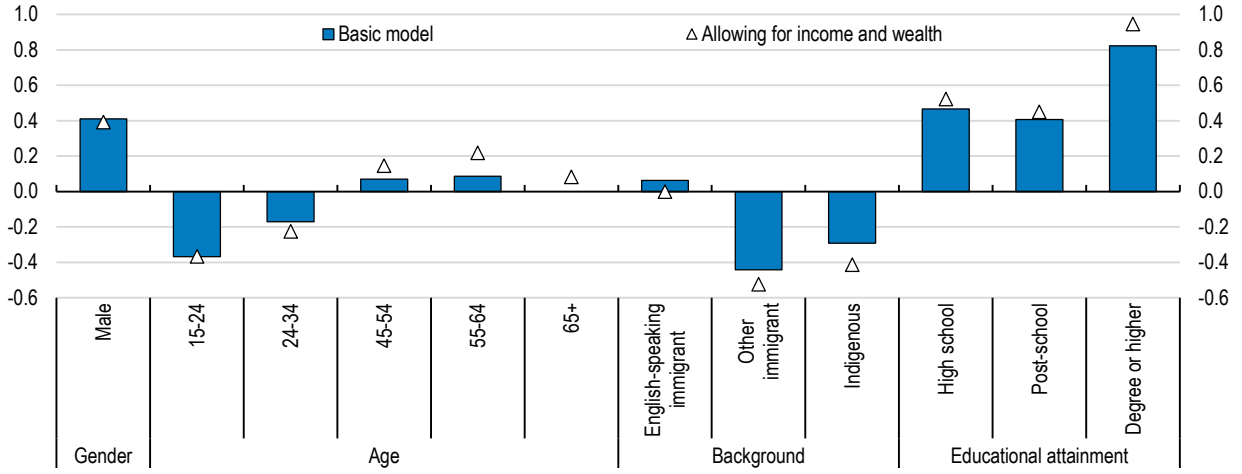
Figure 2.26. Financial knowledge is strongly related to demographic characteristics

Estimated regression coefficient on variable shown



Note: Coefficients are from two regression models. The dependent variable is the number of correct responses to five financial knowledge questions. The basic model includes gender, age, place of birth and Indigenous status, relationship in household, educational attainment, region, labour force status and a constant. The second model is identical but includes income and wealth. In the categories shown, the reference groups are: female, 35-44 year-olds, Australian-born non-Indigenous, educated to less than high school.

Source: Wilkins, R. "Financial literacy and attitudes to finances", Chapter 9 in R. Wilkins and I. Lass (2018), *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 16*, Melbourne Institute: Applied Economic & Social Research, Melbourne.

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Australia has had a national financial literacy strategy since 2011 with financial education in schools at its core. It has been a leader in recognising the important influence of personal circumstances on financial decision-making (OECD, 2015b). In the third strategy in 2018, literacy was broadened to "capability": "being able to talk about money, to make informed decisions about money and to feel financially secure". However, unlike the previous strategy, the current published strategy is a high-level document and is not supported by measurable targets or details of implementation, monitoring and evaluation. Since late 2020, the strategy has been led by Treasury, which is in the process of revising it and plans to build on the monitoring and evaluation framework that ASIC began.

Delivery of financial capability programmes is decentralised. The Australian financial capability community comprises government departments and agencies, educational institutions and organisations, not-for-profits and firms that undertake initiatives aligned with the strategy. ASIC is responsible for three key elements: the Moneysmart website, which provides calculators and other resources; financial education support materials for schools; and provision of consumer education via the Indigenous Outreach Program. The Moneysmart website is an example of best practice, incorporating behavioural insights and is a hub of easily accessible information, particularly during the pandemic. Almost half of all Australians accessed the website in 2019-20 (ASIC, 2021b). ASIC also commissioned the Financial Attitudes and Behaviour Tracker annually from 2014-2018. The Tracker was used to inform programmes and initiatives in conjunction with other inputs such as the Financial Wellbeing Survey of Adults in Australia commissioned every three years by a commercial bank. The activities of other members of the financial capability community vary widely in scale and content.

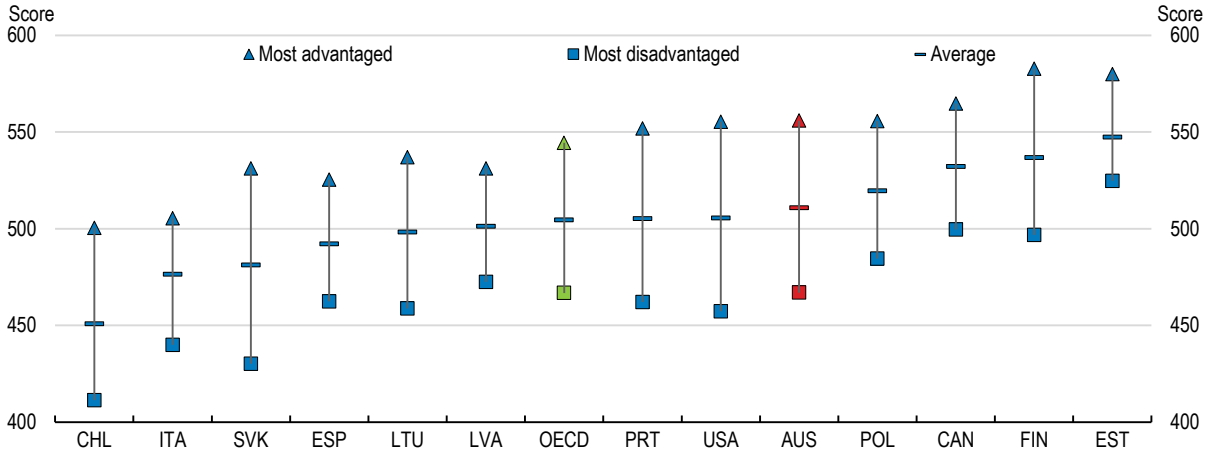
Financial education improves financial knowledge and behaviours (Kaiser et al., 2020). Australia stands out for embedding financial education into the school curriculum until year 10 (around age 16) (OECD, 2019d). This approach is recognised as an efficient way of reaching a generation (OECD, 2020h). Students in Australia have comparatively good financial literacy scores on average (Figure 2.27). However, 16% of

students lacked basic proficiency and the gap between advantaged and disadvantaged students is comparatively large (OECD, 2020i). In addition to formal learning, some financial education is delivered informally. However, a recent review of school banking programmes offered by 10 banks at almost 4 000 schools found these programmes to be marketing exercises without a discernible benefit (ASIC, 2020b). Three jurisdictions have proposed banning the programmes. In practice, financial education varies across schools (ASIC, 2020b) and students at more socially advantaged schools had greater exposure to financial education concepts (OECD, 2020i). Narrowing gaps is especially important given that young people are being exposed to financial services at a younger age due to digitalisation. Indeed in 2018 55% of Australian 15 year-olds had mobile phone access to a financial account, which was one of the highest rates in the OECD (OECD, 2020i).

Recognising these challenges, in 2020 ASIC established an expert group on young people and money to inform its work. Governments should allocate more resources for financial education at less advantaged schools, drawing on results from the recent ASIC study and PISA tests. Teachers should be encouraged to undertake the free online accredited training in teaching financial education. A code of conduct could be created to govern private sector involvement in financial education, as in Spain (OECD, 2020h). Beyond schools, additional focus could be given to interventions at teachable moments, such as receiving a first paycheck. In the United States organisers of youth employment programmes were encouraged to partner with financial institutions to provide financial education and access to an appropriate saving account, which led to long-lasting effects on financial knowledge and behaviours (OECD, 2020h). The Moneysmart website could be extended to include not only teaching resources but financial education for youth, following the example of Ireland's Money Matter's website, or the financial health check on Singapore's MoneySense website (OECD, 2020h). Other countries are also using digital tools to develop more tailored and engaging resources (OECD, 2021c). Policy-makers should continue to develop and evaluate digital financial education tools and resources, including by building on existing strengths such as the Moneysmart website.

Figure 2.27. Financial literacy is a little above the OECD average with wide dispersion

PISA score for financial literacy



Note: Most advantaged (disadvantaged) is the average of the upper (lower) quartile of the distribution by socio-economic status.
Source: OECD (2020), *PISA 2018 Results (Volume IV)*.

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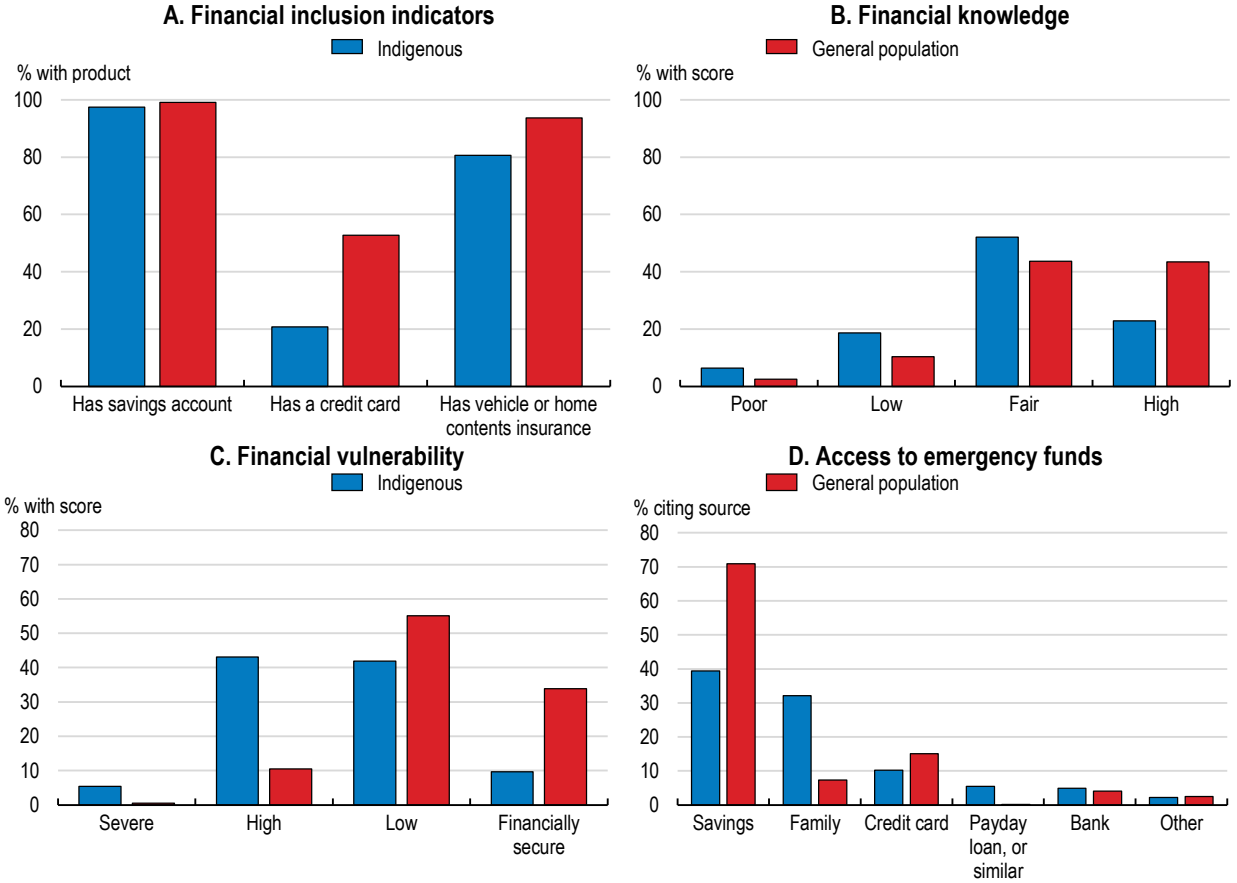
The gaps in traditional measures of financial literacy and inclusion are particularly large and persistent for Indigenous Australians (Figure 2.28, Panels A and B). This is a challenge common to several OECD countries, notably Canada, Mexico, New Zealand and the United States (OECD, 2020b). Survey data on financial literacy showed minimal improvement over 2003 to 2014 despite a plethora of programmes (Wagland and Taylor, 2015). Around half of all Indigenous Australians face high or severe levels of financial stress compared to 10% of the general population (Figure 2.28, Panel C). They are less likely to have savings to access in an emergency and more likely to use fringe credit (payday lenders or similar) (Figure 2.28, Panel D; Weier et al., 2019). The Royal Commission listed ways of easily reducing financial exclusion that were not being used, as well as egregious cases of mis-selling and misconduct (Hayne, 2019). There is growing recognition that in addition to socio-economic factors and remoteness, cultural factors drive outcomes and policy-making must start with these (Russell et al, 2020; Wagland and Taylor, 2015). Other factors, including receiving mining royalties, also complicate financial management in some communities (Russell et al., 2020).

Figure 2.28. Financial inclusion, knowledge and resilience are lower for Indigenous Australians



Note: Indicators in Panel A are from the 2018 wave of the Household, Income and Labour Dynamics in Australia (HILDA) survey. Savings account is alone or joint. Insurance refers to the household. Panel B is based on five questions from the 2016 wave of the HILDA survey with the following scoring: "high" for five correct answers; "fair" for three or four correct answers; "low" for one or two correct answers; and "poor" for no correct answers. The HILDA Survey is conducted by the Australian Government Department of Social Services (DSS). The findings and views reported in this chapter, however, are those of the authors and should not be attributed to the Australian Government, DSS, or any of DSS' contractors or partners. The composite indicator in Panel C comprises indicators of economic resources, access to financial services, financial knowledge and behaviour and social capital; see Weier et al. (2019) for methodological details.

Source: M. Weier et al. (2019), *Money Stories: Financial Resilience among Aboriginal and Torres Strait Islander Australians 2019*; Household Income and Labour Dynamics in Australia (HILDA) database and OECD calculations.

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There has been a shift towards designing programs to fit into Indigenous culture, sometimes led by Indigenous organisations. For instance, ASIC has created a resource delivered via its Moneysmart website that tackles issues faced by Indigenous Australians, such as managing store credit and requests for money from family and friends. It also includes teaching resources. ASIC is also creating a financial capability roadmap in consultation with Indigenous stakeholders around the country as part of its Indigenous Outreach Programme. This should lead to more locally-driven and Indigenous-led programmes. A potential source of funding for such programmes is Ecstra, a not-for-profit organisation that was partly financed through the large penalties charged to banks for past misconduct. Another possibility would be to equip the National Indigenous Australians Agency (a government agency) with resources to oversee such programmes with ASIC. The financial sector, particularly the major banks, is also active, with programmes to build financial inclusion (e.g. matched savings programmes, microfinance), financial literacy and cultural awareness within their own institutions. But more research is needed to understand factors such as barriers to Indigenous financial literacy and attitudes to money so that programmes can better fit Indigenous Australians' needs (Russell et al., 2020; Wagland and Taylor, 2015). In 2021 the RBA formed a Central Bank Network for Indigenous Inclusion with indigenous partners, the Reserve Bank of New Zealand and the Bank of Canada. Its activities will include research, sharing best practices and supporting financial education.

Expanding materials produced in Indigenous languages could help increase usage and understanding. New Zealand's version of the Moneysmart website is produced in Māori. Although there are many more indigenous languages in Australia than New Zealand, priority could be given to those more likely to be a first language or the 13 that are spoken by children. Improving financial inclusion could also help improve access to finance for Indigenous entrepreneurs. In the United States and Canada the government supported the development of networks of financial institutions owned and operated by First Nations peoples (OECD, 2019e). These have been operating for around three decades and have helped develop businesses and financial literacy within their communities. Indigenous Business Australia offers business and home loans on behalf of the government whereas the Canadian and US approaches are grassroots-based. The model could be adapted to Australia, where population density is lower, by pooling risk and resources across multiple local institutions or partnering with a bank, for example. Continuing to better understand the difficulties Indigenous businesses face accessing finance should help improve policy-making and, accordingly, outcomes.

More generally, the transfer of responsibility for national financial capability policy to the Treasury is an opportunity to more actively co-ordinate the myriad of programmes across the country. Duplication in activities should be minimised and programmes that are succeeding should receive support to be extended elsewhere. In the case of localised programmes, such as those for Indigenous Australians, greater support should be provided for community-driven initiatives with knowledge-sharing of successful initiatives. In keeping with the *OECD Recommendation on Financial Literacy* the Financial Capability Strategy should be accompanied by measurable goals, an implementation plan and plan to monitor and evaluate the strategy against its targets. In particular, it should set out clear and ambitious objectives for groups that have been identified as facing greater challenges, namely women, youth, the elderly, people with disabilities, Indigenous Australians and people from culturally and linguistically diverse backgrounds.

The strategy should also recognise the challenges and opportunities of the digital transformation, in keeping with OECD guidance (OECD, 2020j, 2018e). Treasury should work closely with ASIC to ensure that institutional knowledge is maintained and there are mechanisms for sharing insights gleaned by each. A hub or conference could bring together available research and key actors working on key challenges such as better reaching vulnerable groups and trends such as taking advantage of digitalisation. A co-ordinated awareness campaign like a financial capability month, as in Canada, Italy and the United States, would allow Australia to harness the strengths of a decentralised approach and increase the impact of existing initiatives.

Box 2.7. Measuring financial literacy in Australia

The OECD defines financial literacy as "a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being" (OECD, 2020).

Australia's main longitudinal survey, the Household Income and Labour Dynamics in Australia (HILDA) Survey, included questions to measure financial literacy in 2016. Following Lusardi and Mitchell (2014) it asked five questions relating to:

- **Numeracy**: Calculating the worth of AUD100 in a savings account earning 2% after one year.
- **Inflation**: Whether those savings would be worth more, the same or less if interest was 1% and inflation was 2% per year.
- **Diversification**: Whether "buying shares in a single company usually provides a safer return than buying shares in a number of different companies".
- **Risk–return**: Whether "an investment with a high return is likely to be high risk".
- **Money illusion**: Change in purchasing power (can buy more, the same or less) if in two years' time both income and prices have doubled.

An aggregate indicator of financial literacy is calculated as the sum of the correct answers. "Don't know" and "refused to answer" are treated as incorrect unless the respondent refused to answer all five questions, which was then treated as missing.

Source: Wilkins, R. "Financial literacy and attitudes to finances", Chapter 9 in R. Wilkins and I. Lass (2018), *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 16*, Melbourne Institute: Applied Economic & Social Research, Melbourne. OECD (2020), *Recommendation on Financial Literacy*, www.oecd.org/finance/OECD-Recommendation-on-Financial-Literacy.htm; Lusardi A. and O. Mitchell (2014), "The Economic Importance of Financial Literacy: Theory and Evidence", Journal of Economic Literature, vol. 52, no. 1, pp. 5–44.

Table 2.7. Recommendations to ensure the financial sector supports a sustainable and inclusive recovery

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Navigating the crisis and early recovery	
The number of insolvencies fell sharply in 2020 but is expected to increase.	Increase awareness and support for pre-insolvency actions and offer firms most affected by restrictions business viability vouchers.
Households are amongst the most indebted in the OECD and banks are highly exposed to housing assets. Risks are moderated by high household asset holdings, well-capitalised banks and close supervision.	If credit growth picks up and there are other signs of building risks, implement macroprudential tools. Complete implementation of a loss-absorbing regime, including bail-in provisions, in case of financial institution insolvency.
The government allowed early access to superannuation at the onset of the pandemic, supporting adversely-impacted households, including those in acute financial distress. Online tools were made available to enable applicants to estimate the effect of withdrawals on retirement savings, but many applicants either underestimated this or did not undertake such estimates.	Continue to only allow early withdrawals of superannuation in exceptional circumstances, such as severe financial hardship.
Channelling finance to viable and productive firms	
Data on financing conditions for small firms is lacking, with limited demand-side surveys and no publicly available supply-side data.	Build on existing surveys to create internationally comparable surveys of access to finance and credit conditions.
Regulatory settings contribute to disincentives for banks to lend to small firms. Smaller lenders face higher costs than larger banks, hampering competition. Until 2023 risk weights for SME lending used by second-tier banks will be more stringent and less granular than international standards.	Consider providing temporary capital relief on small business lending by second-tier banks. Expand options for second-tier banks to achieve lower risk weights on small business lending.

The SME securitised loan market is small. New government funds to invest in securitised SME loans will help to develop the market over time.	Continue developing the SME securitised loan market, including a centralised data platform with loan-level data and performance history.
The register of security interests over personal property (Personal Property Securities Register) is considered difficult to use and lacks visibility.	**Overhaul the Personal Property Securities Register then increase awareness among small businesses and lenders.**
Comprehensive credit reporting and the new consumer data right in banking can help improve competition in lending for start-ups and smaller businesses by allowing borrowers to share information with other service providers.	Evaluate the case for extending the coverage of comprehensive credit reporting to SMEs and increase awareness. Publicise the consumer data right so that consumers and firms are well-placed to benefit from emerging opportunities. **Extend open banking to facilitate switching of providers and other actions ("write access") with appropriate protections.**
The main equity market facilitates initial public offerings by small firms. However, it has a one-size-fits-all approach to listing and disclosure requirements.	Incorporate greater proportionality and flexibility in listing and disclosure requirements.
Supporting the green transition	
Disclosure of climate-related risks by listed companies and financial institutions has increased but progress is uneven and there are still large data gaps.	**Create a roadmap for improving the consistency, comparability and quality of reporting of climate-related risks by listed companies and financial institutions.**
Climate vulnerability assessments are beginning with the five-largest banks in 2021.	Expand climate-risk scenario analysis to all banks, insurers and fund managers as soon as possible.
ESG investing and use of instruments such as green bonds are growing. However, the multitude of definitions may undermine progress.	Continue to work closely with international bodies to develop a taxonomy for sustainable finance.
Strengthening households' resilience and mitigating inequality	
A Royal Commission found serious misconduct in the financial sector. The Government has implemented a significant number of the Commission's recommendations, but some reforms remain outstanding.	**Complete the implementation of the reforms arising from the Royal Commission into the financial sector.**
Forms of high-cost credit can perpetuate financial exclusion. Recent reforms before the Parliament will strengthen protections in respect of certain high-cost forms of credit. However, associated changes to reduce regulatory burdens risk gaps in protections arising.	Ensure that the current reforms to consumer protections are appropriately enforced and evaluated, and further strengthen protections particularly for high cost credit if needed.
Buy-now-pay-later is growing rapidly. Industry self-regulation creates an uneven playing field with credit providers.	Close differences in regulatory treatment of credit-like products and those regulated as consumer credit.
Australia has had a financial literacy strategy since 2011, supported by integration in schooling and decentralised programme delivery. Many Australians still lack sufficient financial knowledge and capability. Indicators of financial inclusion, knowledge and resilience are lower for Indigenous Australians than the general population.	Promote awareness of available financial capability resources through a national campaign. Provide greater support for Indigenous-led financial capability programmes and knowledge-sharing of successful initiatives.

References

ABC (2021), “Buy now, pay later for elective surgery sparks warnings of financial risk”, 16 March 2021.

ACCC (2021), “NAB's acquisition of 86 400 not opposed”, press release, 30 March.

ACCC (2018), *Residential Mortgage Price Inquiry*, Final report, Commonwealth of Australia, Canberra.

Adalet McGowan, M. and D. Andrews (2018), "Design of insolvency regimes across countries", *OECD Economics Department Working Papers*, No. 1504, OECD Publishing, Paris.

AFR (Australian Financial Review) (2021), “Non-banks leverage up SMSF property after COVID-19, 15 February.

Allens (2021), *PE Horizons 2021*, March 2021.

Alston, M., S. Black, B. Jackman and S. Schwartz (2020), “The Term Funding Facility”, *RBA Bulletin,* December.

Andrews, D., M. Adalet McGowan and V. Millot (2017), “Confronting the zombies: policies for productivity revival”, *OECD Economic Policy Papers*, No. 21, OECD Publishing, Paris.

Andrews, D. and C. Criscuolo (2013), "Knowledge-Based Capital, Innovation and Resource Allocation: A Going for Growth Report", *OECD Economic Policy Papers*, No. 4, OECD Publishing, Paris.

Andrews, D., C. Criscuolo and C. Menon (2014), “Do Resources Flow to Patenting Firms?: Cross-Country Evidence from Firm Level Data”, *OECD Economics Department Working Papers*, No. 1127, OECD Publishing, Paris.

APRA (2021), “Climate Vulnerability Assessment”, Information Paper, 3 September 2021.

APRA (2020a), “Stress testing banks during COVID-19”, Information Paper, 15 December.

APRA (2020b), “The superannuation Early Release Scheme: insights from APRA’s pandemic data collection”, *APRA Insight*, Issue 4.

APRA (2020c), Submission: Senate Select Committee on Financial Technology and Regulatory Technology, 20 January.

APRA (2020d), “Understanding and managing the financial risks of climate change”, Letter to all APRA-regulated entities, 24 February.

APRA (2019), “Climate change: awareness to action”, Information Paper, 20 March.

ASBFEO (2021), “Personal property securities register”, Research Paper, February.

ASFI (Australian Sustainable Finance Initiative) (2020), *Australian Sustainable Finance Roadmap: a Plan for Aligning Australia’s Financial System with a Sustainable, Resilient and Prosperous Future for All Australians*, Responsible Investment Association Australasia, Melbourne.

ASIC (2021a), Submission to the Senate Economic Legislation Committee Inquiry into the National Consumer Credit Protection Amendment (Supporting the Economic Recovery) Bill 2020, No. 110.

ASIC (2021b), *Financial Capability*, https://asic.gov.au/for-consumers/financial-capability/, (accessed 14 May 2021).

ASIC (2020a), *Buy Now Pay Later: An Industry Update,* Report No. 672.

ASIC (2020b), *Review of Banking Programs*, Report No. 676.

ASIC (2018a), *Climate Risk Disclosure by Australia’s Listed Companies*, Report No. 593.

ASIC (2018b), Submission to the Senate Economics References Committee Inquiry into credit and financial services targeted at Australians at risk of financial hardship, No. 21.

ASIC (2018c), *Credit Card Lending in Australia*, Report No. 580.

ASIC (2017), *Assessment of National Stock Exchange of Australia Limited’s Listing Standards*, Report No. 538.

ASIC / AFM (2019), *Disclosure: Why Shouldn't it be the Default?*, Joint report from the Australian Securities and Investments Commission and the Dutch Authority for the Financial Markets, Report No. 632.

ASX (2012), *Strengthening Australia's Equity Capital Markets*, ASX proposals and consultation.

Australian Government (2020), "Insolvency reforms to support small business", Factsheet.

Bant, E. et al. (2021), Submission to Senate Economics Legislation Committee on the National Consumer Credit Protection Amendment (Supporting Economic Recovery) Bill 2020, No. 91.

Bateman, H. et al. (2020), *20K Now or 50K Later? What's Driving People's Decision to Withdraw Their Super?*, CEPAR, Arc Centre of Excellence in Population Ageing Research, August.

Barraket, T.J. et al. (2020), Measuring *Australia's Digital Divide: The Australian Digital Inclusion Index 2020*, RMIT and Swinburne University of Technology, Melbourne.

Baudino, P., R. Goetschmann, J. Henry, K. Taniguchi and W. Zhu (2018), "Stress-testing banks – a comparative analysis", *FSI insights on policy implementation*, No. 12, Bank for International Settlements, Basel.

BCBS (Basel Committee on Banking Supervision) (2021), *Climate-related risk drivers and their transmission channels*, Bank for International Settlements, Basel.

Beck, T., B. Büyükkarabacak, F.K. Rioja and N.T. Valev (2012), "Who gets the credit? And does it matter? Household vs. firm lending across countries", *The B.E. Journal of Macroeconomics*, Vol. 12/1, pp.1-44.

Birchal (2021), *CSF Yearbook 2020*, 31 December.

Boele, N. and S. Bayes (2020), *Responsible Investment Benchmark Report 2020 Australia*, Responsible Investment Association Australasia, Sydney.

Boissinot, J., D. Huber and G. Lame (2016), "Finance and climate: The transition to a low-carbon and climate-resilient economy from a financial sector perspective", *OECD Journal: Financial Market Trends*, Vol. 2015/1.

Boschmans, K. and L. Pissareva (2018), "Fostering Markets for SME Finance: Matching Business and Investor Needs", *OECD SME and Entrepreneurship Papers*, No. 6, OECD Publishing, Paris.

Bradley, W. A., G. Duruflé, T. Hellmann, and K.E. Wilson (2019), "Cross-border venture capital investments: what is the role of public policy?", *Journal of Risk and Financial Management*, Vol. 12/3, pp. 1-22.

Brander, J., Q. Du and T. Hellmann (2015), "The effects of government-sponsored venture capital: international evidence", *Review of Finance*, Vol. 19/2, pp. 571–618.

Brassell, M. and K. Boschmans (2019), "Fostering the use of intangibles to strengthen SME access to finance", *OECD SME and Entrepreneurship Papers*, No. 12, OECD Publishing, Paris.

Brown, J.R., G. Martinsson and B.C. Petersen (2012) "Do financing constraints matter for R&D?", *European Economic Review*, Vol. 56/8, pp 1512-29.

Byres, W. (2019), *Speech to the Customer-Owned Banking Convention*, APRA, 11 November.

Calvino, F., C. Criscuolo and C. Menon (2015), "No Country for Young Firms?: Start-up Dynamics and National Policies", *OECD Science, Technology and Industry Policy Papers*, No. 29, OECD Publishing, Paris.

Carletti, E. and A. Smolenska (2017), "10 years on from the Financial Crisis: Co-operation between Competition Agencies and Regulators in the Financial Sector", Background note to the OECD Working Party No. 2 on Competition and Regulation.

CCAF (Cambridge Centre for Alternative Finance) (2020), *The Global Alternative Finance Market Benchmarking Report*, April 2020.

CFR / ATO (2019), *Council of Financial Regulators and ATO Report to Government: Leverage and Risk*

in the Superannuation System 2019, February.

Coates, B. (2021), “A big step on the long road to cheaper super”, Grattan Institute, Melbourne.

Connolly, E. and J. Bank (2018), “Access to small business finance”, *RBA Bulletin*, September.

Connolly, E. and B. Jackman (2017), “The availability of business finance”, *RBA Bulletin*, December.

Consumer Action Law Centre (2021), “Saving responsible lending: Senate Committee opening statement”, press release.

Cournède, B., O. Denk and P. Hoeller (2015), “Finance and Inclusive Growth”, *OECD Economic Policy Papers*, No 14, OECD Publishing, Paris.

Criscuolo C., P.N. Gal and C. Menon (2014), “The Dynamics of Employment Growth: New Evidence from 18 Countries”, *OECD Science, Technology and Industry Policy Papers,* No. 14, OECD Publishing, Paris.

CSMI (Climate Standards Measurement Initiative) (2020), *Scenario Analysis of Climate-related Physical Risk for Buildings and Infrastructure: Financial disclosure Guidelines & Climate Science Guidance,* Summary for executives, Climate-KIC Australia.

Daley, J. and D. Wood (2016), *Hot Property: Negative Gearing and Capital Gains Tax Reform*, Grattan Institute, Melbourne.

Davis, K. (2020), “None of the justifications for weakening bank lending standards quite makes sense”, The Conversation, 13 October.

Dechezleprêtre, A. and M. Fadic (2021), “Can government venture capital help bring research to the market?”, *OECD Science, Technology and Innovation Policy Papers*, forthcoming.

Deloitte (2019), *Dynamics of the Australian Superannuation System: The Next 20 Years to 2038*, Deloitte Actuaries and Consultants.

Deloitte (2018), *Statutory Review of the Clean Energy Finance Corporation*, Report prepared for the Department of the Environment and Energy.

Demmou, L., S. Calligaris, G. Franco, D. Dlugosch, M. Adalet McGowan and S. Sakha (2021), "Insolvency and debt overhang following the COVID-19 outbreak: Assessment of risks and policy responses", *OECD Economics Department Working Papers*, No. 1651, OECD Publishing, Paris.

Demmou, L., I. Stefanescu and A. Arquie (2019), "Productivity growth and finance: The role of intangible assets - a sector level analysis", *OECD Economics Department Working Papers*, No. 1547, OECD Publishing, Paris.

Department of the Treasury (2018), *Regulation Impact Statement – Australian Business Securitisation Fund*.

Dwyer, B. and B. Kotey (2015), “Financing SME Growth: The Role of the National Stock Exchange of Australia and Business Advisors”, Australian *Accounting Review*, Vol. 25/2.

East and Partners (2021), *SME Banking Insights 2021*.

Farrell, S. (2020), *Inquiry into Future Directions for the Consumer Data Right*, Commonwealth of Australia, Canberra.

FIN-FSA (2020), “Report on means to prevent excessive household indebtedness”, 6 May 2020.

Garner, M. and A. Suthakar (2021), “Developments in banks' funding costs and lending rates”, *RBA Bulletin*, March.

Gocher, D. and ACCR staff (2021), *Cutting Carbon; What the Rush to Divest Fossil Fuels Means for Emissions Reduction and Engagement,* Australasian Centre for Corporate Responsibility.

Hall, B. and J. Lerner (2010), “The financing of R&D and innovation”, *Handbook of Economics*, Vol. 1, pp 609-639.

Hayne, K. (2019), *Royal Commission into Misconduct in the Banking, Superannuation and Financial*

Services Industry, Final Report, Volume 1, Commonwealth of Australia, Canberra.

Heil, M. (2017), "Finance and productivity: A literature review", *OECD Economics Department Working Papers*, No. 1374, OECD Publishing, Paris.

Henry, K. (2009), *Australia's Future Tax System,* Report to the Treasurer, Part 1.

Herd, E., M. McAdam, B. Bacani, S. O'Connor and E. Usher (2018), "Joint statement in support of a sustainable financial system for Australia and New Zealand", UNEPFI.

Hsu, P.-H., X. Tian, and Y. Xu (2014), "Financial development and innovation: cross-country evidence", *Journal of Financial Economics*, Vol. 112/1.

Hutley, N. and S.H. Davis (2021), "Climate change and directors' duties", Further supplementary memorandum of opinion, The Centre for Policy Development, 23 April.

Hutley, N. and S.H. Davis (2019), "Climate change and directors' duties", Supplementary memorandum of opinion, The Centre for Policy Development, 26 March.

Hutley N.C. and J.E. Mack (2021), "Superannuation trustee duties and climate change", Memorandum of opinion, The Centre for Policy Development, 16 February.

IGCC (Investor Group on Climate Change) (2020), *Mapping Australia's Net Zero Investment Potential*, IGCC Policy Update, October.

IMF (2020a), *Global Financial Stability Report: Bridge to Recovery*, International Monetary Fund, Washington DC.

IMF (2020b), *Australia: Selected Issues*, IMF Country Report No. 20/69, International Monetary Fund, Washington DC.

IMF (2019), *Australia: Financial System Stability Assessment*, IMF Country Report No. 19/54, International Monetary Fund, Washington DC.

Kaiser, T. et al. (2020), "Financial education affects financial knowledge and downstream behaviours", *NBER Working Papers,* No. 27057.

Kearns, J. (2020), "Banking and the COVID-19 Pandemic", Speech to UNSW's 33rd Australasian Finance and Banking Conference, 15 December.

Kent, C. (2021), "Small Businesses Finance in the Pandemic", Address to the Australian Finance Industry Association, 17 March.

KPMG (2020), *Towards Net Zero: Australian Supplement*.

Koreen, M., A. Laboul and N. Smaini (2018), "G20/OECD effective approaches for implementing the G20/OECD high-level principles on SME financing", *OECD SME and Entrepreneurship Papers*, No. 9, OECD Publishing, Paris.

Kraemer-Eis, H., S. Signore, and D. Prencipe (2016), "The European venture capital landscape: an EIF perspective", *EIF Working Papers,* No. 2016/34, European Investment Fund, Luxembourg.

Lumpkin, S. and S. Schich (2020), "Banks, Digital Banking Initiatives and the Financial Safety Net: Theory and Analytical Framework", *Journal of Economic Science Research*, Vol. 3/1,

Lusardi A. and O. Mitchell (2014), "The Economic Importance of Financial Literacy: Theory and Evidence", *Journal of Economic Literature*, vol. 52, no. 1, pp. 5–44.

Lusardi, A., and P. Tufano, (2015). "Debt Literacy, Financial Experiences, and Over Indebtedness," *Journal of Pension Economics and Finance*, Vol. 14/4, pp. 332-328.

Market Forces (2021), *Out of Line, Out of Time*, www.marketforces.org.au/campaigns/super/outofline/

Market Forces (2020), *Funding Climate Failure: How Australia's Big Banks are Undermining the Paris Agreement*, www.marketforces.org.au/campaigns/banks-new/bigfourscorecard/

Mian, A., A. Sufi and E. Verner (2015), "Household debt and business cycles worldwide", *NBER Working Papers*, No 21581.

Morningstar (2020), *Global Investor Experience Study: Disclosure*, Morningstar.

MSCI (2021), *MSCI Index Carbon Footprint Metrics,* (accessed 14 May 2021).

Murray, G. (2021), "Ten meditations on government venture capital", *Venture Capital*, April 2021.

Murray, D., K. Davis, C. Dunn, C. Hewson, B. McNamee (2014), *Financial System Inquiry – Final Report*, Commonwealth of Australia, Canberra.

Nassr, I.K. and G. Wehinger (2014), "Non-bank debt financing for SMEs: The role of securitisation, private placements and bonds", *OECD Journal: Financial Market Trends*, Vol. 2014/1.

Nassr, I.K. and G. Wehinger (2016), "Opportunities and limitations of public equity markets for SMEs", *OECD Journal: Financial Market Trends*, Vol. 2015/1.

OAG (2016), *Report 1 – Venture Capital Plan*, 2016 Spring Reports of the Auditor General of Canada, Office of the Auditor-General of Canada.

OBIE (2020), "Adapting to survive: UK's small businesses leverage open banking as part of their COVID-19 crisis recovery", Open Banking Implementation Entity, 7 December.

OECD (2021a), *Brick by Brick: Building Better Housing Policies*, OECD Publishing, Paris.

OECD (2021b), *Financial Markets and Climate Transition*, forthcoming.

OECD (2021c), Digital delivery of financial education: design and practice. www.oecd.org//financial/education/digital-delivery-of-financial-education-design-and-practice.htm

OECD (2020a), *Digital Disruption in Banking and its Impact on Competition,* 26 February 2020.

OECD (2020b), *Corporate and Personal Insolvency During the COVID-19 Crisis*, OECD Publishing Paris.

OECD (2020c), *OECD Economic Surveys: Costa Rica 2020*, OECD Publishing, Paris, https://doi.org/10.1787/2e0fea6c-en.

OECD (2020d), *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard*, OECD Publishing, Paris.

OECD (2020e), "Open banking", Chapter 2 in *Financial Markets, Insurance and Pensions: Digital Technologies and Finance*.

OECD (2020f), *OECD Business and Finance Outlook 2020: Sustainable and Resilient Finance*, OECD Publishing, Paris.

OECD (2020g), *Financial Consumer Protection Policy Approaches in the Digital Age: Protecting Consumers' Assets, Data and Privacy*, OECD Publishing, Paris.

OECD (2020h), *Advancing the Digital Financial Inclusion of Youth*, Report prepared for the G20 Global Partnership for Financial Inclusion by the OECD.

OECD (2020i), *PISA 2018 Results (Volume IV): Are Students Smart about Money?*, PISA, OECD Publishing, Paris.

OECD (2020j), *Personal Data Use in Financial Services and the Role of Financial Education: A Consumer-Centric Analysis,* www.oecd.org/daf/fin/financial-education/Personal-Data-Use-in-Financial-Services-andthe-Role-of-Financial-Education.pdf

OECD (2019a), "Access to finance", in *OECD SME and Entrepreneurship Outlook 2019*, OECD Publishing, Paris.

OECD (2019b), *OECD Environmental Performance Reviews: Australia 2019*, OECD Environmental Performance Reviews, OECD Publishing, Paris.

OECD (2019c) "Short-term consumer credit and inclusiveness", Chapter 4 in *Financial Markets Insurance and Pensions: Inclusiveness and Finance*, OECD Publishing, Paris.

OECD (2019d), *Policy Handbook on Financial Education for Young People in the Commonwealth of Independent States*, OECD Publishing, Paris.

OECD (2019e), *Linking Indigenous Communities with Regional Development,* OECD Rural Policy Reviews, OECD Publishing, Paris.

OECD (2018a), *OECD Economic Surveys: Australia 2018*, OECD Economic Surveys, OECD Publishing, Paris.

OECD (2018b), *Financing SMEs and Entrepreneurs 2018: An OECD Scoreboard*, OECD Publishing, Paris.

OECD (2018c), *Flexibility and Proportionality in Corporate Governance*, Corporate Governance, OECD Publishing, Paris.

OECD (2018d), *G20/OECD Policy Guidance on Financial Consumer Protection Approaches in the Digital Age*, https://www.oecd.org/finance/G20-OECD-Policy-Guidance-Financial-Consumer-Protection-Digital-Age-2018.pdf.

OECD (2018e), *G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy*, http://www.oecd.org/finance/G20-OECD-INFE-Policy-Guidance-Digitalisation-Financial-Literacy-2018.pdf.

OECD (2017a), *OECD Economic Surveys: Australia 2017*, OECD Publishing, Paris.

OECD (2017b), *Investing in Climate, Investing in Growth*, OECD Publishing, Paris

OECD (2015a), *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD Publishing, Paris.

OECD (2015b), *National Strategies for Financial Education: OECD/INFE Policy Handbook*, OECD Publishing, Paris.

Pavlova, E. and S. Signore (2019), "The European venture capital landscape: an EIF perspective", *EIF Working Papers,* No. 2019/55, European Investment Fund, Luxembourg.

PC (Productivity Commission) (2018), *Competition in the Australian Financial System,* Productivity Commission Inquiry Report No. 89, Canberra.

PC (2015), *Business Set-up, Transfer and Closure*, Productivity Commission Inquiry Report No. 75, Canberra.

Phillips, B. and V. Narayanan (2021), *Financial Stress and Social Security Settings in Australia*, ANU Centre for Social Research Methods, April.

PMC (Prime Minister and Cabinet) (2020), *Applying Behavioural Insights to the Personal Property Securities Register*, Advisory Report, Australian Government, Canberra.

Price, F., B. Beckers, and G. La Cava (2019), "The effect of mortgage debt on consumer spending: evidence from household-level data", *RBA Research Discussion Paper,* No. 2019-06, Reserve Bank of Australia, Sydney.

PRA (Prudential Regulation Authority) (2018), *Annual Competition Report 2017*, Bank of Englland, London.

RBA (2021), *Financial Stability Review*, Reserve Bank of Australia, April.

RBA (2020a), *Financial Stability Review*, Reserve Bank of Australia, October.

RBA (2020b), *Financial Stability Review*, Reserve Bank of Australia, April.

RBA (2015), Submission to the Inquiry into Home Ownership, Reserve Bank of Australia.

Royal Commission into National Natural Disaster Arrangements (2020), *Report*, Commonwealth of Australia, 28 October 2020.

Russell, R., J. Kutin and T. Marriner (2020), *Financial Capability Research in Australia*, RMIT University, Melbourne.

SDTA (Stop the Debt Trap Alliance) (2021), *Submission: National Consumer Credit Protection Amendment (Supporting Economic Recovery) Bill 2020*, No. 55, 2 February.

SDTA (2019), *The Debt Trap: How Payday Lending is Costing Australians*, Consumer Action Law Centre, Melbourne.

Select Committee on Financial Technology and Regulatory Technology (2020), Interim report, Commonwealth of Australia, Canberra.

Select Committee on Financial Technology and Regulatory Technology (2021), Second interim report, Commonwealth of Australia, Canberra.

Summerhayes, G. (2020), Speech to Australian Business Roundtable for Disaster Resilience and Safer Communities webinar, 14 October.

Sylvan, L. (2019), *The Countervailing Power: Review of the Coordination and Funding for Financial Counselling Services Across Australia*.

Wagland, S. and S. Taylor (2015), “The conflict between financial decision making and indigenous Australian culture”, *Financial Planning Research Journal*, Vol. 1/1.

Weier, M., K. Dolan, A. Powell, K. Muir and A. Young (2019), *Money Stories: Financial Resilience among Aboriginal and Torres Strait Islander Australians 2019*, Centre for Social Impact and UNSW Sydney, Sydney.

Weild, D., E. Kim and L. Newport (2013), "Making Stock Markets Work to Support Economic Growth: Implications for Governments, Regulators, Stock Exchanges, Corporate Issuers and their Investors", *OECD Corporate Governance Working Papers*, No. 10, OECD Publishing, Paris.

Whittaker, B. (2015), *Review of the Personal Property Securities Act 2009*, Final Report, Commonwealth of Australia, Canberra.

Wilkins, R. (2020), “Household wealth”, Chapter 10 in R. Wilkins et al. (2020), *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 18*, Melbourne Institute: Applied Economic & Social Research, Melbourne.

Wolfrom, L. and M. Yokoi-Arai (2016), "Financial instruments for managing disaster risks related to climate change", *OECD Journal: Financial Market Trends*, vol. 2015/1, OECD Publishing, Paris.

World Bank (2019), *Credit Reporting Knowledge Guide*, The World Bank Group, Washington DC.

Annex 2.A. The Royal Commission into misconduct in the financial services industry

On 30 November 2017 the Prime Minister and Treasurer announced a Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry. An interim report was handed down in September 2018 and the final report was released in February 2019.

The final report contained 76 recommendations under the themes:

- Banking (17 recommendations)
- Financial advice (10 recommendations)
- Superannuation (9 recommendations)
- Insurance (15 recommendations)
- Culture, governance and remuneration (7 recommendations)
- Regulators (14 recommendations)
- Other important steps (i.e. external dispute resolution, follow-up to the ASIC Enforcement Review Taskforce, and simplification; 4 recommendations)

In parallel to the Royal Commission, the Senate Economics References Committee undertook an inquiry into credit and financial products targeted at Australians at risk of financial hardship to assess some products and providers outside the scope of the royal commission. The final report of the Senate Committee inquiry made 20 recommendations including coverage of the regulatory framework, funding of various support services, and expanding affordable credit options.

Annex Table 2.A.1. Recommendations from the royal commission relating to the banking sector

Recommendation	Status
The National Consumer Credit Protection Act should not be amended to alter the obligation to assess unsuitability.	Legislation to repeal responsible lending obligations for most credit products is with the Parliament. ASIC will apply elements of APRA's bank lending standards to non-banks. Lenders may rely on information provided by borrowers (replacing a "lender beware" principle).
Best interests duty: the law should be amended to provide that, when acting in connection with home lending, mortgage brokers must act in the best interests of the intending borrower, with a civil penalty provision.	From 1 January 2021 the Act provides that mortgage brokers must act in the best interests of consumers when providing credit assistance in relation to credit contracts.
Mortgage broker remuneration: The borrower, not the lender, should pay the mortgage broker a fee for acting in connection with home lending. Changes in brokers' remuneration should be made over a period of two or three years, by first prohibiting lenders from paying trail commission to mortgage brokers in respect of new loans, then prohibiting lenders from paying other commissions to mortgage brokers.	The Government agreed to address conflicted remuneration for brokers. From 1 January 2021 some types of conflicted remuneration are banned.
A Treasury-led **working group** should be established to monitor and, if necessary, adjust the remuneration model [for mortgage brokers], and any fee that lenders should be required to charge to achieve a level playing field, in response to market changes.	In 2022 the Council of Financial Regulators and ACCC will conduct a review of the impact of changes to remuneration.
Mortgage brokers as financial advisers: after a sufficient period of transition, mortgage brokers should be subject to and regulated by the law that applies to entities providing financial product advice to retail clients.	No change as yet.
Australian Credit Licence holders should: ● be bound by information-sharing and reporting obligations in respect of mortgage brokers similar to those referred to in [the Report's recommendations] for financial advisers; and	Legislation has passed Parliament.

● take the same steps in response to detecting misconduct of a mortgage broker as those referred to in [the recommendation] for financial advisers.	
Point-of-sale exemption for retail dealers from the operation of the National Consumer Credit Protection Act should be abolished.	No change. In its official response the government agreed with the change.
The ABA should **amend the Banking Code** to provide that: ● banks will work with customers: - who live in remote areas; or - who are not adept in using English to identify a suitable way for those customers to access and undertake their banking; ● if a customer is having difficulty proving his or her identity, and tells the bank that he or she identifies as an Aboriginal or Torres Strait Islander person, the bank will follow AUSTRAC's guidance about the identification and verification of persons of Aboriginal or Torres Strait Islander heritage; ● without prior express agreement with the customer, banks will not allow informal overdrafts on basic accounts; and ● banks will not charge dishonour fees on basic accounts.	In December 2019 the Banking Code was amended to: • provide inclusive and accessible banking services to those with limited English and those living in remote areas • give concession card holders access to accounts with no overdraft and dishonour fees • make features of a basic, low and no fee bank account for low-income earners uniform across the industry.
The **NCCP Act** should not be amended to extend its operation to lending to small businesses.	No change (as recommended).
The ABA should amend the **definition of 'small business'** in the Banking Code so that the Code applies to any business or group employing fewer than 100 full-time equivalent employees, where the loan applied for is less than AUD5 million.	In progress. The loan threshold will be increased to AUD 5 million following the completion of the current review of the Banking Code.
A national scheme of **farm debt mediation** should be enacted.	In progress. The federal government is relying on states to change legislation. Tasmania introduced a scheme in January 2021.
Valuations of land: APRA should amend Prudential Standard APS 220 to: ● require that internal appraisals of the value of land taken or to be taken as security should be independent of loan origination, loan processing and loan decision processes; and ● provide for valuation of agricultural land in a manner that will recognise, to the extent possible: - the likelihood of external events affecting its realisable value; and - the time that may be taken to realise the land at a reasonable price affecting its realisable value.	Implementation of the new standard was delayed to 1 January 2022 due to COVID-19.
The ABA should amend the Banking Code to provide that, while a declaration remains in force, banks will not charge default interest on loans secured by agricultural land in an area declared to be affected by drought or other natural disaster.	The Banking Code of Practice was changed in December 2019.
When dealing with **distressed agricultural loans**, banks should: ● ensure that those loans are managed by experienced agricultural bankers; ● offer farm debt mediation as soon as a loan is classified as distressed; ● manage every distressed loan on the footing that working out will be the best outcome for bank and borrower, and enforcement the worst; ● recognise that appointment of receivers or any other form of external administrator is a remedy of last resort; and ● cease charging default interest when there is no realistic prospect of recovering the amount charged.	The Banking Code of Practice now bans charging default interest on distressed agricultural loans.
Enforceable code provisions: The law should be amended to provide: ● that ASIC's power to approve codes of conduct extends to codes relating to all APRA-regulated institutions and ACL holders; ● that industry codes of conduct approved by ASIC may include 'enforceable code provisions', which are provisions in respect of which a contravention will constitute a breach of the law; ● that ASIC may take into consideration whether particular provisions of an industry code of conduct have been designated as 'enforceable code provisions' in determining whether to approve a code;	Legislation passed Parliament in December 2020.

● for remedies, modelled on those now set out in Part VI of the Competition and Consumer Act, for breach of an 'enforceable code provision'; and ● for the establishment and imposition of mandatory financial services industry codes.	
In respect of the **Banking Code** that ASIC approved in 2018, the ABA and ASIC should take all necessary steps to have the provisions that govern the terms of the contract made or to be made between the bank and the customer or guarantor designated as 'enforceable code provisions'.	In progress. Legislation passed Parliament in December 2020 and ABA and ASIC will now consider inclusion in the Banking Code.
BEAR product responsibility: After appropriate consultation, APRA should determine for the purposes of section 37BA(2)(b) of the Banking Act, a responsibility, within each ADI subject to the BEAR, for all steps in the design, delivery and maintenance of all products offered to customers by the ADI and any necessary remediation of customers in respect of any of those products.	Exposure Draft legislation to enable rules to be made to implement recommendation was released on 16 July 2021.

Source: Hayne, K. (2019), *Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry*; Australian Government (2019), *Restoring Trust in Government*; Australian Banking Association; The Guardian (2021), "Banking royal commission: most recommendations have been abandoned or delayed" 19 Jan; ABC (2021), "Banking royal commission recommendations flounder, two years on", 4 February.

OECD Economic Surveys

AUSTRALIA

The pandemic recession in 2020 was milder than in most other OECD countries. This owed to well-coordinated policies across federal state governments to suppress the virus combined with a swift and appropriate economic policy response. Looking forward, public policy must focus on setting the economy up for another prolonged period of strong and well-distributed growth in living standards. Recent efforts to reduce regulatory, administrative and financial barriers for young high potential firms should continue. At the same time, the resilience of the economy to future economic shocks can be supported by rethinking institutional frameworks related to fiscal and monetary policy, ensuring the social safety net is adequate and that the financial sector supports household financial resilience. Australia is uniquely vulnerable to climate change, but it is also uniquely placed to benefit economically from global decarbonisation due to its natural endowments (e.g. wind, sun, ocean access) and strong human capital to form the basis of innovation in carbon abatement technologies. A coherent and coordinated national strategy that defines clear goals and corresponding policy settings for achieving the government's emission reduction objectives will be critical.

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